

# Splicing sites scoring

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```
eejs <- readTxt(file.path(fd, "eej_nas_common.txt"))
ucsc <- readTxt(file.path(fd, "ucsc_nas_common.txt"))

add_scores <- function(df) {
  df$ref_score <- unname(mapply(calculateMaxEntScanScore, df$refseq, df$ss))
  df$alt_score <- unname(mapply(calculateMaxEntScanScore, df$altseq, df$ss))
  return(df)
}

eejs <- add_scores(eejs)
ucsc <- add_scores(ucsc)
eejs$score_diff <- abs(as.numeric(eejs$ref_score) - as.numeric(eejs$alt_score))
ucsc$score_diff <- abs(as.numeric(ucsc$ref_score) - as.numeric(ucsc$alt_score))
```

Save SSs data annotated with scores with and without SNV:

```
write.table(eejs, file.path(fd, "eejs_nas_wscores.txt"), sep="\t", row.names = FALSE)
write.table(ucsc, file.path(fd, "ucsc_nas_wscores.txt"), sep="\t", row.names = FALSE)
```

Re-read the data if needed:

```
eejs <- readTxt(file.path(fd, "eejs_nas_wscores.txt"))
ucsc <- readTxt(file.path(fd, "ucsc_nas_wscores.txt"))
```

## SSs from RNA-Seq Derived EEJ Matrices

eejs

##		eej_id	gene_id	seqnames	start
## 1	chr1:1402256-1402462_str-	ENSG00000242485	1	1402256	
## 2	chr1:1839238-1873958_str-	ENSG00000078369	1	1839238	
## 3	chr1:3496018-3496605_str-	ENSG00000162591	1	3496018	
## 4	chr1:6098929-6098969_str+	ENSG00000069424	1	6098929	
## 5	chr1:6098966-6099075_str+	ENSG00000069424	1	6098966	
## 6	chr1:13772214-13773078_str+	ENSG00000116731	1	13772214	
## 7	chr1:24902666-24907259_str-	ENSG00000020633	1	24902666	
## 8	chr1:26280628-26280764_str+	ENSG00000142669	1	26280628	

## 9	chr1:40980561-40983278_str+	ENSG00000171793	1	40980561
## 10	chr1:42818786-42823608_str+	ENSG00000164010	1	42818786
## 11	chr1:74733529-74736540_str+	ENSG00000162623	1	74733529
## 12	chr1:90027464-90027507_str+	ENSG00000162664	1	90027464
## 13	chr1:90027465-90027493_str+	ENSG00000162664	1	90027465
## 14	chr1:111183587-111184191_str+	ENSG00000134255	1	111183587
## 15	chr1:112699498-112699683_str+	ENSG00000155363	1	112699498
## 16	chr1:159010156-159014661_str+	ENSG00000163565	1	159010156
## 17	chr1:159010161-159011030_str+	ENSG00000163565	1	159010161
## 18	chr1:159010161-159014661_str+	ENSG00000163565	1	159010161
## 19	chr1:167640712-167641391_str+	ENSG00000198771	1	167640712
## 20	chr1:167640712-167683900_str+	ENSG00000198771	1	167640712
## 21	chr1:171557426-171557448_str+	ENSG00000117523	1	171557426
## 22	chr1:173864304-173865471_str-	ENSG00000234741	1	173864304
## 23	chr1:173864704-173865471_str-	ENSG00000234741	1	173864704
## 24	chr1:173865282-173865471_str-	ENSG00000234741	1	173865282
## 25	chr1:203307923-203309417_str+	ENSG00000159388	1	203307923
## 26	chr1:207337250-207337329_str+	ENSG00000196352	1	207337250
## 27	chr1:209777414-209778419_str+	ENSG00000009790	1	209777414
## 28	chr1:230281010-230281144_str+	ENSG00000143641	1	230281010
## 29	chr2:269347-271866_str+	ENSG00000143727	2	269347
## 30	chr2:9487547-9488147_str+	ENSG00000134330	2	9487547
## 31	chr2:10052414-10052493_str+	ENSG00000172059	2	10052414
## 32	chr2:10052415-10052498_str+	ENSG00000172059	2	10052415
## 33	chr2:10312013-10312759_str+	ENSG00000115756	2	10312013
## 34	chr2:20448446-20448543_str+	ENSG00000143878	2	20448446
## 35	chr2:20448450-20448643_str+	ENSG00000143878	2	20448450
## 36	chr2:28928114-28929579_str+	ENSG00000163811	2	28928114
## 37	chr2:63842597-63856304_str+	ENSG00000169764	2	63842597
## 38	chr2:68217131-68250819_str-	ENSG00000273398	2	68217131
## 39	chr2:68217131-68250819_str-	ENSG00000221823	2	68217131
## 40	chr2:68395781-68395851_str+	ENSG00000115956	2	68395781
## 41	chr2:73265640-73266173_str-	ENSG00000163013	2	73265640
## 42	chr2:74463012-74463254_str-	ENSG00000115275	2	74463012
## 43	chr2:99363862-99364271_str+	ENSG00000158417	2	99363862
## 44	chr2:101271744-101272842_str-	ENSG00000163162	2	101271744
## 45	chr2:119369176-119370740_str+	ENSG00000155368	2	119369176
## 46	chr2:119369176-119370740_str+	ENSG00000155368	2	119369176
## 47	chr2:135862748-135865013_str-	ENSG00000076003	2	135862748
## 48	chr2:152135603-152143827_str-	ENSG00000115145	2	152135603
## 49	chr2:159670810-159710717_str-	ENSG00000226266	2	159670810
## 50	chr2:159695420-159710717_str-	ENSG00000226266	2	159695420
## 51	chr2:169623013-169630774_str+	ENSG00000138398	2	169623013
## 52	chr2:181487048-181493325_str+	ENSG00000115232	2	181487048
## 53	chr2:181535258-181535431_str+	ENSG00000115232	2	181535258
## 54	chr2:208266643-208271509_str+	ENSG00000115020	2	208266643
## 55	chr2:218367082-218367591_str+	ENSG00000158428	2	218367082
## 56	chr2:223899070-223901183_str-	ENSG00000085449	2	223899070
## 57	chr2:231712491-231712963_str+	ENSG00000187514	2	231712491
## 58	chr2:240578351-240578408_str+	ENSG00000142327	2	240578351
## 59	chr3:9806366-9806558_str+	ENSG00000241553	3	9806366
## 60	chr3:9806366-9806558_str+	ENSG00000250151	3	9806366
## 61	chr3:11807895-11808335_str-	ENSG00000144559	3	11807895
## 62	chr3:11790581-11809517_str-	ENSG00000144559	3	11790581

## 63	chr3:11807895-11809517_str-	ENSG00000144559	3	11807895
## 64	chr3:11808583-11809517_str-	ENSG00000144559	3	11808583
## 65	chr3:41232580-41233341_str+	ENSG00000168036	3	41232580
## 66	chr3:41912899-41915977_str-	ENSG00000168038	3	41912899
## 67	chr3:42603358-42607110_str-	ENSG00000230084	3	42603358
## 68	chr3:47046621-47062163_str-	ENSG00000181555	3	47046621
## 69	chr3:47057490-47062163_str-	ENSG00000181555	3	47057490
## 70	chr3:47057428-47062163_str-	ENSG00000181555	3	47057428
## 71	chr3:50118032-50118044_str+	ENSG00000003756	3	50118032
## 72	chr3:52489383-52489450_str+	ENSG00000010322	3	52489383
## 73	chr3:52686059-52686769_str+	ENSG00000163938	3	52686059
## 74	chr3:53858610-53858719_str+	ENSG00000056736	3	53858610
## 75	chr3:113291748-113293952_str-	ENSG00000206530	3	113291748
## 76	chr3:125504744-125520032_str-	ENSG00000114520	3	125504744
## 77	chr3:125504913-125520032_str-	ENSG00000114520	3	125504913
## 78	chr3:128620593-128622164_str-	ENSG00000163902	3	128620593
## 79	chr3:128620578-128622164_str-	ENSG00000163902	3	128620578
## 80	chr3:129977109-129977203_str+	ENSG00000170893	3	129977109
## 81	chr3:129977110-129977204_str+	ENSG00000170893	3	129977110
## 82	chr3:151327288-151327458_str-	ENSG00000181631	3	151327288
## 83	chr3:170172700-170178773_str-	ENSG00000173889	3	170172700
## 84	chr3:170172712-170178773_str-	ENSG00000173889	3	170172712
## 85	chr3:180915696-180933334_str+	ENSG00000114416	3	180915696
## 86	chr3:194589626-194589855_str+	ENSG00000231770	3	194589626
## 87	chr4:991940-1000612_str+	ENSG00000127415	4	991940
## 88	chr4:8205355-8209747_str+	ENSG00000125089	4	8205355
## 89	chr4:13577631-13578912_str-	ENSG00000038219	4	13577631
## 90	chr4:48168626-48170248_str-	ENSG00000135605	4	48168626
## 91	chr4:68039362-68039454_str+	ENSG00000248049	4	68039362
## 92	chr4:68039362-68039454_str+	ENSG00000227725	4	68039362
## 93	chr4:73102547-73113792_str-	ENSG00000132466	4	73102547
## 94	chr4:73113311-73113792_str-	ENSG00000132466	4	73113311
## 95	chr4:78920681-78923857_str-	ENSG00000163291	4	78920681
## 96	chr4:78922421-78923857_str-	ENSG00000163291	4	78922421
## 97	chr4:78917880-78923857_str-	ENSG00000163291	4	78917880
## 98	chr4:79983970-79984591_str-	ENSG00000163297	4	79983970
## 99	chr4:80203664-80203673_str+	ENSG00000152784	4	80203664
## 100	chr4:123028395-123056387_str+	ENSG00000145375	4	123028395
## 101	chr4:138172017-138179217_str-	ENSG00000151012	4	138172017
## 102	chr4:145765738-145774506_str-	ENSG00000151612	4	145765738
## 103	chr4:184730968-184734016_str-	ENSG00000151725	4	184730968
## 104	chr5:475226-475245_str+	ENSG00000225138	5	475226
## 105	chr5:6611085-6611644_str-	ENSG00000037474	5	6611085
## 106	chr5:10404781-10405558_str+	ENSG00000145495	5	10404781
## 107	chr5:37696674-37696689_str+	ENSG00000082068	5	37696674
## 108	chr5:56894703-56894967_str+	ENSG00000095015	5	56894703
## 109	chr5:62398881-62402036_str-	ENSG00000086189	5	62398881
## 110	chr5:127551876-127553811_str+	ENSG00000164244	5	127551876
## 111	chr5:127551876-127553795_str+	ENSG00000164244	5	127551876
## 112	chr5:160009193-160010500_str+	ENSG00000113312	5	160009193
## 113	chr5:170435831-170452802_str+	ENSG00000182132	5	170435831
## 114	chr5:170435831-170452802_str+	ENSG00000182132	5	170435831
## 115	chr5:176529090-176529274_str-	ENSG00000146083	5	176529090
## 116	chr6:2840594-2841322_str-	ENSG00000021355	6	2840594

## 117	chr6:36720224-36720372_str+	ENSG00000255587	6	36720224
## 118	chr6:36720227-36720370_str+	ENSG00000255587	6	36720227
## 119	chr6:42079683-42080508_str+	ENSG00000137413	6	42079683
## 120	chr6:44312263-44313081_str-	ENSG00000124608	6	44312263
## 121	chr6:111574658-111576362_str+	ENSG00000231889	6	111574658
## 122	chr6:116250418-116251809_str-	ENSG00000187189	6	116250418
## 123	chr6:116277629-116277636_str+	ENSG00000111817	6	116277629
## 124	chr6:119306992-119348463_str-	ENSG00000111885	6	119306992
## 125	chr6:119326299-119348463_str-	ENSG00000111885	6	119326299
## 126	chr6:119327308-119348463_str-	ENSG00000111885	6	119327308
## 127	chr6:119332004-119348463_str-	ENSG00000111885	6	119332004
## 128	chr6:119336459-119348463_str-	ENSG00000111885	6	119336459
## 129	chr6:119339041-119348463_str-	ENSG00000111885	6	119339041
## 130	chr6:119323859-119348463_str-	ENSG00000111885	6	119323859
## 131	chr6:153282676-153282692_str+	ENSG00000213121	6	153282676
## 132	chr6:153282681-153282688_str+	ENSG00000213121	6	153282681
## 133	chr6:153282681-153282691_str+	ENSG00000213121	6	153282681
## 134	chr6:159775310-159776147_str+	ENSG00000120437	6	159775310
## 135	chr6:159775313-159776150_str+	ENSG00000120437	6	159775313
## 136	chr7:12351713-12354350_str-	ENSG00000146530	7	12351713
## 137	chr7:21903114-21904110_str-	ENSG00000164649	7	21903114
## 138	chr7:21902352-21904110_str-	ENSG00000164649	7	21902352
## 139	chr7:21903302-21904110_str-	ENSG00000164649	7	21903302
## 140	chr7:30568989-30573000_str-	ENSG00000196295	7	30568989
## 141	chr7:30572807-30573000_str-	ENSG00000196295	7	30572807
## 142	chr7:88208565-88208825_str-	ENSG00000075142	7	88208565
## 143	chr7:127391615-127392548_str-	ENSG00000048405	7	127391615
## 144	chr7:135594729-135597147_str+	ENSG00000155561	7	135594729
## 145	chr7:135594729-135597368_str+	ENSG00000155561	7	135594729
## 146	chr7:152121939-152122046_str+	ENSG00000178234	7	152121939
## 147	chr8:19844485-19844596_str+	ENSG00000104613	8	19844485
## 148	chr8:19844485-19845704_str+	ENSG00000104613	8	19844485
## 149	chr8:20210646-20211177_str+	ENSG00000147416	8	20210646
## 150	chr8:23246994-23247987_str+	ENSG00000147457	8	23246994
## 151	chr8:23246994-23249210_str+	ENSG00000147457	8	23246994
## 152	chr8:23246994-23247987_str+	ENSG00000147457	8	23246994
## 153	chr8:23246994-23249210_str+	ENSG00000147457	8	23246994
## 154	chr8:47930787-47933965_str-	ENSG00000253729	8	47930787
## 155	chr8:47933172-47933965_str-	ENSG00000253729	8	47933172
## 156	chr8:94490082-94491578_str-	ENSG00000164944	8	94490082
## 157	chr8:98043208-98044076_str+	ENSG00000245970	8	98043208
## 158	chr8:103161056-103212919_str+	ENSG00000164929	8	103161056
## 159	chr8:130058076-130060579_str-	ENSG00000153317	8	130058076
## 160	chr8:130054805-130060579_str-	ENSG00000153317	8	130054805
## 161	chr8:133499189-133507199_str-	ENSG00000008513	8	133499189
## 162	chr8:141185741-141186025_str+	ENSG00000105339	8	141185741
## 163	chr8:142274863-142275409_str-	ENSG00000171045	8	142274863
## 164	chr8:144511789-144511902_str-	ENSG00000160957	8	144511789
## 165	chr9:420583-420949_str+	ENSG00000107099	9	420583
## 166	chr9:420583-420958_str+	ENSG00000107099	9	420583
## 167	chr9:420583-422048_str+	ENSG00000107099	9	420583
## 168	chr9:433975-434783_str+	ENSG00000107099	9	433975
## 169	chr9:35660992-35661220_str+	ENSG00000159884	9	35660992
## 170	chr9:35711792-35712005_str-	ENSG00000137076	9	35711792

## 171	chr9:35757197-35757731_str+	ENSG00000107185	9	35757197
## 172	chr9:78317804-78328051_str+	ENSG00000135069	9	78317804
## 173	chr9:78317804-78328981_str+	ENSG00000135069	9	78317804
## 174	chr9:94293895-94295633_str+	ENSG00000175787	9	94293895
## 175	chr9:129632865-129634054_str+	ENSG00000148335	9	129632865
## 176	chr9:131496842-131496854_str+	ENSG00000130723	9	131496842
## 177	chr9:133100382-133101589_str-	ENSG00000160271	9	133100382
## 178	chr10:3126235-3129819_str+	ENSG00000067057	10	3126235
## 179	chr10:5897470-5903020_str+	ENSG00000134452	10	5897470
## 180	chr10:7753602-7753952_str-	ENSG00000151657	10	7753602
## 181	chr10:7753599-7753952_str-	ENSG00000151657	10	7753599
## 182	chr10:18675913-18676829_str+	ENSG00000165997	10	18675913
## 183	chr10:21713946-21726269_str+	ENSG00000078403	10	21713946
## 184	chr10:21713950-21726244_str+	ENSG00000078403	10	21713950
## 185	chr10:21713950-21726273_str+	ENSG00000078403	10	21713950
## 186	chr10:48451140-48453304_str-	ENSG00000128805	10	48451140
## 187	chr10:48446619-48453304_str-	ENSG00000128805	10	48446619
## 188	chr10:48451607-48453304_str-	ENSG00000128805	10	48451607
## 189	chr10:48452797-48453304_str-	ENSG00000128805	10	48452797
## 190	chr10:71819111-71819465_str-	ENSG00000197746	10	71819111
## 191	chr10:71818724-71819465_str-	ENSG00000197746	10	71818724
## 192	chr10:71819069-71819465_str-	ENSG00000197746	10	71819069
## 193	chr10:71819102-71819465_str-	ENSG00000197746	10	71819102
## 194	chr10:78034314-78035350_str+	ENSG00000138326	10	78034314
## 195	chr10:79126839-79139681_str+	ENSG00000108175	10	79126839
## 196	chr10:89635065-89635676_str-	ENSG00000152782	10	89635065
## 197	chr10:99528121-99528590_str-	ENSG00000257582	10	99528121
## 198	chr10:100983817-100986749_str-	ENSG00000055950	10	100983817
## 199	chr10:100984074-100986749_str-	ENSG00000055950	10	100984074
## 200	chr10:100986572-100986749_str-	ENSG00000055950	10	100986572
## 201	chr10:102628794-102630065_str+	ENSG00000107882	10	102628794
## 202	chr10:109884148-109886246_str-	ENSG00000108039	10	109884148
## 203	chr10:109882642-109886246_str-	ENSG00000108039	10	109882642
## 204	chr10:109884148-109886248_str-	ENSG00000108039	10	109884148
## 205	chr10:129792034-129799666_str+	ENSG00000283141	10	129792034
## 206	chr10:133268862-133269307_str-	ENSG00000151651	10	133268862
## 207	chr10:133394956-133395711_str+	ENSG00000254536	10	133394956
## 208	chr10:133394956-133395711_str+	ENSG00000148824	10	133394956
## 209	chr10:133394956-133395711_str+	ENSG00000254536	10	133394956
## 210	chr10:133394956-133395711_str+	ENSG00000148824	10	133394956
## 211	chr11:824783-824832_str+	ENSG00000177666	11	824783
## 212	chr11:870499-874775_str-	ENSG00000177830	11	870499
## 213	chr11:10806047-10806820_str-	ENSG00000110321	11	10806047
## 214	chr11:10806073-10806820_str-	ENSG00000110321	11	10806073
## 215	chr11:10805990-10806820_str-	ENSG00000110321	11	10805990
## 216	chr11:10806010-10806820_str-	ENSG00000110321	11	10806010
## 217	chr11:10806024-10806820_str-	ENSG00000110321	11	10806024
## 218	chr11:34960518-34966640_str+	ENSG00000110435	11	34960518
## 219	chr11:62665332-62665647_str+	ENSG00000214756	11	62665332
## 220	chr11:64318312-64319752_str+	ENSG00000126432	11	64318312
## 221	chr11:65422904-65422931_str+	ENSG00000245532	11	65422904
## 222	chr11:65422905-65423326_str+	ENSG00000245532	11	65422905
## 223	chr11:65422907-65422953_str+	ENSG00000245532	11	65422907
## 224	chr11:65504358-65504658_str+	ENSG00000251562	11	65504358

## 225	chr11:65856242-65857093_str-	ENSG00000172757	11	65856242
## 226	chr11:66626913-66626966_str+	ENSG00000239306	11	66626913
## 227	chr11:66626913-66626966_str+	ENSG00000248643	11	66626913
## 228	chr11:67200123-67207510_str+	ENSG00000173120	11	67200123
## 229	chr11:67282818-67283128_str+	ENSG00000173020	11	67282818
## 230	chr11:67484703-67487005_str+	ENSG00000110711	11	67484703
## 231	chr11:69648142-69651118_str+	ENSG00000110092	11	69648142
## 232	chr11:95173341-95175498_str-	ENSG00000149212	11	95173341
## 233	chr11:117291813-117293054_str-	ENSG00000186318	11	117291813
## 234	chr11:117993392-117993999_str+	ENSG00000110324	11	117993392
## 235	chr11:122782967-122783053_str+	ENSG00000154127	11	122782967
## 236	chr11:125582420-125583521_str+	ENSG00000149547	11	125582420
## 237	chr12:6872997-6873246_str-	ENSG00000111671	12	6872997
## 238	chr12:6872986-6873246_str-	ENSG00000111671	12	6872986
## 239	chr12:6944193-6944475_str+	ENSG00000111678	12	6944193
## 240	chr12:6944194-6944476_str+	ENSG00000111678	12	6944194
## 241	chr12:10506965-10507257_str+	ENSG00000180574	12	10506965
## 242	chr12:10507174-10507257_str+	ENSG00000180574	12	10507174
## 243	chr12:27059460-27060905_str+	ENSG00000152944	12	27059460
## 244	chr12:27059460-27064276_str+	ENSG00000152944	12	27059460
## 245	chr12:53039701-53040142_str+	ENSG00000063046	12	53039701
## 246	chr12:53039702-53040143_str+	ENSG00000063046	12	53039702
## 247	chr12:57476651-57476871_str-	ENSG00000123329	12	57476651
## 248	chr12:57476454-57476871_str-	ENSG00000123329	12	57476454
## 249	chr12:57808548-57809597_str-	ENSG00000135407	12	57808548
## 250	chr12:76060279-76067371_str-	ENSG00000187109	12	76060279
## 251	chr12:76061087-76067371_str-	ENSG00000187109	12	76061087
## 252	chr12:76063208-76067371_str-	ENSG00000187109	12	76063208
## 253	chr12:76060270-76067371_str-	ENSG00000187109	12	76060270
## 254	chr12:76059878-76067371_str-	ENSG00000187109	12	76059878
## 255	chr12:76056161-76067371_str-	ENSG00000187109	12	76056161
## 256	chr12:101760143-101761127_str-	ENSG00000111670	12	101760143
## 257	chr12:101757657-101761127_str-	ENSG00000111670	12	101757657
## 258	chr12:103793997-103794744_str-	ENSG00000111696	12	103793997
## 259	chr12:104987968-104988167_str+	ENSG00000151131	12	104987968
## 260	chr12:120737135-120737356_str+	ENSG00000122971	12	120737135
## 261	chr12:121778127-121779549_str+	ENSG00000188735	12	121778127
## 262	chr12:121799956-121801707_str-	ENSG00000139725	12	121799956
## 263	chr12:121801608-121801707_str-	ENSG00000139725	12	121801608
## 264	chr12:121799956-121801707_str-	ENSG00000212694	12	121799956
## 265	chr12:121801608-121801707_str-	ENSG00000212694	12	121801608
## 266	chr12:123152469-123154382_str-	ENSG00000051825	12	123152469
## 267	chr12:123152625-123154382_str-	ENSG00000051825	12	123152625
## 268	chr13:40943925-40949806_str-	ENSG00000120690	13	40943925
## 269	chr13:40948003-40949806_str-	ENSG00000120690	13	40948003
## 270	chr13:40943898-40949806_str-	ENSG00000120690	13	40943898
## 271	chr13:40934028-40949806_str-	ENSG00000120690	13	40934028
## 272	chr13:40943144-40949806_str-	ENSG00000120690	13	40943144
## 273	chr13:43970434-43970465_str+	ENSG00000281883	13	43970434
## 274	chr13:43970434-43970465_str+	ENSG00000233725	13	43970434
## 275	chr13:43970434-43970465_str+	ENSG00000179611	13	43970434
## 276	chr13:52680155-52687734_str+	ENSG00000165416	13	52680155
## 277	chr14:24440926-24441009_str-	ENSG00000100445	14	24440926
## 278	chr14:24440926-24441674_str-	ENSG00000100445	14	24440926

## 279	chr14:24440926-24441771_str-	ENSG00000100445	14	24440926
## 280	chr14:24441138-24441771_str-	ENSG00000100445	14	24441138
## 281	chr14:24440926-24441771_str-	ENSG00000100445	14	24440926
## 282	chr14:24441138-24441771_str-	ENSG00000100445	14	24441138
## 283	chr14:60397856-60398017_str+	ENSG00000258427	14	60397856
## 284	chr14:60398179-60398251_str+	ENSG00000258427	14	60398179
## 285	chr14:73716093-73718216_str-	ENSG00000156030	14	73716093
## 286	chr14:92118966-92121196_str-	ENSG00000183648	14	92118966
## 287	chr14:92117642-92121196_str-	ENSG00000183648	14	92117642
## 288	chr14:100343387-100346746_str-	ENSG00000140105	14	100343387
## 289	chr14:103712931-103714105_str-	ENSG00000126215	14	103712931
## 290	chr15:66326002-66328969_str+	ENSG00000166938	15	66326002
## 291	chr15:68715311-68718698_str+	ENSG00000103647	15	68715311
## 292	chr15:74023956-74024857_str+	ENSG00000140464	15	74023956
## 293	chr15:74802729-74802781_str+	ENSG00000103653	15	74802729
## 294	chr15:89806809-89808346_str-	ENSG00000166825	15	89806809
## 295	chr15:90232327-90233143_str-	ENSG00000185043	15	90232327
## 296	chr15:92967368-92967423_str+	ENSG00000173575	15	92967368
## 297	chr15:101287010-101287656_str-	ENSG00000131876	15	101287010
## 298	chr16:1769641-1769756_str+	ENSG00000138834	16	1769641
## 299	chr16:2936230-2939871_str+	ENSG00000059122	16	2936230
## 300	chr16:4676452-4677463_str+	ENSG00000102858	16	4676452
## 301	chr16:9107328-9107338_str+	ENSG00000182831	16	9107328
## 302	chr16:9107328-9107338_str+	ENSG00000263244	16	9107328
## 303	chr16:30953616-30953679_str+	ENSG00000261487	16	30953616
## 304	chr16:30953616-30953679_str+	ENSG00000175938	16	30953616
## 305	chr16:30953618-30953681_str+	ENSG00000175938	16	30953618
## 306	chr16:30953618-30953681_str+	ENSG00000261487	16	30953618
## 307	chr16:71745614-71746588_str-	ENSG00000166747	16	71745614
## 308	chr16:71745624-71746588_str-	ENSG00000166747	16	71745624
## 309	chr16:84056135-84058218_str-	ENSG00000140943	16	84056135
## 310	chr16:84095805-84099053_str-	ENSG00000140943	16	84095805
## 311	chr16:85582169-85583343_str-	ENSG00000270124	16	85582169
## 312	chr16:88696743-88696883_str+	ENSG00000259813	16	88696743
## 313	chr16:88697151-88697446_str+	ENSG00000259813	16	88697151
## 314	chr16:89268663-89269937_str-	ENSG00000167522	16	89268663
## 315	chr17:7014473-7014499_str+	ENSG00000219200	17	7014473
## 316	chr17:7014473-7014499_str+	ENSG00000161939	17	7014473
## 317	chr17:7224393-7224480_str+	ENSG00000072778	17	7224393
## 318	chr17:7224393-7224484_str+	ENSG00000072778	17	7224393
## 319	chr17:29568508-29569018_str+	ENSG00000264031	17	29568508
## 320	chr17:29568508-29569018_str+	ENSG00000167543	17	29568508
## 321	chr17:40340067-40348316_str+	ENSG00000131759	17	40340067
## 322	chr17:44868350-44872446_str-	ENSG00000108883	17	44868350
## 323	chr17:44868479-44872446_str-	ENSG00000108883	17	44868479
## 324	chr17:44865065-44872446_str-	ENSG00000108883	17	44865065
## 325	chr17:44867897-44872446_str-	ENSG00000108883	17	44867897
## 326	chr17:46949347-46955501_str+	ENSG00000108433	17	46949347
## 327	chr17:46949347-46952113_str+	ENSG00000108433	17	46949347
## 328	chr17:46949347-46952113_str+	ENSG00000262633	17	46949347
## 329	chr17:46949347-46966534_str+	ENSG00000108433	17	46949347
## 330	chr17:46949347-46966534_str+	ENSG00000262633	17	46949347
## 331	chr17:58273612-58275542_str-	ENSG00000005381	17	58273612
## 332	chr17:58273669-58275542_str-	ENSG00000005381	17	58273669

## 333	chr17:58274652-58275542_str-	ENSG00000005381	17	58274652
## 334	chr17:58273726-58275542_str-	ENSG00000005381	17	58273726
## 335	chr17:58273483-58275542_str-	ENSG00000005381	17	58273483
## 336	chr17:58274199-58275542_str-	ENSG00000005381	17	58274199
## 337	chr17:58272918-58275542_str-	ENSG00000005381	17	58272918
## 338	chr17:58271892-58275542_str-	ENSG00000005381	17	58271892
## 339	chr17:58273578-58275542_str-	ENSG00000005381	17	58273578
## 340	chr17:58311213-58311571_str-	ENSG00000005379	17	58311213
## 341	chr17:67944484-67945409_str+	ENSG00000171634	17	67944484
## 342	chr17:73201608-73201818_str+	ENSG00000166685	17	73201608
## 343	chr17:75523329-75523657_str+	ENSG00000182173	17	75523329
## 344	chr17:75523334-75524261_str+	ENSG00000182173	17	75523334
## 345	chr17:75588739-75588858_str+	ENSG00000266714	17	75588739
## 346	chr17:75590243-75590626_str+	ENSG00000266714	17	75590243
## 347	chr17:75590681-75591616_str+	ENSG00000266714	17	75590681
## 348	chr17:75591701-75591977_str+	ENSG00000266714	17	75591701
## 349	chr17:75607003-75610166_str+	ENSG00000266714	17	75607003
## 350	chr17:75607003-75607196_str+	ENSG00000266714	17	75607003
## 351	chr17:75834716-75834920_str-	ENSG00000092929	17	75834716
## 352	chr17:75834143-75834920_str-	ENSG00000092929	17	75834143
## 353	chr17:76737917-76738281_str+	ENSG00000267168	17	76737917
## 354	chr17:76737917-76738281_str+	ENSG00000092931	17	76737917
## 355	chr17:77088949-77089153_str+	ENSG00000129657	17	77088949
## 356	chr17:77088949-77089153_str+	ENSG00000234912	17	77088949
## 357	chr17:77088950-77089154_str+	ENSG00000129657	17	77088950
## 358	chr17:77088950-77089154_str+	ENSG00000234912	17	77088950
## 359	chr17:77499757-77499852_str+	ENSG00000184640	17	77499757
## 360	chr17:81845230-81845561_str-	ENSG00000185624	17	81845230
## 361	chr17:81844092-81845561_str-	ENSG00000185624	17	81844092
## 362	chr17:81845303-81845561_str-	ENSG00000185624	17	81845303
## 363	chr17:82454413-82457438_str-	ENSG00000265458	17	82454413
## 364	chr18:3262788-3272884_str+	ENSG00000118680	18	3262788
## 365	chr18:35454968-35456776_str-	ENSG00000267583	18	35454968
## 366	chr18:35454968-35456776_str-	ENSG00000267140	18	35454968
## 367	chr18:35454968-35456776_str-	ENSG00000153391	18	35454968
## 368	chr18:63391076-63392120_str-	ENSG00000119541	18	63391076
## 369	chr18:80046506-80047086_str+	ENSG00000267127	18	80046506
## 370	chr19:1076066-1077857_str+	ENSG00000180448	19	1076066
## 371	chr19:1258285-1258314_str+	ENSG00000167470	19	1258285
## 372	chr19:7645714-7646249_str+	ENSG00000076944	19	7645714
## 373	chr19:7682557-7682699_str+	ENSG00000181029	19	7682557
## 374	chr19:7682557-7682699_str+	ENSG00000269711	19	7682557
## 375	chr19:8486207-8486220_str+	ENSG00000099783	19	8486207
## 376	chr19:9380139-9381148_str+	ENSG00000270011	19	9380139
## 377	chr19:9380139-9381148_str+	ENSG00000188629	19	9380139
## 378	chr19:9380139-9380668_str+	ENSG00000270011	19	9380139
## 379	chr19:9380139-9380668_str+	ENSG00000188629	19	9380139
## 380	chr19:12943965-12944182_str+	ENSG00000179218	19	12943965
## 381	chr19:14469517-14469752_str+	ENSG00000123143	19	14469517
## 382	chr19:14469517-14469712_str+	ENSG00000123143	19	14469517
## 383	chr19:14469517-14469912_str+	ENSG00000123143	19	14469517
## 384	chr19:16325447-16325778_str+	ENSG00000127528	19	16325447
## 385	chr19:17942529-17942656_str+	ENSG00000007080	19	17942529
## 386	chr19:18568567-18569241_str+	ENSG00000105700	19	18568567



## 387	chr19:23656822-23658029_str-	ENSG00000197372	19	23656822
## 388	chr19:35164245-35166142_str+	ENSG00000089327	19	35164245
## 389	chr19:35169638-35169688_str+	ENSG00000089327	19	35169638
## 390	chr19:36149862-36149945_str+	ENSG00000126247	19	36149862
## 391	chr19:36149865-36149930_str+	ENSG00000126247	19	36149865
## 392	chr19:36476616-36489474_str-	ENSG00000186017	19	36476616
## 393	chr19:39408021-39408535_str+	ENSG00000128016	19	39408021
## 394	chr19:39433418-39433494_str-	ENSG00000105193	19	39433418
## 395	chr19:41353010-41410648_str+	ENSG00000255730	19	41353010
## 396	chr19:45473454-45473482_str+	ENSG00000125740	19	45473454
## 397	chr19:45641766-45641879_str+	ENSG00000267757	19	45641766
## 398	chr19:45641766-45642225_str+	ENSG00000267757	19	45641766
## 399	chr19:46784144-46787400_str-	ENSG00000105281	19	46784144
## 400	chr19:46784559-46787400_str-	ENSG00000105281	19	46784559
## 401	chr19:47271312-47271349_str+	ENSG00000105321	19	47271312
## 402	chr19:49103418-49103547_str+	ENSG00000104852	19	49103418
## 403	chr19:49103418-49103972_str+	ENSG00000104852	19	49103418
## 404	chr19:49850955-49854406_str+	ENSG00000104960	19	49850955
## 405	chr20:1118649-1118753_str+	ENSG00000125818	20	1118649
## 406	chr20:1480065-1480294_str-	ENSG00000196209	20	1480065
## 407	chr20:4801062-4815062_str-	ENSG00000101265	20	4801062
## 408	chr20:35954339-35954448_str-	ENSG00000171222	20	35954339
## 409	chr20:45895138-45896965_str+	ENSG00000064601	20	45895138
## 410	chr20:49278707-49279104_str+	ENSG00000177410	20	49278707
## 411	chr20:62307828-62308021_str+	ENSG00000130706	20	62307828
## 412	chr20:63736024-63736065_str+	ENSG00000197114	20	63736024
## 413	chr20:63736024-63736065_str+	ENSG00000273154	20	63736024
## 414	chr21:43760047-43760056_str+	ENSG00000160209	21	43760047
## 415	chr21:46664713-46664779_str+	ENSG00000160310	21	46664713
## 416	chr22:35410381-35410744_str+	ENSG00000100297	22	35410381
## 417	chr22:37296972-37297564_str+	ENSG00000100055	22	37296972
## 418	chr22:45184272-45184454_str+	ENSG00000093000	22	45184272
## 419	chr22:46275421-46278586_str+	ENSG00000075234	22	46275421
## 420	chrX:13714505-13716419_str-	ENSG00000196459	X	13714505
## 421	chrX:80687003-80688069_str-	ENSG00000165288	X	80687003
## 422	chr1:948232-948490_str-	ENSG00000188976	1	948232
## 423	chr1:1309851-1310634_str+	ENSG00000169972	1	1309851
## 424	chr1:2405834-2406484_str-	ENSG00000157911	1	2405834
## 425	chr1:3501385-3501796_str-	ENSG00000162591	1	3501385
## 426	chr1:6098925-6098937_str+	ENSG00000069424	1	6098925
## 427	chr1:6098870-6098973_str+	ENSG00000069424	1	6098870
## 428	chr1:6100370-6100511_str+	ENSG00000069424	1	6100370
## 429	chr1:6100777-6100818_str+	ENSG00000069424	1	6100777
## 430	chr1:6100791-6100829_str+	ENSG00000069424	1	6100791
## 431	chr1:6100777-6100818_str+	ENSG00000069424	1	6100777
## 432	chr1:6100791-6100829_str+	ENSG00000069424	1	6100791
## 433	chr1:6100745-6100911_str+	ENSG00000069424	1	6100745
## 434	chr1:6100750-6100916_str+	ENSG00000069424	1	6100750
## 435	chr1:6197756-6198780_str-	ENSG00000116251	1	6197756
## 436	chr1:6197756-6199562_str-	ENSG00000116251	1	6197756
## 437	chr1:6197756-6200489_str-	ENSG00000116251	1	6197756
## 438	chr1:6197756-6199439_str-	ENSG00000116251	1	6197756
## 439	chr1:6197756-6199451_str-	ENSG00000116251	1	6197756
## 440	chr1:6197756-6198180_str-	ENSG00000116251	1	6197756

## 441	chr1:6197756-6208681_str-	ENSG00000116251	1	6197756
## 442	chr1:6197756-6209135_str-	ENSG00000116251	1	6197756
## 443	chr1:6526003-6526696_str-	ENSG00000162408	1	6526003
## 444	chr1:6526003-6528994_str-	ENSG00000162408	1	6526003
## 445	chr1:7778169-7780865_str+	ENSG00000049245	1	7778169
## 446	chr1:15583395-15584696_str-	ENSG00000116771	1	15583395
## 447	chr1:19161147-19161589_str-	ENSG00000127481	1	19161147
## 448	chr1:19222834-19223396_str-	ENSG00000127463	1	19222834
## 449	chr1:19238139-19238795_str-	ENSG00000127463	1	19238139
## 450	chr1:19238139-19239231_str-	ENSG00000127463	1	19238139
## 451	chr1:20853677-20854978_str-	ENSG00000075151	1	20853677
## 452	chr1:21848093-21848643_str-	ENSG00000142798	1	21848093
## 453	chr1:22030650-22030727_str+	ENSG00000218510	1	22030650
## 454	chr1:26285541-26285823_str-	ENSG00000158062	1	26285541
## 455	chr1:32217351-32217437_str-	ENSG00000160055	1	32217351
## 456	chr1:32217351-32221131_str-	ENSG00000160055	1	32217351
## 457	chr1:36137322-36137796_str-	ENSG00000054116	1	36137322
## 458	chr1:36137322-36149337_str-	ENSG00000054116	1	36137322
## 459	chr1:36177945-36178088_str+	ENSG00000116871	1	36177945
## 460	chr1:37540755-37552645_str-	ENSG00000163877	1	37540755
## 461	chr1:37540755-37554006_str-	ENSG00000163877	1	37540755
## 462	chr1:37540755-37546939_str-	ENSG00000163877	1	37540755
## 463	chr1:37583933-37587311_str-	ENSG00000134697	1	37583933
## 464	chr1:39327353-39349478_str+	ENSG00000127603	1	39327353
## 465	chr1:39347210-39349478_str+	ENSG00000127603	1	39347210
## 466	chr1:39570002-39571097_str-	ENSG00000090621	1	39570002
## 467	chr1:39570002-39571234_str-	ENSG00000090621	1	39570002
## 468	chr1:39570002-39572393_str-	ENSG00000090621	1	39570002
## 469	chr1:40091981-40092398_str-	ENSG00000131238	1	40091981
## 470	chr1:40691867-40722676_str+	ENSG00000066136	1	40691867
## 471	chr1:41038506-41041311_str-	ENSG00000010803	1	41038506
## 472	chr1:52643002-52648451_str+	ENSG00000182183	1	52643002
## 473	chr1:53313743-53315444_str-	ENSG00000157193	1	53313743
## 474	chr1:53313743-53326873_str-	ENSG00000157193	1	53313743
## 475	chr1:54216317-54218184_str+	ENSG00000116221	1	54216317
## 476	chr1:58665631-58667038_str-	ENSG00000162601	1	58665631
## 477	chr1:58685251-58689038_str-	ENSG00000162601	1	58685251
## 478	chr1:81502405-81502479_str+	ENSG00000117114	1	81502405
## 479	chr1:81502405-81502479_str+	ENSG00000227288	1	81502405
## 480	chr1:89568493-89574747_str+	ENSG00000197147	1	89568493
## 481	chr1:90022345-90022915_str+	ENSG00000162664	1	90022345
## 482	chr1:92320634-92333391_str+	ENSG00000122484	1	92320634
## 483	chr1:92324375-92333391_str+	ENSG00000122484	1	92324375
## 484	chr1:92325209-92333391_str+	ENSG00000122484	1	92325209
## 485	chr1:93115088-93115470_str+	ENSG00000143033	1	93115088
## 486	chr1:93134195-93136670_str+	ENSG00000143033	1	93134195
## 487	chr1:93135304-93136670_str+	ENSG00000143033	1	93135304
## 488	chr1:99850415-99851035_str+	ENSG00000162688	1	99850415
## 489	chr1:110897849-110899207_str+	ENSG00000143119	1	110897849
## 490	chr1:110899153-110899211_str+	ENSG00000143119	1	110899153
## 491	chr1:111137586-111139501_str-	ENSG00000156171	1	111137586
## 492	chr1:111137586-111139588_str-	ENSG00000156171	1	111137586
## 493	chr1:111137586-111140038_str-	ENSG00000156171	1	111137586
## 494	chr1:111137586-111139521_str-	ENSG00000156171	1	111137586

## 495	chr1:111137586-111140043_str-	ENSG00000156171	1 111137586
## 496	chr1:111137586-111138896_str-	ENSG00000156171	1 111137586
## 497	chr1:111139666-111140038_str-	ENSG00000156171	1 111139666
## 498	chr1:113900400-113901236_str-	ENSG00000134262	1 113900400
## 499	chr1:113900400-113902638_str-	ENSG00000134262	1 113900400
## 500	chr1:113900400-113904605_str-	ENSG00000134262	1 113900400
## 501	chr1:113900400-113901755_str-	ENSG00000134262	1 113900400
## 502	chr1:117942544-117943396_str+	ENSG00000065183	1 117942544
## 503	chr1:150972057-150974619_str-	ENSG00000143418	1 150972057
## 504	chr1:151001829-151002165_str-	ENSG00000143409	1 151001829
## 505	chr1:151054321-151055016_str-	ENSG00000197622	1 151054321
## 506	chr1:151054321-151055677_str-	ENSG00000197622	1 151054321
## 507	chr1:151054321-151055885_str-	ENSG00000197622	1 151054321
## 508	chr1:151054321-151059479_str-	ENSG00000197622	1 151054321
## 509	chr1:151054321-151054983_str-	ENSG00000197622	1 151054321
## 510	chr1:151054321-151055938_str-	ENSG00000197622	1 151054321
## 511	chr1:154236611-154237024_str+	ENSG00000143569	1 154236611
## 512	chr1:154222168-154251191_str+	ENSG00000143569	1 154222168
## 513	chr1:155060832-155061114_str+	ENSG00000143537	1 155060832
## 514	chr1:156194247-156199835_str+	ENSG00000160785	1 156194247
## 515	chr1:156196173-156199835_str+	ENSG00000160785	1 156196173
## 516	chr1:156199721-156199835_str+	ENSG00000160785	1 156199721
## 517	chr1:159020529-159032524_str+	ENSG00000163565	1 159020529
## 518	chr1:159015987-159032524_str+	ENSG00000163565	1 159015987
## 519	chr1:159020529-159032530_str+	ENSG00000163565	1 159020529
## 520	chr1:165631292-165632230_str+	ENSG00000143198	1 165631292
## 521	chr1:171557417-171557439_str+	ENSG00000117523	1 171557417
## 522	chr1:171557420-171557442_str+	ENSG00000117523	1 171557420
## 523	chr1:171557424-171557446_str+	ENSG00000117523	1 171557424
## 524	chr1:171557426-171557448_str+	ENSG00000117523	1 171557426
## 525	chr1:179884769-179889310_str+	ENSG00000143337	1 179884769
## 526	chr1:179887959-179889310_str+	ENSG00000143337	1 179887959
## 527	chr1:179884769-179889313_str+	ENSG00000143337	1 179884769
## 528	chr1:179887959-179889313_str+	ENSG00000143337	1 179887959
## 529	chr1:181089094-181089483_str+	ENSG00000162783	1 181089094
## 530	chr1:202951164-202954241_str-	ENSG00000159346	1 202951164
## 531	chr1:202951164-202957909_str-	ENSG00000159346	1 202951164
## 532	chr1:202951164-202958185_str-	ENSG00000159346	1 202951164
## 533	chr1:202951164-202952840_str-	ENSG00000159346	1 202951164
## 534	chr1:203307824-203307869_str+	ENSG00000159388	1 203307824
## 535	chr1:203307827-203307871_str+	ENSG00000159388	1 203307827
## 536	chr1:203700923-203701635_str+	ENSG00000058668	1 203700923
## 537	chr1:206730098-206731138_str+	ENSG00000162889	1 206730098
## 538	chr1:206730763-206731138_str+	ENSG00000162889	1 206730763
## 539	chr1:206729475-206731138_str+	ENSG00000162889	1 206729475
## 540	chr1:207881224-207884338_str-	ENSG00000174059	1 207881224
## 541	chr1:209776118-209777346_str+	ENSG000000009790	1 209776118
## 542	chr1:209775736-209777352_str+	ENSG000000009790	1 209775736
## 543	chr1:209776124-209777352_str+	ENSG000000009790	1 209776124
## 544	chr1:209775696-209777355_str+	ENSG000000009790	1 209775696
## 545	chr1:222722514-222722886_str+	ENSG00000162819	1 222722514
## 546	chr1:223762251-223764150_str+	ENSG00000162909	1 223762251
## 547	chr1:224615737-224616099_str+	ENSG00000143786	1 224615737
## 548	chr1:224615737-224616099_str+	ENSG00000143786	1 224615737

## 549	chr1:230281058-230281106_str+	ENSG00000143641	1	230281058
## 550	chr1:236234302-236235789_str-	ENSG00000086619	1	236234302
## 551	chr1:236544908-236548005_str+	ENSG00000116977	1	236544908
## 552	chr1:236544915-236548012_str+	ENSG00000116977	1	236544915
## 553	chr1:236547057-236548012_str+	ENSG00000116977	1	236547057
## 554	chr1:244969981-244970814_str+	ENSG00000203666	1	244969981
## 555	chr1:247202113-247210691_str-	ENSG00000227671	1	247202113
## 556	chr2:9587509-9588165_str-	ENSG00000134308	2	9587509
## 557	chr2:9587509-9591392_str-	ENSG00000134308	2	9587509
## 558	chr2:11193857-11194256_str-	ENSG00000134318	2	11193857
## 559	chr2:15596763-15597375_str+	ENSG00000079785	2	15596763
## 560	chr2:19901592-19901706_str-	ENSG00000183891	2	19901592
## 561	chr2:24077858-24079444_str-	ENSG00000115129	2	24077858
## 562	chr2:26034303-26034388_str+	ENSG00000084733	2	26034303
## 563	chr2:26034303-26034388_str+	ENSG00000084733	2	26034303
## 564	chr2:27634924-27635140_str+	ENSG00000259080	2	27634924
## 565	chr2:27634924-27635140_str+	ENSG00000198522	2	27634924
## 566	chr2:28129380-28139148_str+	ENSG00000158019	2	28129380
## 567	chr2:28129380-28139148_str+	ENSG00000158019	2	28129380
## 568	chr2:28415394-28415509_str+	ENSG00000075426	2	28415394
## 569	chr2:30911059-30912223_str-	ENSG00000158089	2	30911059
## 570	chr2:30911059-30924119_str-	ENSG00000158089	2	30911059
## 571	chr2:32416163-32418370_str+	ENSG00000115760	2	32416163
## 572	chr2:36578865-36581290_str-	ENSG00000171055	2	36578865
## 573	chr2:37253101-37254204_str-	ENSG00000115825	2	37253101
## 574	chr2:39755409-39755889_str-	ENSG00000138050	2	39755409
## 575	chr2:47073864-47073897_str+	ENSG00000068724	2	47073864
## 576	chr2:53782169-53786821_str-	ENSG00000115239	2	53782169
## 577	chr2:53782169-53786821_str-	ENSG00000270898	2	53782169
## 578	chr2:55234962-55235410_str+	ENSG00000143947	2	55234962
## 579	chr2:55234962-55235413_str+	ENSG00000143947	2	55234962
## 580	chr2:55298062-55299839_str-	ENSG00000115355	2	55298062
## 581	chr2:55572838-55573619_str-	ENSG00000275052	2	55572838
## 582	chr2:65205698-65205933_str+	ENSG00000172974	2	65205698
## 583	chr2:65205663-65205949_str+	ENSG00000172974	2	65205663
## 584	chr2:68388293-68395840_str+	ENSG00000115956	2	68388293
## 585	chr2:74877321-74878688_str+	ENSG00000159399	2	74877321
## 586	chr2:85579061-85581622_str+	ENSG00000118640	2	85579061
## 587	chr2:85579076-85581629_str+	ENSG00000118640	2	85579076
## 588	chr2:85581709-85581746_str+	ENSG00000118640	2	85581709
## 589	chr2:85579167-85581754_str+	ENSG00000118640	2	85579167
## 590	chr2:85581656-85581754_str+	ENSG00000118640	2	85581656
## 591	chr2:85579057-85581754_str+	ENSG00000118640	2	85579057
## 592	chr2:85581605-85581754_str+	ENSG00000118640	2	85581605
## 593	chr2:85581644-85581754_str+	ENSG00000118640	2	85581644
## 594	chr2:85581779-85581859_str+	ENSG00000118640	2	85581779
## 595	chr2:85581771-85581863_str+	ENSG00000118640	2	85581771
## 596	chr2:85579090-85581872_str+	ENSG00000118640	2	85579090
## 597	chr2:112654636-112655236_str+	ENSG00000144136	2	112654636
## 598	chr2:113185072-113185331_str+	ENSG00000125637	2	113185072
## 599	chr2:113185072-113185331_str+	ENSG00000125637	2	113185072
## 600	chr2:117946882-117948105_str-	ENSG00000125633	2	117946882
## 601	chr2:117973994-117974850_str-	ENSG00000125633	2	117973994
## 602	chr2:126656312-126663356_str+	ENSG00000136732	2	126656312

## 603	chr2:126656195-126696092_str+	ENSG00000136732	2	126656195
## 604	chr2:126696081-126696095_str+	ENSG00000136732	2	126696081
## 605	chr2:126695998-126696096_str+	ENSG00000136732	2	126695998
## 606	chr2:126695981-126696099_str+	ENSG00000136732	2	126695981
## 607	chr2:127942164-127942424_str-	ENSG00000136715	2	127942164
## 608	chr2:128191586-128193541_str+	ENSG00000136731	2	128191586
## 609	chr2:143649832-143649842_str+	ENSG00000075884	2	143649832
## 610	chr2:148690373-148691621_str+	ENSG00000135999	2	148690373
## 611	chr2:151468146-151468290_str+	ENSG00000080345	2	151468146
## 612	chr2:152664252-152669137_str-	ENSG00000196504	2	152664252
## 613	chr2:159097834-159136194_str+	ENSG00000115183	2	159097834
## 614	chr2:159854535-159854904_str-	ENSG00000248672	2	159854535
## 615	chr2:159854535-159854904_str-	ENSG00000054219	2	159854535
## 616	chr2:170951416-170966084_str+	ENSG00000115806	2	170951416
## 617	chr2:179981997-179986695_str-	ENSG00000163510	2	179981997
## 618	chr2:181481683-181482360_str+	ENSG00000115232	2	181481683
## 619	chr2:181481678-181482360_str+	ENSG00000115232	2	181481678
## 620	chr2:181482650-181484155_str+	ENSG00000115232	2	181482650
## 621	chr2:181482651-181484156_str+	ENSG00000115232	2	181482651
## 622	chr2:190488818-190489768_str+	ENSG00000151690	2	190488818
## 623	chr2:197500439-197501074_str+	ENSG00000115541	2	197500439
## 624	chr2:197500918-197501074_str+	ENSG00000115541	2	197500918
## 625	chr2:197500439-197501074_str+	ENSG00000270757	2	197500439
## 626	chr2:197500918-197501074_str+	ENSG00000270757	2	197500918
## 627	chr2:197500439-197501078_str+	ENSG00000115541	2	197500439
## 628	chr2:197500439-197501078_str+	ENSG00000270757	2	197500439
## 629	chr2:201276968-201279216_str+	ENSG00000064012	2	201276968
## 630	chr2:201277104-201279216_str+	ENSG00000064012	2	201277104
## 631	chr2:201285317-201286459_str+	ENSG00000064012	2	201285317
## 632	chr2:208342649-208345111_str+	ENSG00000115020	2	208342649
## 633	chr2:208340131-208345111_str+	ENSG00000115020	2	208340131
## 634	chr2:215326138-215326822_str+	ENSG00000138363	2	215326138
## 635	chr2:215326094-215326822_str+	ENSG00000138363	2	215326094
## 636	chr2:216499398-216499832_str+	ENSG00000197756	2	216499398
## 637	chr2:218217544-218224907_str+	ENSG00000163466	2	218217544
## 638	chr2:219562674-219563355_str-	ENSG00000124006	2	219562674
## 639	chr2:231708629-231712498_str+	ENSG00000187514	2	231708629
## 640	chr2:231708730-231712501_str+	ENSG00000187514	2	231708730
## 641	chr2:239156773-239163803_str-	ENSG00000068024	2	239156773
## 642	chr2:239156773-239163809_str-	ENSG00000068024	2	239156773
## 643	chr2:239156773-239176413_str-	ENSG00000068024	2	239156773
## 644	chr2:241315982-241320203_str+	ENSG00000168385	2	241315982
## 645	chr2:241493036-241493293_str+	ENSG00000006607	2	241493036
## 646	chr3:3174261-3175163_str-	ENSG00000113851	3	3174261
## 647	chr3:3174261-3179621_str-	ENSG00000113851	3	3174261
## 648	chr3:9781600-9782981_str+	ENSG00000114026	3	9781600
## 649	chr3:9813344-9815695_str+	ENSG00000250151	3	9813344
## 650	chr3:9813344-9815695_str+	ENSG00000214021	3	9813344
## 651	chr3:14666947-14667424_str+	ENSG00000154781	3	14666947
## 652	chr3:15686309-15690019_str-	ENSG00000206560	3	15686309
## 653	chr3:15686309-15694739_str-	ENSG00000206560	3	15686309
## 654	chr3:15686309-15689537_str-	ENSG00000206560	3	15686309
## 655	chr3:30658013-30671635_str+	ENSG00000163513	3	30658013
## 656	chr3:30650460-30671638_str+	ENSG00000163513	3	30650460

## 657	chr3:30657822-30671638_str+	ENSG00000163513	3	30657822
## 658	chr3:30654725-30671638_str+	ENSG00000163513	3	30654725
## 659	chr3:30661639-30671638_str+	ENSG00000163513	3	30661639
## 660	chr3:30661746-30671638_str+	ENSG00000163513	3	30661746
## 661	chr3:33828968-33836021_str+	ENSG00000170248	3	33828968
## 662	chr3:33828968-33836024_str+	ENSG00000170248	3	33828968
## 663	chr3:33828968-33836027_str+	ENSG00000170248	3	33828968
## 664	chr3:33828969-33836141_str+	ENSG00000170248	3	33828969
## 665	chr3:37121536-37121635_str-	ENSG00000093167	3	37121536
## 666	chr3:37121536-37129063_str-	ENSG00000093167	3	37121536
## 667	chr3:39143752-39143855_str-	ENSG00000144655	3	39143752
## 668	chr3:39410999-39411296_str+	ENSG00000168028	3	39410999
## 669	chr3:39410999-39411570_str+	ENSG00000168028	3	39410999
## 670	chr3:39410920-39411667_str+	ENSG00000168028	3	39410920
## 671	chr3:39410917-39411670_str+	ENSG00000168028	3	39410917
## 672	chr3:39410968-39411671_str+	ENSG00000168028	3	39410968
## 673	chr3:39410918-39411672_str+	ENSG00000168028	3	39410918
## 674	chr3:39410867-39411672_str+	ENSG00000168028	3	39410867
## 675	chr3:39410969-39411675_str+	ENSG00000168028	3	39410969
## 676	chr3:39410886-39411686_str+	ENSG00000168028	3	39410886
## 677	chr3:46680026-46680430_str-	ENSG00000178038	3	46680026
## 678	chr3:48641524-48641851_str-	ENSG00000008300	3	48641524
## 679	chr3:48694525-48695090_str-	ENSG00000068745	3	48694525
## 680	chr3:49015302-49015370_str+	ENSG00000178252	3	49015302
## 681	chr3:49279891-49280744_str-	ENSG00000114316	3	49279891
## 682	chr3:49701910-49702083_str+	ENSG00000164068	3	49701910
## 683	chr3:49714174-49715575_str+	ENSG00000164068	3	49714174
## 684	chr3:50118032-50118044_str+	ENSG00000003756	3	50118032
## 685	chr3:52291111-52291747_str+	ENSG00000168237	3	52291111
## 686	chr3:52524881-52524963_str-	ENSG00000168268	3	52524881
## 687	chr3:52697569-52697721_str-	ENSG00000016864	3	52697569
## 688	chr3:53231550-53233156_str-	ENSG00000163931	3	53231550
## 689	chr3:53231550-53232739_str-	ENSG00000163931	3	53231550
## 690	chr3:53231550-53234983_str-	ENSG00000163931	3	53231550
## 691	chr3:53876080-53876620_str-	ENSG00000113812	3	53876080
## 692	chr3:53876080-53877214_str-	ENSG00000113812	3	53876080
## 693	chr3:53876080-53877647_str-	ENSG00000113812	3	53876080
## 694	chr3:56661017-56662385_str-	ENSG00000163946	3	56661017
## 695	chr3:56661017-56663541_str-	ENSG00000163946	3	56661017
## 696	chr3:56727688-56727824_str-	ENSG00000163947	3	56727688
## 697	chr3:57596632-57597074_str-	ENSG00000168374	3	57596632
## 698	chr3:58156075-58159554_str+	ENSG00000136068	3	58156075
## 699	chr3:58154928-58159554_str+	ENSG00000136068	3	58154928
## 700	chr3:67609596-67654503_str-	ENSG00000172340	3	67609596
## 701	chr3:67609596-67617463_str-	ENSG00000172340	3	67609596
## 702	chr3:67609596-67637646_str-	ENSG00000172340	3	67609596
## 703	chr3:98588854-98590632_str-	ENSG00000080819	3	98588854
## 704	chr3:98588854-98589662_str-	ENSG00000080819	3	98588854
## 705	chr3:101335932-101337509_str-	ENSG00000138468	3	101335932
## 706	chr3:108086934-108090863_str-	ENSG00000196776	3	108086934
## 707	chr3:111624404-111637241_str+	ENSG00000153283	3	111624404
## 708	chr3:111987050-111987672_str+	ENSG00000144827	3	111987050
## 709	chr3:112569269-112570540_str+	ENSG00000138459	3	112569269
## 710	chr3:121637504-121638817_str-	ENSG00000180353	3	121637504

## 711	chr3:121923129-121923206_str+	ENSG00000163406	3	121923129
## 712	chr3:123579769-123582212_str-	ENSG00000206527	3	123579769
## 713	chr3:124735246-124737915_str+	ENSG00000114491	3	124735246
## 714	chr3:126462220-126466155_str-	ENSG00000070476	3	126462220
## 715	chr3:126462220-126470895_str-	ENSG00000070476	3	126462220
## 716	chr3:126462220-126462455_str-	ENSG00000070476	3	126462220
## 717	chr3:128906249-128908185_str+	ENSG00000177646	3	128906249
## 718	chr3:129975955-129976698_str+	ENSG00000170893	3	129975955
## 719	chr3:129975982-129976698_str+	ENSG00000170893	3	129975982
## 720	chr3:129976015-129976699_str+	ENSG00000170893	3	129976015
## 721	chr3:129976027-129976699_str+	ENSG00000170893	3	129976027
## 722	chr3:129976027-129976707_str+	ENSG00000170893	3	129976027
## 723	chr3:132718117-132718994_str-	ENSG00000274810	3	132718117
## 724	chr3:132718117-132718994_str-	ENSG00000113971	3	132718117
## 725	chr3:132718117-132718649_str-	ENSG00000274810	3	132718117
## 726	chr3:132718117-132718649_str-	ENSG00000113971	3	132718117
## 727	chr3:146541180-146544467_str-	ENSG00000188313	3	146541180
## 728	chr3:152836943-152839194_str+	ENSG00000169860	3	152836943
## 729	chr3:172133546-172184245_str+	ENSG00000075420	3	172133546
## 730	chr3:179368103-179375220_str+	ENSG00000171109	3	179368103
## 731	chr3:180608810-180609630_str+	ENSG00000163728	3	180608810
## 732	chr3:183635747-183636221_str+	ENSG00000114796	3	183635747
## 733	chr3:183635793-183636221_str+	ENSG00000114796	3	183635793
## 734	chr3:183635780-183643478_str+	ENSG00000114796	3	183635780
## 735	chr3:183635747-183643480_str+	ENSG00000114796	3	183635747
## 736	chr3:183635793-183643480_str+	ENSG00000114796	3	183635793
## 737	chr3:183636311-183643480_str+	ENSG00000114796	3	183636311
## 738	chr3:183643255-183643480_str+	ENSG00000114796	3	183643255
## 739	chr3:183635709-183643480_str+	ENSG00000114796	3	183635709
## 740	chr3:183637235-183643480_str+	ENSG00000114796	3	183637235
## 741	chr3:184170729-184171567_str+	ENSG00000161202	3	184170729
## 742	chr3:184174959-184178857_str+	ENSG00000161203	3	184174959
## 743	chr3:184177067-184178857_str+	ENSG00000161203	3	184177067
## 744	chr3:184177067-184178857_str+	ENSG00000145191	3	184177067
## 745	chr3:193659924-193659936_str+	ENSG00000198836	3	193659924
## 746	chr3:194488726-194497938_str+	ENSG00000233058	3	194488726
## 747	chr3:196232524-196233063_str+	ENSG00000163959	3	196232524
## 748	chr3:197829673-197830770_str+	ENSG00000186001	3	197829673
## 749	chr4:1744080-1744092_str+	ENSG00000013810	4	1744080
## 750	chr4:1740986-1744518_str+	ENSG00000013810	4	1740986
## 751	chr4:3520193-3524907_str-	ENSG00000163956	4	3520193
## 752	chr4:5016964-5017135_str-	ENSG00000170891	4	5016964
## 753	chr4:5741814-5745204_str+	ENSG00000072840	4	5741814
## 754	chr4:5742226-5745204_str+	ENSG00000072840	4	5742226
## 755	chr4:5828668-5835915_str-	ENSG00000072832	4	5828668
## 756	chr4:8218347-8219335_str+	ENSG00000125089	4	8218347
## 757	chr4:11371987-11372718_str+	ENSG00000250896	4	11371987
## 758	chr4:15715361-15715707_str+	ENSG00000109743	4	15715361
## 759	chr4:15711889-15715707_str+	ENSG00000109743	4	15711889
## 760	chr4:15715361-15715708_str+	ENSG00000109743	4	15715361
## 761	chr4:15715361-15715718_str+	ENSG00000109743	4	15715361
## 762	chr4:17621699-17623601_str+	ENSG00000118579	4	17621699
## 763	chr4:17619967-17623601_str+	ENSG00000118579	4	17619967
## 764	chr4:37635123-37638447_str-	ENSG00000181826	4	37635123

## 765	chr4:37635123-37647368_str-	ENSG00000181826	4	37635123
## 766	chr4:37635123-37636216_str-	ENSG00000181826	4	37635123
## 767	chr4:37635123-37636891_str-	ENSG00000181826	4	37635123
## 768	chr4:38054338-38060620_str+	ENSG00000065882	4	38054338
## 769	chr4:39045096-39062559_str+	ENSG00000109790	4	39045096
## 770	chr4:48145579-48146325_str-	ENSG00000135605	4	48145579
## 771	chr4:52862649-52863268_str+	ENSG00000128045	4	52862649
## 772	chr4:55396157-55396217_str+	ENSG00000134851	4	55396157
## 773	chr4:55396157-55396217_str+	ENSG00000134851	4	55396157
## 774	chr4:55396160-55396220_str+	ENSG00000134851	4	55396160
## 775	chr4:56384341-56387362_str-	ENSG00000157426	4	56384341
## 776	chr4:56979004-56985280_str+	ENSG00000047315	4	56979004
## 777	chr4:80203664-80203673_str+	ENSG00000152784	4	80203664
## 778	chr4:82428886-82429248_str-	ENSG00000152795	4	82428886
## 779	chr4:88595614-88597950_str+	ENSG00000138641	4	88595614
## 780	chr4:99061645-99062170_str+	ENSG00000164024	4	99061645
## 781	chr4:103120333-103122871_str-	ENSG00000138778	4	103120333
## 782	chr4:103120333-103122871_str-	ENSG00000138778	4	103120333
## 783	chr4:103120333-103122871_str-	ENSG00000138778	4	103120333
## 784	chr4:105422433-105424196_str-	ENSG00000138777	4	105422433
## 785	chr4:120062095-120065672_str-	ENSG00000164109	4	120062095
## 786	chr4:120062095-120066662_str-	ENSG00000164109	4	120062095
## 787	chr4:143214943-143215057_str+	ENSG00000170185	4	143214943
## 788	chr4:145123597-145124987_str+	ENSG00000164163	4	145123597
## 789	chr4:145123599-145124989_str+	ENSG00000164163	4	145123599
## 790	chr4:145123600-145124990_str+	ENSG00000164163	4	145123600
## 791	chr4:145123601-145124991_str+	ENSG00000164163	4	145123601
## 792	chr4:184389066-184390703_str-	ENSG00000168310	4	184389066
## 793	chr4:184648631-184649395_str-	ENSG00000164305	4	184648631
## 794	chr4:184648631-184649165_str-	ENSG00000164305	4	184648631
## 795	chr5:475226-475245_str+	ENSG00000225138	5	475226
## 796	chr5:6605408-6606820_str-	ENSG00000037474	5	6605408
## 797	chr5:7897133-7897214_str+	ENSG00000124275	5	7897133
## 798	chr5:14287063-14290716_str+	ENSG00000038382	5	14287063
## 799	chr5:32077605-32087130_str+	ENSG00000133401	5	32077605
## 800	chr5:32077606-32087131_str+	ENSG00000133401	5	32077606
## 801	chr5:32788055-32788097_str+	ENSG00000113389	5	32788055
## 802	chr5:37696674-37696689_str+	ENSG00000082068	5	37696674
## 803	chr5:39372708-39373390_str-	ENSG00000113600	5	39372708
## 804	chr5:39372708-39373390_str-	ENSG00000153071	5	39372708
## 805	chr5:56882866-56883527_str+	ENSG00000095015	5	56882866
## 806	chr5:56937698-56938296_str-	ENSG00000155545	5	56937698
## 807	chr5:56937698-56938883_str-	ENSG00000155545	5	56937698
## 808	chr5:56937698-56946926_str-	ENSG00000155545	5	56937698
## 809	chr5:62366481-62373687_str+	ENSG00000068796	5	62366481
## 810	chr5:62365353-62373687_str+	ENSG00000068796	5	62365353
## 811	chr5:73502598-73502913_str+	ENSG00000145741	5	73502598
## 812	chr5:73502601-73502916_str+	ENSG00000145741	5	73502601
## 813	chr5:73502574-73502916_str+	ENSG00000145741	5	73502574
## 814	chr5:73502602-73502917_str+	ENSG00000145741	5	73502602
## 815	chr5:73502580-73502919_str+	ENSG00000145741	5	73502580
## 816	chr5:79447145-79450990_str-	ENSG00000152413	5	79447145
## 817	chr5:79667951-79685747_str+	ENSG00000164329	5	79667951
## 818	chr5:82276002-82276030_str+	ENSG00000152348	5	82276002



## 819	chr5:94870491-94870872_str-	ENSG00000175471	5	94870491
## 820	chr5:94870491-94871315_str-	ENSG00000175471	5	94870491
## 821	chr5:96786549-96788531_str-	ENSG00000164307	5	96786549
## 822	chr5:96786549-96790296_str-	ENSG00000164307	5	96786549
## 823	chr5:103258896-103263896_str+	ENSG00000181751	5	103258896
## 824	chr5:111735505-111737107_str+	ENSG00000246859	5	111735505
## 825	chr5:127554268-127554313_str+	ENSG00000164244	5	127554268
## 826	chr5:134161130-134167170_str-	ENSG00000113558	5	134161130
## 827	chr5:134161130-134166867_str-	ENSG00000113558	5	134161130
## 828	chr5:140561722-140561844_str-	ENSG00000113108	5	140561722
## 829	chr5:146483629-146485713_str+	ENSG00000113649	5	146483629
## 830	chr5:146484393-146485713_str+	ENSG00000113649	5	146484393
## 831	chr5:148417204-148423998_str+	ENSG00000145868	5	148417204
## 832	chr5:150444641-150445609_str-	ENSG00000164587	5	150444641
## 833	chr5:150446963-150447474_str-	ENSG00000164587	5	150446963
## 834	chr5:150446963-150447585_str-	ENSG00000164587	5	150446963
## 835	chr5:150446963-150447674_str-	ENSG00000164587	5	150446963
## 836	chr5:150446963-150449703_str-	ENSG00000164587	5	150446963
## 837	chr5:150446963-150447649_str-	ENSG00000164587	5	150446963
## 838	chr5:150446963-150447656_str-	ENSG00000164587	5	150446963
## 839	chr5:150521210-150521251_str+	ENSG00000070614	5	150521210
## 840	chr5:150757948-150758586_str-	ENSG00000132912	5	150757948
## 841	chr5:150757948-150758859_str-	ENSG00000132912	5	150757948
## 842	chr5:151027531-151027909_str+	ENSG00000211445	5	151027531
## 843	chr5:151155701-151157680_str-	ENSG00000197043	5	151155701
## 844	chr5:170027948-170034399_str+	ENSG00000134516	5	170027948
## 845	chr5:176527616-176528592_str-	ENSG00000146083	5	176527616
## 846	chr5:176531630-176532004_str-	ENSG00000146083	5	176531630
## 847	chr5:176531630-176532366_str-	ENSG00000146083	5	176531630
## 848	chr5:176912195-176919170_str-	ENSG00000087206	5	176912195
## 849	chr5:176912195-176943335_str-	ENSG00000087206	5	176912195
## 850	chr5:177509575-177509802_str-	ENSG00000146094	5	177509575
## 851	chr5:177509575-177510260_str-	ENSG00000146094	5	177509575
## 852	chr5:177509575-177509758_str-	ENSG00000146094	5	177509575
## 853	chr5:177509584-177509758_str-	ENSG00000146094	5	177509584
## 854	chr5:178231866-178232492_str-	ENSG00000175309	5	178231866
## 855	chr5:180568003-180569110_str+	ENSG00000113300	5	180568003
## 856	chr5:180567242-180569110_str+	ENSG00000113300	5	180567242
## 857	chr5:181233435-181233699_str+	ENSG00000146063	5	181233435
## 858	chr6:2766444-2768691_str+	ENSG00000124535	6	2766444
## 859	chr6:2834012-2835856_str-	ENSG00000021355	6	2834012
## 860	chr6:2834012-2836108_str-	ENSG00000021355	6	2834012
## 861	chr6:2834012-2837882_str-	ENSG00000021355	6	2834012
## 862	chr6:2837803-2837882_str-	ENSG00000021355	6	2837803
## 863	chr6:2837999-2838549_str-	ENSG00000021355	6	2837999
## 864	chr6:2837999-2839335_str-	ENSG00000021355	6	2837999
## 865	chr6:2837999-2840349_str-	ENSG00000021355	6	2837999
## 866	chr6:2837999-2840419_str-	ENSG00000021355	6	2837999
## 867	chr6:2837999-2840445_str-	ENSG00000021355	6	2837999
## 868	chr6:2837999-2838473_str-	ENSG00000021355	6	2837999
## 869	chr6:2837999-2838367_str-	ENSG00000021355	6	2837999
## 870	chr6:7888848-7889495_str-	ENSG00000239264	6	7888848
## 871	chr6:7888848-7889495_str-	ENSG00000259040	6	7888848
## 872	chr6:7888848-7891621_str-	ENSG00000239264	6	7888848

## 873	chr6:7888848-7889540_str-	ENSG00000239264	6	7888848
## 874	chr6:7888848-7889540_str-	ENSG00000259040	6	7888848
## 875	chr6:7888848-7891621_str-	ENSG00000259040	6	7888848
## 876	chr6:27467920-27472288_str-	ENSG00000096654	6	27467920
## 877	chr6:28126921-28129430_str+	ENSG00000196812	6	28126921
## 878	chr6:35835488-35838337_str-	ENSG00000096063	6	35835488
## 879	chr6:36718118-36718493_str+	ENSG00000255587	6	36718118
## 880	chr6:36717419-36718493_str+	ENSG00000255587	6	36717419
## 881	chr6:42208372-42208858_str-	ENSG00000048544	6	42208372
## 882	chr6:42214218-42214280_str-	ENSG00000048544	6	42214218
## 883	chr6:47576590-47577009_str+	ENSG00000198087	6	47576590
## 884	chr6:47576602-47577009_str+	ENSG00000198087	6	47576602
## 885	chr6:73518264-73518354_str-	ENSG00000156508	6	73518264
## 886	chr6:73518264-73518698_str-	ENSG00000156508	6	73518264
## 887	chr6:73519516-73519803_str-	ENSG00000156508	6	73519516
## 888	chr6:73519516-73519821_str-	ENSG00000156508	6	73519516
## 889	chr6:73519516-73519883_str-	ENSG00000156508	6	73519516
## 890	chr6:73519516-73521000_str-	ENSG00000156508	6	73519516
## 891	chr6:75258986-75259347_str-	ENSG00000112697	6	75258986
## 892	chr6:79208576-79214972_str-	ENSG00000118418	6	79208576
## 893	chr6:79208576-79234546_str-	ENSG00000118418	6	79208576
## 894	chr6:87230233-87230248_str+	ENSG00000188994	6	87230233
## 895	chr6:110960616-110962392_str+	ENSG00000155115	6	110960616
## 896	chr6:116277430-116277634_str+	ENSG00000111817	6	116277430
## 897	chr6:116277629-116277636_str+	ENSG00000111817	6	116277629
## 898	chr6:116277543-116277638_str+	ENSG00000111817	6	116277543
## 899	chr6:116278454-116278506_str+	ENSG00000111817	6	116278454
## 900	chr6:127280340-127285208_str+	ENSG00000118518	6	127280340
## 901	chr6:132459629-132460715_str-	ENSG00000079950	6	132459629
## 902	chr6:132814783-132814903_str+	ENSG00000112306	6	132814783
## 903	chr6:132817061-132817194_str+	ENSG00000112306	6	132817061
## 904	chr6:137869431-137869559_str+	ENSG00000118503	6	137869431
## 905	chr6:147278204-147310084_str+	ENSG00000164506	6	147278204
## 906	chr6:147291172-147310084_str+	ENSG00000164506	6	147291172
## 907	chr6:147308592-147310084_str+	ENSG00000164506	6	147308592
## 908	chr6:147339384-147345944_str+	ENSG00000164506	6	147339384
## 909	chr6:149410691-149410770_str+	ENSG00000055208	6	149410691
## 910	chr6:153282644-153282684_str+	ENSG00000213121	6	153282644
## 911	chr6:153282639-153282685_str+	ENSG00000213121	6	153282639
## 912	chr6:153282681-153282688_str+	ENSG00000213121	6	153282681
## 913	chr6:153282360-153282688_str+	ENSG00000213121	6	153282360
## 914	chr6:153282276-153282689_str+	ENSG00000213121	6	153282276
## 915	chr6:153282681-153282691_str+	ENSG00000213121	6	153282681
## 916	chr6:153282676-153282692_str+	ENSG00000213121	6	153282676
## 917	chr6:153282357-153282696_str+	ENSG00000213121	6	153282357
## 918	chr6:153282309-153282699_str+	ENSG00000213121	6	153282309
## 919	chr6:153282614-153282700_str+	ENSG00000213121	6	153282614
## 920	chr6:153282615-153282700_str+	ENSG00000213121	6	153282615
## 921	chr6:153282545-153282701_str+	ENSG00000213121	6	153282545
## 922	chr6:158627104-158627176_str+	ENSG00000146433	6	158627104
## 923	chr6:159778280-159778659_str+	ENSG00000120437	6	159778280
## 924	chr6:159785997-159787743_str-	ENSG00000120438	6	159785997
## 925	chr6:166999514-167000060_str+	ENSG00000213066	6	166999514
## 926	chr6:166999514-167000060_str+	ENSG00000272980	6	166999514

## 927	chr6:169663706-169664166_str-	ENSG00000184465	6	169663706
## 928	chr6:169718918-169721005_str-	ENSG00000130024	6	169718918
## 929	chr6:170583747-170584299_str-	ENSG00000071994	6	170583747
## 930	chr7:869516-869725_str+	ENSG00000164828	7	869516
## 931	chr7:1534944-1535617_str+	ENSG00000198517	7	1534944
## 932	chr7:6387283-6388114_str+	ENSG00000136238	7	6387283
## 933	chr7:22822355-22822677_str-	ENSG00000196683	7	22822355
## 934	chr7:23691596-23698192_str+	ENSG00000188732	7	23691596
## 935	chr7:23694913-23698192_str+	ENSG00000188732	7	23694913
## 936	chr7:30562128-30563723_str-	ENSG00000196295	7	30562128
## 937	chr7:30562128-30563731_str-	ENSG00000196295	7	30562128
## 938	chr7:30632437-30633735_str+	ENSG00000106105	7	30632437
## 939	chr7:32558628-32558929_str+	ENSG00000105778	7	32558628
## 940	chr7:32573418-32575955_str+	ENSG00000105778	7	32573418
## 941	chr7:32575824-32575955_str+	ENSG00000105778	7	32575824
## 942	chr7:32888095-32891536_str-	ENSG00000170852	7	32888095
## 943	chr7:32888095-32890977_str-	ENSG00000170852	7	32888095
## 944	chr7:33097362-33099307_str-	ENSG00000164610	7	33097362
## 945	chr7:33097362-33098126_str-	ENSG00000164610	7	33097362
## 946	chr7:43608400-43619597_str+	ENSG00000164543	7	43608400
## 947	chr7:44122195-44123511_str-	ENSG00000106628	7	44122195
## 948	chr7:44799872-44801285_str+	ENSG00000196262	7	44799872
## 949	chr7:44800541-44801285_str+	ENSG00000196262	7	44800541
## 950	chr7:75983856-75984777_str+	ENSG00000127948	7	75983856
## 951	chr7:76048132-76048185_str+	ENSG00000146701	7	76048132
## 952	chr7:76048168-76048200_str+	ENSG00000146701	7	76048168
## 953	chr7:77696018-77696172_str-	ENSG00000214293	7	77696018
## 954	chr7:100149565-100153400_str+	ENSG00000188186	7	100149565
## 955	chr7:100149579-100153400_str+	ENSG00000188186	7	100149579
## 956	chr7:100152757-100153400_str+	ENSG00000188186	7	100152757
## 957	chr7:100149552-100153400_str+	ENSG00000188186	7	100149552
## 958	chr7:100148975-100153400_str+	ENSG00000188186	7	100148975
## 959	chr7:100888141-100888472_str+	ENSG00000087087	7	100888141
## 960	chr7:100888381-100888472_str+	ENSG00000087087	7	100888381
## 961	chr7:100888143-100888474_str+	ENSG00000087087	7	100888143
## 962	chr7:100888383-100888474_str+	ENSG00000087087	7	100888383
## 963	chr7:100887859-100888474_str+	ENSG00000087087	7	100887859
## 964	chr7:100888354-100888474_str+	ENSG00000087087	7	100888354
## 965	chr7:102466270-102467719_str+	ENSG00000161036	7	102466270
## 966	chr7:102467479-102467719_str+	ENSG00000161036	7	102467479
## 967	chr7:107905058-107905361_str+	ENSG00000091140	7	107905058
## 968	chr7:107924087-107924230_str-	ENSG00000091136	7	107924087
## 969	chr7:107924087-107924230_str-	ENSG00000091136	7	107924087
## 970	chr7:127377329-127385526_str-	ENSG00000048405	7	127377329
## 971	chr7:127377329-127386060_str-	ENSG00000048405	7	127377329
## 972	chr7:127377329-127391497_str-	ENSG00000048405	7	127377329
## 973	chr7:128092147-128092217_str+	ENSG00000197157	7	128092147
## 974	chr7:128092059-128092219_str+	ENSG00000197157	7	128092059
## 975	chr7:127652412-128092226_str+	ENSG00000197157	7	127652412
## 976	chr7:135207202-135208791_str-	ENSG00000105875	7	135207202
## 977	chr7:148789826-148790310_str+	ENSG00000055130	7	148789826
## 978	chr7:150433829-150442549_str+	ENSG00000242258	7	150433829
## 979	chr7:150435370-150442549_str+	ENSG00000242258	7	150435370
## 980	chr7:151064367-151064526_str+	ENSG00000164889	7	151064367

## 981	chr7:152145295-152146599_str-	ENSG00000055609	7	152145295
## 982	chr7:152145295-152148033_str-	ENSG00000055609	7	152145295
## 983	chr7:158737179-158737288_str-	ENSG00000117868	7	158737179
## 984	chr7:158737179-158739023_str-	ENSG00000117868	7	158737179
## 985	chr7:158737179-158741523_str-	ENSG00000117868	7	158737179
## 986	chr8:17923188-17935589_str+	ENSG00000078674	8	17923188
## 987	chr8:17924780-17935589_str+	ENSG00000078674	8	17924780
## 988	chr8:17934858-17935589_str+	ENSG00000078674	8	17934858
## 989	chr8:22101851-22102145_str+	ENSG00000158863	8	22101851
## 990	chr8:22101851-22102145_str+	ENSG00000158863	8	22101851
## 991	chr8:38133546-38138816_str+	ENSG00000129691	8	38133546
## 992	chr8:38135766-38138816_str+	ENSG00000129691	8	38135766
## 993	chr8:73292405-73292689_str-	ENSG00000147604	8	73292405
## 994	chr8:73292405-73292628_str-	ENSG00000147604	8	73292405
## 995	chr8:89946295-89947824_str-	ENSG00000104320	8	89946295
## 996	chr8:89946295-89953244_str-	ENSG00000104320	8	89946295
## 997	chr8:89980428-89980734_str-	ENSG00000104320	8	89980428
## 998	chr8:91073911-91078356_str+	ENSG00000155100	8	91073911
## 999	chr8:91076731-91078356_str+	ENSG00000155100	8	91076731
## 1000	chr8:98043335-98043688_str+	ENSG00000245970	8	98043335
## 1001	chr8:98043326-98043688_str+	ENSG00000245970	8	98043326
## 1002	chr8:98043335-98043688_str+	ENSG00000245970	8	98043335
## 1003	chr8:98043326-98043688_str+	ENSG00000245970	8	98043326
## 1004	chr8:102295782-102296893_str-	ENSG00000104517	8	102295782
## 1005	chr8:103213620-103219838_str+	ENSG00000164929	8	103213620
## 1006	chr8:103435790-103440136_str+	ENSG00000164934	8	103435790
## 1007	chr8:125432724-125433315_str+	ENSG00000173334	8	125432724
## 1008	chr8:125432128-125433316_str+	ENSG00000173334	8	125432128
## 1009	chr8:125431262-125433317_str+	ENSG00000173334	8	125431262
## 1010	chr8:125432128-125433317_str+	ENSG00000173334	8	125432128
## 1011	chr8:125432324-125433317_str+	ENSG00000173334	8	125432324
## 1012	chr8:130118675-130124013_str-	ENSG00000153317	8	130118675
## 1013	chr8:132844318-132845781_str+	ENSG00000129292	8	132844318
## 1014	chr8:133247926-133248715_str-	ENSG00000104419	8	133247926
## 1015	chr8:141181934-141185138_str+	ENSG00000105339	8	141181934
## 1016	chr8:141180854-141185139_str+	ENSG00000105339	8	141180854
## 1017	chr8:141182487-141185139_str+	ENSG00000105339	8	141182487
## 1018	chr8:141181955-141185139_str+	ENSG00000105339	8	141181955
## 1019	chr8:141180856-141185141_str+	ENSG00000105339	8	141180856
## 1020	chr8:141181934-141185138_str+	ENSG00000105339	8	141181934
## 1021	chr8:141180854-141185139_str+	ENSG00000105339	8	141180854
## 1022	chr8:141182487-141185139_str+	ENSG00000105339	8	141182487
## 1023	chr8:141181955-141185139_str+	ENSG00000105339	8	141181955
## 1024	chr8:141180856-141185141_str+	ENSG00000105339	8	141180856
## 1025	chr8:142273587-142274781_str-	ENSG00000171045	8	142273587
## 1026	chr8:142312704-142314384_str-	ENSG00000171045	8	142312704
## 1027	chr8:143309543-143310068_str-	ENSG00000184428	8	143309543
## 1028	chr8:143839100-143839172_str-	ENSG00000185189	8	143839100
## 1029	chr8:143936014-143936979_str-	ENSG00000178209	8	143936014
## 1030	chr8:144163848-144168295_str+	ENSG00000179832	8	144163848
## 1031	chr8:144514525-144514936_str-	ENSG00000160957	8	144514525
## 1032	chr9:4841357-4844525_str+	ENSG00000120158	9	4841357
## 1033	chr9:5714003-5720182_str+	ENSG00000107036	9	5714003
## 1034	chr9:5929159-5931544_str-	ENSG00000183354	9	5929159

## 1035	chr9:5929159-5933442_str-	ENSG00000183354	9	5929159
## 1036	chr9:5929159-5933751_str-	ENSG00000183354	9	5929159
## 1037	chr9:5929159-5944871_str-	ENSG00000183354	9	5929159
## 1038	chr9:5929159-5954016_str-	ENSG00000183354	9	5929159
## 1039	chr9:33047391-33048106_str-	ENSG00000122692	9	33047391
## 1040	chr9:35558567-35559226_str+	ENSG00000198853	9	35558567
## 1041	chr9:37425994-37426538_str+	ENSG00000137106	9	37425994
## 1042	chr9:72360221-72360628_str-	ENSG00000107372	9	72360221
## 1043	chr9:72360784-72363470_str-	ENSG00000107372	9	72360784
## 1044	chr9:72360787-72363470_str-	ENSG00000107372	9	72360787
## 1045	chr9:72360787-72363539_str-	ENSG00000107372	9	72360787
## 1046	chr9:72360787-72364696_str-	ENSG00000107372	9	72360787
## 1047	chr9:72360787-72361246_str-	ENSG00000107372	9	72360787
## 1048	chr9:72360787-72364462_str-	ENSG00000107372	9	72360787
## 1049	chr9:72360787-72362637_str-	ENSG00000107372	9	72360787
## 1050	chr9:89319797-89319877_str+	ENSG00000187742	9	89319797
## 1051	chr9:90844038-90877208_str+	ENSG00000165025	9	90844038
## 1052	chr9:94293069-94298323_str+	ENSG00000175787	9	94293069
## 1053	chr9:95476857-95477547_str-	ENSG00000185920	9	95476857
## 1054	chr9:95476857-95478055_str-	ENSG00000185920	9	95476857
## 1055	chr9:122997361-122998597_str+	ENSG00000011454	9	122997361
## 1056	chr9:128222861-128226346_str+	ENSG00000106976	9	128222861
## 1057	chr9:128325881-128332850_str+	ENSG00000167113	9	128325881
## 1058	chr9:128332282-128332850_str+	ENSG00000167113	9	128332282
## 1059	chr9:128484886-128485365_str+	ENSG00000136811	9	128484886
## 1060	chr9:128689652-128691855_str+	ENSG00000119335	9	128689652
## 1061	chr9:128691225-128691856_str+	ENSG00000119335	9	128691225
## 1062	chr9:128691227-128691858_str+	ENSG00000119335	9	128691227
## 1063	chr9:128689655-128691858_str+	ENSG00000119335	9	128689655
## 1064	chr9:128692981-128693638_str+	ENSG00000119335	9	128692981
## 1065	chr9:128720017-128720203_str+	ENSG00000160447	9	128720017
## 1066	chr9:128908619-128908650_str+	ENSG00000136802	9	128908619
## 1067	chr9:129148703-129148872_str+	ENSG00000119383	9	129148703
## 1068	chr9:129893238-129895838_str-	ENSG00000187239	9	129893238
## 1069	chr9:131496842-131496854_str+	ENSG00000130723	9	131496842
## 1070	chr9:131496821-131496857_str+	ENSG00000130723	9	131496821
## 1071	chr9:135504375-135504424_str+	ENSG00000122140	9	135504375
## 1072	chr9:135504170-135504425_str+	ENSG00000122140	9	135504170
## 1073	chr9:136218808-136218994_str-	ENSG00000165661	9	136218808
## 1074	chr9:136218808-136219030_str-	ENSG00000165661	9	136218808
## 1075	chr9:136355846-136356342_str+	ENSG00000160360	9	136355846
## 1076	chr9:136405202-136405905_str-	ENSG00000165689	9	136405202
## 1077	chr9:136474486-136475198_str-	ENSG00000148396	9	136474486
## 1078	chr9:136474486-136475938_str-	ENSG00000148396	9	136474486
## 1079	chr9:136659630-136664692_str+	ENSG00000172889	9	136659630
## 1080	chr9:136659929-136664692_str+	ENSG00000172889	9	136659929
## 1081	chr9:136663108-136664692_str+	ENSG00000172889	9	136663108
## 1082	chr9:136663498-136664692_str+	ENSG00000172889	9	136663498
## 1083	chr9:136663623-136664692_str+	ENSG00000172889	9	136663623
## 1084	chr9:136664334-136664692_str+	ENSG00000172889	9	136664334
## 1085	chr9:136664099-136664692_str+	ENSG00000172889	9	136664099
## 1086	chr9:136659630-136664695_str+	ENSG00000172889	9	136659630
## 1087	chr9:136663623-136664695_str+	ENSG00000172889	9	136663623
## 1088	chr9:136663108-136664695_str+	ENSG00000172889	9	136663108

## 1089	chr9:136663498-136664695_str+	ENSG00000172889	9	136663498
## 1090	chr9:136664334-136664695_str+	ENSG00000172889	9	136664334
## 1091	chr9:136672282-136672382_str+	ENSG00000172889	9	136672282
## 1092	chr10:1526899-1548081_str+	ENSG00000205696	10	1526899
## 1093	chr10:3120044-3129819_str+	ENSG00000067057	10	3120044
## 1094	chr10:3125249-3129819_str+	ENSG00000067057	10	3125249
## 1095	chr10:3128287-3129819_str+	ENSG00000067057	10	3128287
## 1096	chr10:3128617-3129819_str+	ENSG00000067057	10	3128617
## 1097	chr10:3118869-3129819_str+	ENSG00000067057	10	3118869
## 1098	chr10:3128587-3129819_str+	ENSG00000067057	10	3128587
## 1099	chr10:3126235-3129819_str+	ENSG00000067057	10	3126235
## 1100	chr10:3143502-3143607_str+	ENSG00000278419	10	3143502
## 1101	chr10:3143502-3143607_str+	ENSG00000237399	10	3143502
## 1102	chr10:3148063-3148171_str-	ENSG00000107959	10	3148063
## 1103	chr10:3148063-3149621_str-	ENSG00000107959	10	3148063
## 1104	chr10:3159936-3160204_str-	ENSG00000107959	10	3159936
## 1105	chr10:5639371-5640696_str-	ENSG00000196372	10	5639371
## 1106	chr10:5720970-5723677_str+	ENSG00000108021	10	5720970
## 1107	chr10:6233090-6233273_str+	ENSG00000170525	10	6233090
## 1108	chr10:12250402-12250456_str+	ENSG00000151465	10	12250402
## 1109	chr10:13638120-13638701_str+	ENSG00000282246	10	13638120
## 1110	chr10:13638120-13638701_str+	ENSG00000239665	10	13638120
## 1111	chr10:15112963-15119343_str-	ENSG00000152465	10	15112963
## 1112	chr10:21727928-21728632_str+	ENSG00000078403	10	21727928
## 1113	chr10:26541692-26550926_str+	ENSG00000077420	10	26541692
## 1114	chr10:29730962-29731803_str-	ENSG00000197321	10	29730962
## 1115	chr10:30439274-30442571_str+	ENSG00000107968	10	30439274
## 1116	chr10:31820488-31826304_str-	ENSG00000165322	10	31820488
## 1117	chr10:50266155-50266290_str+	ENSG00000225137	10	50266155
## 1118	chr10:68747566-68749136_str+	ENSG00000060339	10	68747566
## 1119	chr10:71751814-71755356_str+	ENSG00000107736	10	71751814
## 1120	chr10:73126827-73130703_str+	ENSG00000166321	10	73126827
## 1121	chr10:73239384-73240946_str+	ENSG00000138286	10	73239384
## 1122	chr10:73837511-73842169_str-	ENSG00000148660	10	73837511
## 1123	chr10:73837511-73839539_str-	ENSG00000148660	10	73837511
## 1124	chr10:80509471-80510106_str+	ENSG00000108219	10	80509471
## 1125	chr10:86970607-86971057_str-	ENSG00000272734	10	86970607
## 1126	chr10:91817229-91817884_str+	ENSG00000107854	10	91817229
## 1127	chr10:96527496-96528031_str-	ENSG00000077147	10	96527496
## 1128	chr10:96559736-96560416_str-	ENSG00000077147	10	96559736
## 1129	chr10:96559736-96561978_str-	ENSG00000077147	10	96559736
## 1130	chr10:97737321-97738477_str+	ENSG00000155256	10	97737321
## 1131	chr10:97737325-97738477_str+	ENSG00000155256	10	97737325
## 1132	chr10:97749586-97750331_str+	ENSG00000155256	10	97749586
## 1133	chr10:97748364-97750331_str+	ENSG00000155256	10	97748364
## 1134	chr10:98156147-98157463_str+	ENSG00000166024	10	98156147
## 1135	chr10:98156147-98159217_str+	ENSG00000166024	10	98156147
## 1136	chr10:100987613-100989644_str+	ENSG00000107815	10	100987613
## 1137	chr10:100989453-100989644_str+	ENSG00000107815	10	100989453
## 1138	chr10:100987880-100989644_str+	ENSG00000107815	10	100987880
## 1139	chr10:100990662-100990868_str+	ENSG00000107815	10	100990662
## 1140	chr10:100990543-100990869_str+	ENSG00000107815	10	100990543
## 1141	chr10:100989884-100990869_str+	ENSG00000107815	10	100989884
## 1142	chr10:100990662-100990868_str+	ENSG00000107815	10	100990662

## 1143	chr10:100990543-100990869_str+	ENSG00000107815	10	100990543
## 1144	chr10:100989884-100990869_str+	ENSG00000107815	10	100989884
## 1145	chr10:102367560-102369211_str+	ENSG00000107862	10	102367560
## 1146	chr10:102368454-102369211_str+	ENSG00000107862	10	102368454
## 1147	chr10:102368832-102369211_str+	ENSG00000107862	10	102368832
## 1148	chr10:102397685-102397981_str+	ENSG00000077150	10	102397685
## 1149	chr10:102484376-102485609_str-	ENSG00000138107	10	102484376
## 1150	chr10:102484376-102488150_str-	ENSG00000138107	10	102484376
## 1151	chr10:102810054-102812334_str+	ENSG00000166272	10	102810054
## 1152	chr10:104031593-104032204_str-	ENSG00000065618	10	104031593
## 1153	chr10:104031593-104032674_str-	ENSG00000065618	10	104031593
## 1154	chr10:110870438-110872027_str-	ENSG00000203497	10	110870438
## 1155	chr10:114830930-114833233_str+	ENSG00000151553	10	114830930
## 1156	chr10:119157927-119158009_str-	ENSG00000183605	10	119157927
## 1157	chr10:119169428-119172382_str-	ENSG00000165672	10	119169428
## 1158	chr10:120852635-120858643_str+	ENSG00000120008	10	120852635
## 1159	chr10:120856130-120858643_str+	ENSG00000120008	10	120856130
## 1160	chr10:120851506-120858643_str+	ENSG00000120008	10	120851506
## 1161	chr10:128049666-128056123_str+	ENSG00000132334	10	128049666
## 1162	chr10:128052631-128056123_str+	ENSG00000132334	10	128052631
## 1163	chr10:128082940-128084385_str+	ENSG00000132334	10	128082940
## 1164	chr10:128082940-128084451_str+	ENSG00000132334	10	128082940
## 1165	chr11:309066-314209_str+	ENSG00000185201	11	309066
## 1166	chr11:802891-803174_str-	ENSG00000177595	11	802891
## 1167	chr11:838466-838551_str+	ENSG00000177697	11	838466
## 1168	chr11:838521-838553_str+	ENSG00000177697	11	838521
## 1169	chr11:838515-838558_str+	ENSG00000177697	11	838515
## 1170	chr11:864511-865513_str+	ENSG00000214063	11	864511
## 1171	chr11:6604360-6604853_str+	ENSG00000166333	11	6604360
## 1172	chr11:8686271-8687349_str+	ENSG00000166441	11	8686271
## 1173	chr11:8686267-8687359_str+	ENSG00000166441	11	8686267
## 1174	chr11:8686271-8687349_str+	ENSG00000166441	11	8686271
## 1175	chr11:8686267-8687359_str+	ENSG00000166441	11	8686267
## 1176	chr11:9790683-9795831_str-	ENSG00000133812	11	9790683
## 1177	chr11:9790683-9808000_str-	ENSG00000133812	11	9790683
## 1178	chr11:9790683-9808901_str-	ENSG00000133812	11	9790683
## 1179	chr11:11332831-11340819_str-	ENSG00000110328	11	11332831
## 1180	chr11:11352693-11352754_str+	ENSG00000255351	11	11352693
## 1181	chr11:14494439-14498838_str-	ENSG00000129083	11	14494439
## 1182	chr11:14494439-14498838_str-	ENSG00000256206	11	14494439
## 1183	chr11:14494439-14494532_str-	ENSG00000129083	11	14494439
## 1184	chr11:14494439-14494573_str-	ENSG00000129083	11	14494439
## 1185	chr11:14494439-14494573_str-	ENSG00000256206	11	14494439
## 1186	chr11:14494439-14494532_str-	ENSG00000256206	11	14494439
## 1187	chr11:14494439-14498838_str-	ENSG00000129083	11	14494439
## 1188	chr11:14494439-14498838_str-	ENSG00000256206	11	14494439
## 1189	chr11:14494439-14494532_str-	ENSG00000129083	11	14494439
## 1190	chr11:14494439-14494573_str-	ENSG00000129083	11	14494439
## 1191	chr11:14494439-14494573_str-	ENSG00000256206	11	14494439
## 1192	chr11:14494439-14494532_str-	ENSG00000256206	11	14494439
## 1193	chr11:17315475-17317584_str+	ENSG00000070081	11	17315475
## 1194	chr11:17312120-17317584_str+	ENSG00000070081	11	17312120
## 1195	chr11:20402984-20407911_str+	ENSG00000185238	11	20402984
## 1196	chr11:20404983-20407911_str+	ENSG00000185238	11	20404983

## 1197	chr11:20402986-20407913_str+	ENSG00000185238	11	20402986
## 1198	chr11:33032967-33033262_str+	ENSG00000121690	11	33032967
## 1199	chr11:35139370-35176575_str+	ENSG00000026508	11	35139370
## 1200	chr11:35167139-35176575_str+	ENSG00000026508	11	35167139
## 1201	chr11:35154102-35176575_str+	ENSG00000026508	11	35154102
## 1202	chr11:35153919-35176575_str+	ENSG00000026508	11	35153919
## 1203	chr11:36272492-36274274_str-	ENSG00000110442	11	36272492
## 1204	chr11:44066322-44067628_str+	ENSG00000110455	11	44066322
## 1205	chr11:44066701-44067628_str+	ENSG00000110455	11	44066701
## 1206	chr11:44067296-44067628_str+	ENSG00000110455	11	44067296
## 1207	chr11:44938366-44939114_str-	ENSG00000175274	11	44938366
## 1208	chr11:44938366-44939166_str-	ENSG00000175274	11	44938366
## 1209	chr11:44938366-44941003_str-	ENSG00000175274	11	44938366
## 1210	chr11:44938366-44950677_str-	ENSG00000175274	11	44938366
## 1211	chr11:44938366-44950877_str-	ENSG00000175274	11	44938366
## 1212	chr11:45914468-45914604_str-	ENSG00000121680	11	45914468
## 1213	chr11:46659485-46662548_str+	ENSG00000175224	11	46659485
## 1214	chr11:47171800-47172281_str-	ENSG00000149182	11	47171800
## 1215	chr11:57426316-57426588_str-	ENSG00000134802	11	57426316
## 1216	chr11:57426316-57427062_str-	ENSG00000134802	11	57426316
## 1217	chr11:58617566-58624028_str+	ENSG00000255073	11	58617566
## 1218	chr11:58622866-58624030_str+	ENSG00000255073	11	58622866
## 1219	chr11:58622866-58624030_str+	ENSG00000242689	11	58622866
## 1220	chr11:58622866-58624034_str+	ENSG00000255073	11	58622866
## 1221	chr11:58622866-58624034_str+	ENSG00000242689	11	58622866
## 1222	chr11:60383288-60385088_str+	ENSG00000166926	11	60383288
## 1223	chr11:60383288-60385088_str+	ENSG00000166928	11	60383288
## 1224	chr11:60383288-60385088_str+	ENSG00000166927	11	60383288
## 1225	chr11:60898626-60898862_str-	ENSG00000110107	11	60898626
## 1226	chr11:61803112-61803313_str+	ENSG00000134824	11	61803112
## 1227	chr11:64243876-64243968_str+	ENSG00000173486	11	64243876
## 1228	chr11:64371423-64371457_str+	ENSG00000162302	11	64371423
## 1229	chr11:65181072-65181225_str-	ENSG00000254614	11	65181072
## 1230	chr11:65422832-65422928_str+	ENSG00000245532	11	65422832
## 1231	chr11:65504206-65504381_str+	ENSG00000251562	11	65504206
## 1232	chr11:65551783-65551972_str-	ENSG00000168056	11	65551783
## 1233	chr11:65613426-65614010_str-	ENSG00000173327	11	65613426
## 1234	chr11:65713058-65713321_str+	ENSG00000172977	11	65713058
## 1235	chr11:65856242-65856555_str+	ENSG00000172803	11	65856242
## 1236	chr11:66360744-66363269_str+	ENSG00000255468	11	66360744
## 1237	chr11:66367869-66368537_str-	ENSG00000174669	11	66367869
## 1238	chr11:67611206-67611384_str+	ENSG00000167792	11	67611206
## 1239	chr11:68554257-68556907_str+	ENSG00000110075	11	68554257
## 1240	chr11:68554257-68556910_str+	ENSG00000110075	11	68554257
## 1241	chr11:72023147-72024274_str-	ENSG00000137497	11	72023147
## 1242	chr11:72068617-72069842_str-	ENSG00000137497	11	72068617
## 1243	chr11:72696828-72696983_str-	ENSG00000186635	11	72696828
## 1244	chr11:72821494-72821664_str+	ENSG00000168010	11	72821494
## 1245	chr11:72817855-72821668_str+	ENSG00000168010	11	72817855
## 1246	chr11:74965116-74965762_str+	ENSG00000118363	11	74965116
## 1247	chr11:74965117-74965763_str+	ENSG00000118363	11	74965117
## 1248	chr11:85984547-85990250_str-	ENSG00000073921	11	85984547
## 1249	chr11:94416174-94420013_str-	ENSG00000020922	11	94416174
## 1250	chr11:94416174-94417801_str-	ENSG00000020922	11	94416174



## 1251	chr11:112227530-112227671_str+	ENSG00000150787	11	112227530
## 1252	chr11:117168781-117169097_str+	ENSG00000168092	11	117168781
## 1253	chr11:117395722-117396054_str+	ENSG00000110274	11	117395722
## 1254	chr11:117395722-117396057_str+	ENSG00000110274	11	117395722
## 1255	chr11:117998948-117998973_str+	ENSG00000110324	11	117998948
## 1256	chr11:119091525-119092124_str+	ENSG00000256269	11	119091525
## 1257	chr11:119091526-119092125_str+	ENSG00000256269	11	119091526
## 1258	chr11:119090394-119092125_str+	ENSG00000256269	11	119090394
## 1259	chr11:123738910-123739434_str-	ENSG00000166261	11	123738910
## 1260	chr11:123738910-123740117_str-	ENSG00000166261	11	123738910
## 1261	chr11:130110661-130120706_str+	ENSG00000084234	11	130110661
## 1262	chr11:130070082-130120706_str+	ENSG00000084234	11	130070082
## 1263	chr11:130117859-130120706_str+	ENSG00000084234	11	130117859
## 1264	chr11:130110585-130120706_str+	ENSG00000084234	11	130110585
## 1265	chr11:134160074-134161781_str-	ENSG00000151503	11	134160074
## 1266	chr12:564681-565217_str-	ENSG00000171840	12	564681
## 1267	chr12:564681-565316_str-	ENSG00000171840	12	564681
## 1268	chr12:6872986-6873246_str-	ENSG00000111671	12	6872986
## 1269	chr12:6872997-6873246_str-	ENSG00000111671	12	6872997
## 1270	chr12:6872997-6873246_str-	ENSG00000111671	12	6872997
## 1271	chr12:8941940-8942416_str-	ENSG00000003056	12	8941940
## 1272	chr12:10703619-10704051_str-	ENSG00000060138	12	10703619
## 1273	chr12:11890444-11893501_str+	ENSG00000139083	12	11890444
## 1274	chr12:14456634-14460495_str+	ENSG00000171681	12	14456634
## 1275	chr12:14457295-14460495_str+	ENSG00000171681	12	14457295
## 1276	chr12:16347710-16348894_str+	ENSG00000008394	12	16347710
## 1277	chr12:20551933-20552039_str+	ENSG00000172572	12	20551933
## 1278	chr12:20551933-20552039_str+	ENSG00000256663	12	20551933
## 1279	chr12:20552144-20552308_str+	ENSG00000172572	12	20552144
## 1280	chr12:20552144-20552308_str+	ENSG00000256663	12	20552144
## 1281	chr12:24815217-24817480_str-	ENSG00000060982	12	24815217
## 1282	chr12:26632059-26653976_str-	ENSG00000123104	12	26632059
## 1283	chr12:26632059-26655708_str-	ENSG00000123104	12	26632059
## 1284	chr12:26680723-26681874_str-	ENSG00000123104	12	26680723
## 1285	chr12:26701231-26711173_str-	ENSG00000123104	12	26701231
## 1286	chr12:26990627-26995237_str-	ENSG00000064115	12	26990627
## 1287	chr12:26990627-26996742_str-	ENSG00000064115	12	26990627
## 1288	chr12:26998947-26999526_str-	ENSG00000064115	12	26998947
## 1289	chr12:40536484-40536923_str+	ENSG00000205592	12	40536484
## 1290	chr12:42084593-42086355_str-	ENSG00000151233	12	42084593
## 1291	chr12:46364702-46365107_str-	ENSG00000134294	12	46364702
## 1292	chr12:46364702-46366864_str-	ENSG00000134294	12	46364702
## 1293	chr12:46364702-46366107_str-	ENSG00000134294	12	46364702
## 1294	chr12:46367340-46370512_str-	ENSG00000134294	12	46367340
## 1295	chr12:46367340-46370776_str-	ENSG00000134294	12	46367340
## 1296	chr12:49804080-49805980_str-	ENSG00000167566	12	49804080
## 1297	chr12:49804080-49806016_str-	ENSG00000167566	12	49804080
## 1298	chr12:50429090-50430495_str+	ENSG00000161813	12	50429090
## 1299	chr12:50429090-50430498_str+	ENSG00000161813	12	50429090
## 1300	chr12:54372591-54373973_str-	ENSG00000161642	12	54372591
## 1301	chr12:54411964-54412311_str-	ENSG00000161638	12	54411964
## 1302	chr12:54411964-54418981_str-	ENSG00000161638	12	54411964
## 1303	chr12:56421493-56421727_str-	ENSG00000111602	12	56421493
## 1304	chr12:57089354-57091125_str+	ENSG00000166886	12	57089354

## 1305	chr12:66129113-66130705_str-	ENSG00000139233	12	66129113
## 1306	chr12:66129113-66130705_str-	ENSG00000228144	12	66129113
## 1307	chr12:66129113-66138051_str-	ENSG00000228144	12	66129113
## 1308	chr12:68713808-68714681_str+	ENSG00000111581	12	68713808
## 1309	chr12:69585524-69585751_str+	ENSG00000166226	12	69585524
## 1310	chr12:74540842-74540867_str+	ENSG00000253719	12	74540842
## 1311	chr12:74540842-74540867_str+	ENSG00000253719	12	74540842
## 1312	chr12:75481052-75481812_str+	ENSG00000139278	12	75481052
## 1313	chr12:75506916-75508274_str-	ENSG00000111615	12	75506916
## 1314	chr12:76059514-76059798_str-	ENSG00000187109	12	76059514
## 1315	chr12:89351654-89351711_str+	ENSG00000274021	12	89351654
## 1316	chr12:89351026-89351713_str+	ENSG00000274021	12	89351026
## 1317	chr12:89351693-89351713_str+	ENSG00000274021	12	89351693
## 1318	chr12:96247734-96259731_str+	ENSG00000111145	12	96247734
## 1319	chr12:98549040-98549304_str+	ENSG00000120802	12	98549040
## 1320	chr12:103966058-103979829_str+	ENSG00000139372	12	103966058
## 1321	chr12:103966060-103979831_str+	ENSG00000139372	12	103966060
## 1322	chr12:103977060-103979831_str+	ENSG00000139372	12	103977060
## 1323	chr12:105052931-105058073_str-	ENSG00000136010	12	105052931
## 1324	chr12:105188447-105189772_str-	ENSG00000136044	12	105188447
## 1325	chr12:106968061-106971103_str+	ENSG00000151135	12	106968061
## 1326	chr12:106967180-106971105_str+	ENSG00000151135	12	106967180
## 1327	chr12:106970705-106971105_str+	ENSG00000151135	12	106970705
## 1328	chr12:106969362-106971105_str+	ENSG00000151135	12	106969362
## 1329	chr12:111890144-111890440_str+	ENSG00000089022	12	111890144
## 1330	chr12:111893022-111893514_str+	ENSG00000089022	12	111893022
## 1331	chr12:112022298-112022356_str+	ENSG00000089248	12	112022298
## 1332	chr12:120198727-120198854_str-	ENSG00000089157	12	120198727
## 1333	chr12:120198739-120198854_str-	ENSG00000089157	12	120198739
## 1334	chr12:120198739-120198895_str-	ENSG00000089157	12	120198739
## 1335	chr12:120198739-120199118_str-	ENSG00000089157	12	120198739
## 1336	chr12:120687531-120694091_str+	ENSG00000110917	12	120687531
## 1337	chr12:120693128-120694091_str+	ENSG00000110917	12	120693128
## 1338	chr12:123466271-123467485_str+	ENSG00000184209	12	123466271
## 1339	chr12:123466353-123467487_str+	ENSG00000184209	12	123466353
## 1340	chr12:123467231-123467487_str+	ENSG00000184209	12	123467231
## 1341	chr12:123617872-123618597_str+	ENSG00000111364	12	123617872
## 1342	chr12:130804543-130806982_str-	ENSG00000111450	12	130804543
## 1343	chr12:132581824-132582062_str+	ENSG00000112787	12	132581824
## 1344	chr12:132581516-132582062_str+	ENSG00000112787	12	132581516
## 1345	chr12:132632007-132632315_str-	ENSG00000177084	12	132632007
## 1346	chr12:132773294-132774157_str-	ENSG00000090615	12	132773294
## 1347	chr12:133037545-133038875_str+	ENSG00000198040	12	133037545
## 1348	chr13:19782791-19782917_str-	ENSG00000121390	13	19782791
## 1349	chr13:21148035-21148056_str+	ENSG00000150459	13	21148035
## 1350	chr13:21148039-21148057_str+	ENSG00000150459	13	21148039
## 1351	chr13:27441242-27445088_str-	ENSG00000122033	13	27441242
## 1352	chr13:27441249-27445088_str-	ENSG00000122033	13	27441249
## 1353	chr13:41331368-41331774_str+	ENSG00000172766	13	41331368
## 1354	chr13:41331369-41331775_str+	ENSG00000172766	13	41331369
## 1355	chr13:41462119-41463956_str+	ENSG00000102760	13	41462119
## 1356	chr13:43969065-43969099_str+	ENSG00000281883	13	43969065
## 1357	chr13:43969065-43969099_str+	ENSG00000233725	13	43969065
## 1358	chr13:43969065-43969099_str+	ENSG00000179611	13	43969065

## 1359	chr13:43969065-43969102_str+	ENSG00000281883	13	43969065
## 1360	chr13:43969065-43969102_str+	ENSG00000233725	13	43969065
## 1361	chr13:43969065-43969102_str+	ENSG00000179611	13	43969065
## 1362	chr13:43970030-43970059_str+	ENSG00000281883	13	43970030
## 1363	chr13:43970030-43970059_str+	ENSG00000233725	13	43970030
## 1364	chr13:43970030-43970059_str+	ENSG00000179611	13	43970030
## 1365	chr13:43970032-43970061_str+	ENSG00000281883	13	43970032
## 1366	chr13:43970032-43970061_str+	ENSG00000233725	13	43970032
## 1367	chr13:43970032-43970061_str+	ENSG00000179611	13	43970032
## 1368	chr13:43924187-43970375_str+	ENSG00000281883	13	43924187
## 1369	chr13:43924187-43970375_str+	ENSG00000233725	13	43924187
## 1370	chr13:43901815-43970626_str+	ENSG00000281883	13	43901815
## 1371	chr13:45496312-45503244_str+	ENSG00000136152	13	45496312
## 1372	chr13:46788335-46791346_str-	ENSG00000139684	13	46788335
## 1373	chr13:49178655-49178781_str+	ENSG00000102531	13	49178655
## 1374	chr13:49476698-49480219_str+	ENSG00000136169	13	49476698
## 1375	chr13:49477039-49480219_str+	ENSG00000136169	13	49477039
## 1376	chr13:49467960-49480219_str+	ENSG00000136169	13	49467960
## 1377	chr13:49533819-49534032_str-	ENSG00000136144	13	49533819
## 1378	chr13:49550487-49551326_str-	ENSG00000136144	13	49550487
## 1379	chr13:51771495-51771821_str-	ENSG00000102796	13	51771495
## 1380	chr13:75310151-75312738_str-	ENSG00000136111	13	75310151
## 1381	chr13:75310151-75310467_str-	ENSG00000136111	13	75310151
## 1382	chr13:99543995-99546985_str+	ENSG00000125304	13	99543995
## 1383	chr13:100668794-100670360_str-	ENSG00000125247	13	100668794
## 1384	chr13:100668794-100674744_str-	ENSG00000125247	13	100668794
## 1385	chr13:100668794-100670283_str-	ENSG00000125247	13	100668794
## 1386	chr13:102653338-102655025_str+	ENSG00000134900	13	102653338
## 1387	chr13:102651397-102655027_str+	ENSG00000134900	13	102651397
## 1388	chr13:112857920-112858145_str+	ENSG00000068650	13	112857920
## 1389	chr13:112875941-112881816_str+	ENSG00000068650	13	112875941
## 1390	chr13:112878303-112881816_str+	ENSG00000068650	13	112878303
## 1391	chr13:112881235-112881816_str+	ENSG00000068650	13	112881235
## 1392	chr13:112880649-112881816_str+	ENSG00000068650	13	112880649
## 1393	chr13:113233339-113233897_str+	ENSG00000139842	13	113233339
## 1394	chr13:113236890-113239433_str+	ENSG00000139842	13	113236890
## 1395	chr14:20891453-20892060_str+	ENSG00000169397	14	20891453
## 1396	chr14:21362947-21363034_str-	ENSG00000092201	14	21362947
## 1397	chr14:24433030-24434098_str+	ENSG00000100441	14	24433030
## 1398	chr14:24573850-24574245_str-	ENSG00000100448	14	24573850
## 1399	chr14:24573856-24574245_str-	ENSG00000100448	14	24573856
## 1400	chr14:35096633-35096709_str-	ENSG00000092020	14	35096633
## 1401	chr14:39180829-39181045_str+	ENSG00000100941	14	39180829
## 1402	chr14:39181017-39181045_str+	ENSG00000100941	14	39181017
## 1403	chr14:39181017-39181047_str+	ENSG00000100941	14	39181017
## 1404	chr14:43300436-43300478_str+	ENSG00000259051	14	43300436
## 1405	chr14:50512632-50516023_str-	ENSG00000012983	14	50512632
## 1406	chr14:51249371-51249468_str+	ENSG00000139921	14	51249371
## 1407	chr14:60092419-60097965_str+	ENSG00000126773	14	60092419
## 1408	chr14:60397856-60398017_str+	ENSG00000258427	14	60397856
## 1409	chr14:60397927-60398082_str+	ENSG00000258427	14	60397927
## 1410	chr14:60397927-60398082_str+	ENSG00000258427	14	60397927
## 1411	chr14:60398112-60398194_str+	ENSG00000258427	14	60398112
## 1412	chr14:60398112-60398194_str+	ENSG00000258427	14	60398112

## 1413	chr14:64952571-64957940_str-	ENSG00000139998	14	64952571
## 1414	chr14:64952571-64971953_str-	ENSG00000139998	14	64952571
## 1415	chr14:65053349-65054575_str+	ENSG00000125954	14	65053349
## 1416	chr14:65053349-65054575_str+	ENSG00000257365	14	65053349
## 1417	chr14:67648183-67650715_str+	ENSG00000081181	14	67648183
## 1418	chr14:72941824-72942994_str+	ENSG00000119599	14	72941824
## 1419	chr14:72956500-72958612_str+	ENSG00000119599	14	72956500
## 1420	chr14:74802676-74809380_str+	ENSG00000119596	14	74802676
## 1421	chr14:74893424-74898369_str+	ENSG00000119689	14	74893424
## 1422	chr14:74894409-74898369_str+	ENSG00000119689	14	74894409
## 1423	chr14:75764772-75766062_str+	ENSG00000119685	14	75764772
## 1424	chr14:76807502-76807922_str-	ENSG00000013523	14	76807502
## 1425	chr14:76807502-76807922_str-	ENSG00000013523	14	76807502
## 1426	chr14:76807502-76807922_str-	ENSG00000013523	14	76807502
## 1427	chr14:91224812-91225017_str+	ENSG00000133943	14	91224812
## 1428	chr14:100292066-100292181_str+	ENSG00000258504	14	100292066
## 1429	chr14:100374244-100375283_str-	ENSG00000140105	14	100374244
## 1430	chr14:100374244-100376260_str-	ENSG00000140105	14	100374244
## 1431	chr14:102086418-102086986_str-	ENSG00000080824	14	102086418
## 1432	chr14:102086418-102086986_str-	ENSG00000080824	14	102086418
## 1433	chr14:102930651-102930722_str+	ENSG00000166126	14	102930651
## 1434	chr14:103654825-103657546_str+	ENSG00000126214	14	103654825
## 1435	chr14:103654825-103657546_str+	ENSG00000256500	14	103654825
## 1436	chr14:103699576-103703173_str-	ENSG00000126215	14	103699576
## 1437	chr14:103712931-103715424_str-	ENSG00000126215	14	103712931
## 1438	chr14:103712931-103713870_str-	ENSG00000126215	14	103712931
## 1439	chr14:103712931-103715337_str-	ENSG00000126215	14	103712931
## 1440	chr14:103712931-103714105_str-	ENSG00000126215	14	103712931
## 1441	chr14:103712944-103714108_str+	ENSG00000126214	14	103712944
## 1442	chr14:104714346-104714380_str+	ENSG00000203485	14	104714346
## 1443	chr14:104719257-104719344_str+	ENSG00000203485	14	104719257
## 1444	chr14:105020420-105020999_str-	ENSG00000170779	14	105020420
## 1445	chr15:40411691-40412967_str+	ENSG00000128928	15	40411691
## 1446	chr15:41302186-41305480_str+	ENSG00000247556	15	41302186
## 1447	chr15:41302193-41305487_str+	ENSG00000247556	15	41302193
## 1448	chr15:42638087-42638700_str+	ENSG00000159433	15	42638087
## 1449	chr15:50358007-50359596_str+	ENSG00000244879	15	50358007
## 1450	chr15:50355545-50361949_str+	ENSG00000244879	15	50355545
## 1451	chr15:50361532-50361949_str+	ENSG00000244879	15	50361532
## 1452	chr15:50361540-50361949_str+	ENSG00000244879	15	50361540
## 1453	chr15:50361578-50361949_str+	ENSG00000244879	15	50361578
## 1454	chr15:55289146-55289504_str-	ENSG00000069974	15	55289146
## 1455	chr15:55289146-55289452_str-	ENSG00000069974	15	55289146
## 1456	chr15:57263274-57272274_str+	ENSG00000140262	15	57263274
## 1457	chr15:59678087-59679592_str-	ENSG00000140299	15	59678087
## 1458	chr15:59678087-59680241_str-	ENSG00000140299	15	59678087
## 1459	chr15:59678087-59678748_str-	ENSG00000140299	15	59678087
## 1460	chr15:59678087-59678776_str-	ENSG00000140299	15	59678087
## 1461	chr15:59678087-59679743_str-	ENSG00000140299	15	59678087
## 1462	chr15:59678087-59682408_str-	ENSG00000140299	15	59678087
## 1463	chr15:59688576-59689063_str+	ENSG00000259238	15	59688576
## 1464	chr15:60478637-60479003_str-	ENSG00000128915	15	60478637
## 1465	chr15:65530718-65534349_str+	ENSG00000074696	15	65530718
## 1466	chr15:66501134-66501375_str-	ENSG00000174444	15	66501134

## 1467	chr15:66582248-66655876_str+	ENSG00000259471	15	66582248
## 1468	chr15:66582248-66655876_str+	ENSG00000259471	15	66582248
## 1469	chr15:72345776-72346235_str-	ENSG00000260729	15	72345776
## 1470	chr15:72345776-72346235_str-	ENSG00000213614	15	72345776
## 1471	chr15:74846923-74848600_str-	ENSG00000140497	15	74846923
## 1472	chr15:74902129-74902604_str-	ENSG00000178761	15	74902129
## 1473	chr15:80153135-80158060_str+	ENSG00000103876	15	80153135
## 1474	chr15:80153510-80158060_str+	ENSG00000103876	15	80153510
## 1475	chr15:80156729-80158060_str+	ENSG00000103876	15	80156729
## 1476	chr15:80696019-80725022_str+	ENSG00000136379	15	80696019
## 1477	chr15:85746661-85746838_str+	ENSG00000170776	15	85746661
## 1478	chr15:85740272-85746840_str+	ENSG00000170776	15	85740272
## 1479	chr15:85745892-85746840_str+	ENSG00000170776	15	85745892
## 1480	chr15:89631710-89632820_str-	ENSG00000166813	15	89631710
## 1481	chr15:89793126-89797575_str-	ENSG00000166825	15	89793126
## 1482	chr15:89793126-89799260_str-	ENSG00000166825	15	89793126
## 1483	chr15:89793126-89799426_str-	ENSG00000166825	15	89793126
## 1484	chr15:90090167-90090479_str-	ENSG00000182054	15	90090167
## 1485	chr15:90885258-90885412_str+	ENSG00000182511	15	90885258
## 1486	chr15:90906497-90907309_str+	ENSG00000196547	15	90906497
## 1487	chr15:90906913-90907309_str+	ENSG00000196547	15	90906913
## 1488	chr15:90912664-90912877_str+	ENSG00000196547	15	90912664
## 1489	chr15:90912279-90912877_str+	ENSG00000196547	15	90912279
## 1490	chr15:92883186-92892004_str+	ENSG00000272888	15	92883186
## 1491	chr15:92886234-92892004_str+	ENSG00000272888	15	92886234
## 1492	chr15:92886254-92892004_str+	ENSG00000272888	15	92886254
## 1493	chr15:92888314-92892004_str+	ENSG00000272888	15	92888314
## 1494	chr15:92886254-92892004_str+	ENSG00000279765	15	92886254
## 1495	chr15:92886234-92892004_str+	ENSG00000279765	15	92886234
## 1496	chr15:92888314-92892004_str+	ENSG00000279765	15	92888314
## 1497	chr15:92888221-92892004_str+	ENSG00000272888	15	92888221
## 1498	chr15:92888221-92892004_str+	ENSG00000279765	15	92888221
## 1499	chr15:92886254-92892005_str+	ENSG00000272888	15	92886254
## 1500	chr15:92886254-92892005_str+	ENSG00000279765	15	92886254
## 1501	chr15:92955512-92967325_str+	ENSG00000173575	15	92955512
## 1502	chr15:92956649-92967325_str+	ENSG00000173575	15	92956649
## 1503	chr15:92965613-92967325_str+	ENSG00000173575	15	92965613
## 1504	chr16:54058-55459_str+	ENSG00000161981	16	54058
## 1505	chr16:55203-55459_str+	ENSG00000161981	16	55203
## 1506	chr16:551664-552051_str+	ENSG00000103326	16	551664
## 1507	chr16:552530-552605_str+	ENSG00000103326	16	552530
## 1508	chr16:724509-724681_str-	ENSG00000162004	16	724509
## 1509	chr16:1314096-1314293_str+	ENSG00000103275	16	1314096
## 1510	chr16:1309773-1314293_str+	ENSG00000103275	16	1309773
## 1511	chr16:2934800-2936332_str+	ENSG00000059122	16	2934800
## 1512	chr16:3024263-3025707_str+	ENSG00000131652	16	3024263
## 1513	chr16:3024365-3025708_str+	ENSG00000131652	16	3024365
## 1514	chr16:3024365-3025712_str+	ENSG00000131652	16	3024365
## 1515	chr16:3139098-3140689_str+	ENSG00000085644	16	3139098
## 1516	chr16:3138541-3140689_str+	ENSG00000085644	16	3138541
## 1517	chr16:3672821-3674465_str+	ENSG00000213918	16	3672821
## 1518	chr16:3676145-3677498_str-	ENSG00000126602	16	3676145
## 1519	chr16:8642564-8646107_str+	ENSG00000067365	16	8642564
## 1520	chr16:8642565-8646108_str+	ENSG00000067365	16	8642565

## 1521	chr16:8644725-8646108_str+	ENSG00000067365	16	8644725
## 1522	chr16:8646027-8646108_str+	ENSG00000067365	16	8646027
## 1523	chr16:9107328-9107338_str+	ENSG00000182831	16	9107328
## 1524	chr16:9107328-9107338_str+	ENSG00000263244	16	9107328
## 1525	chr16:11677604-11677624_str+	ENSG00000184602	16	11677604
## 1526	chr16:23988590-24003300_str+	ENSG00000166501	16	23988590
## 1527	chr16:28210499-28211366_str-	ENSG00000169180	16	28210499
## 1528	chr16:28904504-28904940_str-	ENSG00000177548	16	28904504
## 1529	chr16:29667487-29668337_str+	ENSG00000197471	16	29667487
## 1530	chr16:29668631-29669086_str+	ENSG00000197471	16	29668631
## 1531	chr16:29810227-29810428_str+	ENSG00000103495	16	29810227
## 1532	chr16:29810227-29810428_str+	ENSG00000280607	16	29810227
## 1533	chr16:31130896-31131073_str+	ENSG00000103510	16	31130896
## 1534	chr16:50034156-50035417_str+	ENSG00000205423	16	50034156
## 1535	chr16:50104957-50106240_str+	ENSG00000155393	16	50104957
## 1536	chr16:50225285-50227839_str+	ENSG00000121274	16	50225285
## 1537	chr16:53314516-53314823_str+	ENSG00000177200	16	53314516
## 1538	chr16:58532395-58534147_str-	ENSG00000125107	16	58532395
## 1539	chr16:66552793-66565886_str+	ENSG00000217555	16	66552793
## 1540	chr16:66558348-66565886_str+	ENSG00000217555	16	66558348
## 1541	chr16:66563217-66565886_str+	ENSG00000217555	16	66563217
## 1542	chr16:66552793-66565886_str+	ENSG00000254788	16	66552793
## 1543	chr16:66558348-66565886_str+	ENSG00000254788	16	66558348
## 1544	chr16:66563217-66565886_str+	ENSG00000254788	16	66563217
## 1545	chr16:66565804-66565886_str+	ENSG00000217555	16	66565804
## 1546	chr16:66565804-66565886_str+	ENSG00000254788	16	66565804
## 1547	chr16:69343640-69347788_str-	ENSG00000157315	16	69343640
## 1548	chr16:69343640-69347788_str-	ENSG00000260371	16	69343640
## 1549	chr16:69343640-69347788_str-	ENSG00000259900	16	69343640
## 1550	chr16:70784838-70785702_str-	ENSG00000103043	16	70784838
## 1551	chr16:71746692-71748251_str-	ENSG00000166747	16	71746692
## 1552	chr16:71746692-71749894_str-	ENSG00000166747	16	71746692
## 1553	chr16:84180344-84181043_str-	ENSG00000103168	16	84180344
## 1554	chr16:84180344-84180864_str-	ENSG00000103168	16	84180344
## 1555	chr16:85668424-85670995_str+	ENSG00000131149	16	85668424
## 1556	chr16:88722066-88722218_str-	ENSG00000103335	16	88722066
## 1557	chr16:88722066-88722583_str-	ENSG00000103335	16	88722066
## 1558	chr16:89739553-89739706_str-	ENSG00000187741	16	89739553
## 1559	chr16:89739553-89739994_str-	ENSG00000187741	16	89739553
## 1560	chr16:89770462-89770564_str-	ENSG00000187741	16	89770462
## 1561	chr16:89803341-89805280_str-	ENSG00000187741	16	89803341
## 1562	chr16:89972765-89977715_str+	ENSG00000223959	16	89972765
## 1563	chr17:2065679-2068778_str-	ENSG00000070366	17	2065679
## 1564	chr17:2065679-2068778_str-	ENSG00000070366	17	2065679
## 1565	chr17:4086655-4087434_str-	ENSG00000074755	17	4086655
## 1566	chr17:4086655-4088678_str-	ENSG00000074755	17	4086655
## 1567	chr17:4716608-4717217_str+	ENSG00000141480	17	4716608
## 1568	chr17:4716671-4717217_str+	ENSG00000141480	17	4716671
## 1569	chr17:4710744-4717217_str+	ENSG00000141480	17	4710744
## 1570	chr17:5394981-5399552_str-	ENSG00000108559	17	5394981
## 1571	chr17:5394981-5404099_str-	ENSG00000108559	17	5394981
## 1572	chr17:6760601-6761671_str+	ENSG00000132530	17	6760601
## 1573	chr17:7014332-7014390_str+	ENSG00000219200	17	7014332
## 1574	chr17:7014332-7014390_str+	ENSG00000161939	17	7014332

## 1575	chr17:7014349-7014390_str+	ENSG00000161939	17	7014349
## 1576	chr17:7014349-7014390_str+	ENSG00000219200	17	7014349
## 1577	chr17:7014335-7014399_str+	ENSG00000219200	17	7014335
## 1578	chr17:7014335-7014399_str+	ENSG00000161939	17	7014335
## 1579	chr17:7014473-7014499_str+	ENSG00000219200	17	7014473
## 1580	chr17:7014473-7014499_str+	ENSG00000161939	17	7014473
## 1581	chr17:7015156-7015774_str+	ENSG00000161939	17	7015156
## 1582	chr17:7015156-7015774_str+	ENSG00000258315	17	7015156
## 1583	chr17:7015459-7015774_str+	ENSG00000161939	17	7015459
## 1584	chr17:7015459-7015774_str+	ENSG00000258315	17	7015459
## 1585	chr17:7015157-7015775_str+	ENSG00000161939	17	7015157
## 1586	chr17:7015157-7015775_str+	ENSG00000258315	17	7015157
## 1587	chr17:7015156-7015776_str+	ENSG00000161939	17	7015156
## 1588	chr17:7015156-7015776_str+	ENSG00000258315	17	7015156
## 1589	chr17:7226639-7226893_str-	ENSG00000004975	17	7226639
## 1590	chr17:7226639-7227090_str-	ENSG00000004975	17	7226639
## 1591	chr17:7908510-7908694_str+	ENSG00000170004	17	7908510
## 1592	chr17:7908510-7908697_str+	ENSG00000170004	17	7908510
## 1593	chr17:8229446-8229891_str-	ENSG00000178971	17	8229446
## 1594	chr17:8229446-8230294_str-	ENSG00000178971	17	8229446
## 1595	chr17:15704672-15704750_str+	ENSG00000187607	17	15704672
## 1596	chr17:15704672-15704750_str+	ENSG00000255104	17	15704672
## 1597	chr17:17120707-17191228_str+	ENSG00000133030	17	17120707
## 1598	chr17:28620630-28620988_str-	ENSG00000007202	17	28620630
## 1599	chr17:28662342-28672757_str+	ENSG00000109111	17	28662342
## 1600	chr17:28662342-28673371_str+	ENSG00000109111	17	28662342
## 1601	chr17:28672858-28673371_str+	ENSG00000109111	17	28672858
## 1602	chr17:28662685-28673371_str+	ENSG00000109111	17	28662685
## 1603	chr17:28668630-28673371_str+	ENSG00000109111	17	28668630
## 1604	chr17:28671231-28673371_str+	ENSG00000109111	17	28671231
## 1605	chr17:28673127-28673371_str+	ENSG00000109111	17	28673127
## 1606	chr17:28662247-28673371_str+	ENSG00000109111	17	28662247
## 1607	chr17:28860567-28860633_str+	ENSG00000132591	17	28860567
## 1608	chr17:28950246-28950895_str-	ENSG00000109118	17	28950246
## 1609	chr17:28950246-28951467_str-	ENSG00000109118	17	28950246
## 1610	chr17:28950246-28950422_str-	ENSG00000109118	17	28950246
## 1611	chr17:29110101-29110436_str-	ENSG00000196535	17	29110101
## 1612	chr17:31523996-31525090_str+	ENSG00000131242	17	31523996
## 1613	chr17:31523611-31525090_str+	ENSG00000131242	17	31523611
## 1614	chr17:39253604-39258305_str-	ENSG00000108306	17	39253604
## 1615	chr17:39258581-39259204_str-	ENSG00000108306	17	39258581
## 1616	chr17:41994944-41996311_str-	ENSG00000168259	17	41994944
## 1617	chr17:41994944-41997115_str-	ENSG00000168259	17	41994944
## 1618	chr17:43013380-43013477_str+	ENSG00000068079	17	43013380
## 1619	chr17:43013336-43013478_str+	ENSG00000068079	17	43013336
## 1620	chr17:43013376-43013479_str+	ENSG00000068079	17	43013376
## 1621	chr17:44080923-44082585_str-	ENSG00000108840	17	44080923
## 1622	chr17:44176642-44181623_str-	ENSG00000267080	17	44176642
## 1623	chr17:44176642-44186565_str-	ENSG00000267080	17	44176642
## 1624	chr17:44176642-44176856_str-	ENSG00000267080	17	44176642
## 1625	chr17:44438715-44464472_str-	ENSG00000186566	17	44438715
## 1626	chr17:44868479-44872446_str-	ENSG00000108883	17	44868479
## 1627	chr17:45149450-45149532_str+	ENSG00000186834	17	45149450
## 1628	chr17:47819099-47819729_str-	ENSG00000006025	17	47819099

## 1629	chr17:47819099-47819971_str-	ENSG00000006025	17	47819099
## 1630	chr17:48848455-48849252_str+	ENSG00000136436	17	48848455
## 1631	chr17:48848082-48849252_str+	ENSG00000136436	17	48848082
## 1632	chr17:48848827-48849252_str+	ENSG00000136436	17	48848827
## 1633	chr17:50471135-50472428_str+	ENSG00000167107	17	50471135
## 1634	chr17:50551679-50551969_str+	ENSG00000006282	17	50551679
## 1635	chr17:50552180-50554251_str+	ENSG00000006282	17	50552180
## 1636	chr17:55754088-55756165_str+	ENSG00000141179	17	55754088
## 1637	chr17:55751244-55756165_str+	ENSG00000141179	17	55751244
## 1638	chr17:55771185-55773724_str+	ENSG00000141179	17	55771185
## 1639	chr17:55771185-55773724_str+	ENSG00000141179	17	55771185
## 1640	chr17:57677060-57679512_str+	ENSG00000153944	17	57677060
## 1641	chr17:57677059-57679512_str+	ENSG00000153944	17	57677059
## 1642	chr17:57677058-57679521_str+	ENSG00000153944	17	57677058
## 1643	chr17:58083683-58085139_str+	ENSG00000264364	17	58083683
## 1644	chr17:58274652-58275542_str-	ENSG00000005381	17	58274652
## 1645	chr17:58280445-58280723_str-	ENSG00000005381	17	58280445
## 1646	chr17:58280459-58280590_str-	ENSG00000005381	17	58280459
## 1647	chr17:58280459-58280599_str-	ENSG00000005381	17	58280459
## 1648	chr17:58280459-58280605_str-	ENSG00000005381	17	58280459
## 1649	chr17:58280459-58280925_str-	ENSG00000005381	17	58280459
## 1650	chr17:58280459-58280617_str-	ENSG00000005381	17	58280459
## 1651	chr17:62671837-62674063_str+	ENSG00000011028	17	62671837
## 1652	chr17:62672152-62674063_str+	ENSG00000011028	17	62672152
## 1653	chr17:63699113-63699257_str-	ENSG00000136490	17	63699113
## 1654	chr17:63828209-63829494_str+	ENSG000000087191	17	63828209
## 1655	chr17:63827514-63829494_str+	ENSG000000087191	17	63827514
## 1656	chr17:63835020-63835412_str-	ENSG00000108604	17	63835020
## 1657	chr17:68527900-68528847_str+	ENSG00000108946	17	68527900
## 1658	chr17:73092116-73092611_str-	ENSG00000133195	17	73092116
## 1659	chr17:73203793-73205553_str+	ENSG00000166685	17	73203793
## 1660	chr17:73236995-73242896_str+	ENSG00000141219	17	73236995
## 1661	chr17:73242351-73242896_str+	ENSG00000141219	17	73242351
## 1662	chr17:74776577-74777264_str+	ENSG00000109066	17	74776577
## 1663	chr17:75131105-75131181_str-	ENSG00000125458	17	75131105
## 1664	chr17:75239018-75239375_str-	ENSG00000125447	17	75239018
## 1665	chr17:75246796-75261548_str-	ENSG00000125447	17	75246796
## 1666	chr17:75246796-75248840_str-	ENSG00000125447	17	75246796
## 1667	chr17:75493102-75493491_str+	ENSG00000177728	17	75493102
## 1668	chr17:75493132-75493491_str+	ENSG00000177728	17	75493132
## 1669	chr17:75589193-75589607_str+	ENSG00000266714	17	75589193
## 1670	chr17:75589193-75589607_str+	ENSG00000266714	17	75589193
## 1671	chr17:75588966-75589621_str+	ENSG00000266714	17	75588966
## 1672	chr17:75589424-75589621_str+	ENSG00000266714	17	75589424
## 1673	chr17:75590138-75590163_str+	ENSG00000266714	17	75590138
## 1674	chr17:75592301-75592464_str+	ENSG00000266714	17	75592301
## 1675	chr17:75592301-75592474_str+	ENSG00000266714	17	75592301
## 1676	chr17:75706092-75706340_str+	ENSG00000161526	17	75706092
## 1677	chr17:75843266-75843484_str-	ENSG00000092929	17	75843266
## 1678	chr17:75843266-75844221_str-	ENSG00000092929	17	75843266
## 1679	chr17:75843266-75843663_str-	ENSG00000092929	17	75843266
## 1680	chr17:75843285-75843484_str-	ENSG00000092929	17	75843285
## 1681	chr17:75848662-75849604_str-	ENSG00000132471	17	75848662
## 1682	chr17:76000489-76001412_str+	ENSG00000261408	17	76000489



## 1683	chr17:76000695-76001412_str+	ENSG00000261408	17	76000695
## 1684	chr17:76083750-76084006_str-	ENSG00000182473	17	76083750
## 1685	chr17:76088923-76089175_str-	ENSG00000182473	17	76088923
## 1686	chr17:76567552-76568713_str-	ENSG00000070731	17	76567552
## 1687	chr17:76736998-76737025_str+	ENSG00000267168	17	76736998
## 1688	chr17:76736998-76737025_str+	ENSG00000092931	17	76736998
## 1689	chr17:78118775-78118971_str-	ENSG00000141524	17	78118775
## 1690	chr17:78865220-78870898_str-	ENSG00000035862	17	78865220
## 1691	chr17:80375870-80376301_str+	ENSG00000173821	17	80375870
## 1692	chr17:81670453-81670534_str+	ENSG00000185298	17	81670453
## 1693	chr17:81670453-81670534_str+	ENSG00000185298	17	81670453
## 1694	chr17:81701087-81701530_str+	ENSG00000185359	17	81701087
## 1695	chr17:81701127-81701534_str+	ENSG00000185359	17	81701127
## 1696	chr17:81701128-81701535_str+	ENSG00000185359	17	81701128
## 1697	chr17:81701131-81701538_str+	ENSG00000185359	17	81701131
## 1698	chr17:81843314-81843415_str+	ENSG00000262831	17	81843314
## 1699	chr17:82050006-82050402_str-	ENSG00000169733	17	82050006
## 1700	chr17:82050006-82050402_str-	ENSG00000169733	17	82050006
## 1701	chr17:82091069-82091222_str-	ENSG00000169710	17	82091069
## 1702	chr17:82435872-82436667_str+	ENSG00000169660	17	82435872
## 1703	chr17:82571870-82572259_str+	ENSG00000141568	17	82571870
## 1704	chr18:673076-674161_str-	ENSG00000132199	18	673076
## 1705	chr18:706578-712504_str-	ENSG00000132199	18	706578
## 1706	chr18:706578-712360_str-	ENSG00000132199	18	706578
## 1707	chr18:2770108-2771533_str+	ENSG00000101596	18	2770108
## 1708	chr18:9216900-9221852_str+	ENSG00000265257	18	9216900
## 1709	chr18:9219996-9221852_str+	ENSG00000265257	18	9219996
## 1710	chr18:9216900-9221852_str+	ENSG00000101745	18	9216900
## 1711	chr18:9219996-9221852_str+	ENSG00000101745	18	9219996
## 1712	chr18:9476286-9478302_str+	ENSG00000017797	18	9476286
## 1713	chr18:9475688-9512988_str+	ENSG00000017797	18	9475688
## 1714	chr18:9475691-9512991_str+	ENSG00000017797	18	9475691
## 1715	chr18:9476286-9512991_str+	ENSG00000017797	18	9476286
## 1716	chr18:9475176-9512991_str+	ENSG00000017797	18	9475176
## 1717	chr18:9478522-9512991_str+	ENSG00000017797	18	9478522
## 1718	chr18:9954075-9957577_str+	ENSG00000101558	18	9954075
## 1719	chr18:9954160-9957578_str+	ENSG00000101558	18	9954160
## 1720	chr18:9954076-9957578_str+	ENSG00000101558	18	9954076
## 1721	chr18:10534494-10539760_str+	ENSG00000134265	18	10534494
## 1722	chr18:10539028-10539761_str+	ENSG00000134265	18	10539028
## 1723	chr18:10534496-10539762_str+	ENSG00000134265	18	10534496
## 1724	chr18:10538974-10539762_str+	ENSG00000134265	18	10538974
## 1725	chr18:10526158-10539762_str+	ENSG00000134265	18	10526158
## 1726	chr18:11905953-11906203_str-	ENSG00000154889	18	11905953
## 1727	chr18:12311053-12315354_str+	ENSG00000176014	18	12311053
## 1728	chr18:12311053-12317622_str+	ENSG00000176014	18	12311053
## 1729	chr18:49321377-49331864_str-	ENSG00000141627	18	49321377
## 1730	chr18:74635439-74635540_str+	ENSG00000215421	18	74635439
## 1731	chr18:77065700-77066298_str-	ENSG00000197971	18	77065700
## 1732	chr18:80036710-80037324_str+	ENSG00000267127	18	80036710
## 1733	chr18:80036710-80037324_str+	ENSG00000101546	18	80036710
## 1734	chr18:80036710-80037330_str+	ENSG00000267127	18	80036710
## 1735	chr18:80036710-80037330_str+	ENSG00000101546	18	80036710
## 1736	chr19:583204-583276_str+	ENSG00000172270	19	583204

## 1737	chr19:1037983-1038234_str+	ENSG00000064666	19	1037983
## 1738	chr19:1038086-1038237_str+	ENSG00000064666	19	1038086
## 1739	chr19:1038057-1038238_str+	ENSG00000064666	19	1038057
## 1740	chr19:1038060-1038240_str+	ENSG00000064666	19	1038060
## 1741	chr19:1038464-1038584_str+	ENSG00000064666	19	1038464
## 1742	chr19:1074879-1075986_str+	ENSG00000180448	19	1074879
## 1743	chr19:1086321-1086370_str+	ENSG00000180448	19	1086321
## 1744	chr19:1609599-1611704_str-	ENSG00000071564	19	1609599
## 1745	chr19:2042870-2043124_str-	ENSG00000099875	19	2042870
## 1746	chr19:2042870-2043503_str-	ENSG00000099875	19	2042870
## 1747	chr19:2226593-2226678_str+	ENSG00000104885	19	2226593
## 1748	chr19:2233397-2233998_str-	ENSG00000104886	19	2233397
## 1749	chr19:2269744-2271385_str+	ENSG00000104904	19	2269744
## 1750	chr19:2270676-2271385_str+	ENSG00000104904	19	2270676
## 1751	chr19:2271076-2271385_str+	ENSG00000104904	19	2271076
## 1752	chr19:2269744-2271385_str+	ENSG00000273734	19	2269744
## 1753	chr19:2269884-2271385_str+	ENSG00000104904	19	2269884
## 1754	chr19:2269884-2271385_str+	ENSG00000273734	19	2269884
## 1755	chr19:2270676-2271385_str+	ENSG00000273734	19	2270676
## 1756	chr19:2271076-2271385_str+	ENSG00000273734	19	2271076
## 1757	chr19:2271191-2271385_str+	ENSG00000104904	19	2271191
## 1758	chr19:2271191-2271385_str+	ENSG00000273734	19	2271191
## 1759	chr19:2270434-2271385_str+	ENSG00000104904	19	2270434
## 1760	chr19:2270434-2271385_str+	ENSG00000273734	19	2270434
## 1761	chr19:2269744-2271391_str+	ENSG00000104904	19	2269744
## 1762	chr19:2269744-2271391_str+	ENSG00000273734	19	2269744
## 1763	chr19:2269720-2271400_str+	ENSG00000104904	19	2269720
## 1764	chr19:2269720-2271400_str+	ENSG00000273734	19	2269720
## 1765	chr19:2269682-2271401_str+	ENSG00000104904	19	2269682
## 1766	chr19:2269682-2271401_str+	ENSG00000273734	19	2269682
## 1767	chr19:2269714-2271405_str+	ENSG00000104904	19	2269714
## 1768	chr19:2269714-2271405_str+	ENSG00000273734	19	2269714
## 1769	chr19:2324194-2325176_str+	ENSG00000273734	19	2324194
## 1770	chr19:2326201-2328387_str-	ENSG00000130332	19	2326201
## 1771	chr19:3532650-3533294_str+	ENSG00000105325	19	3532650
## 1772	chr19:3542977-3544809_str-	ENSG00000161091	19	3542977
## 1773	chr19:3611265-3611766_str+	ENSG00000226800	19	3611265
## 1774	chr19:5785791-5786467_str-	ENSG00000141994	19	5785791
## 1775	chr19:6821680-6822221_str+	ENSG00000141968	19	6821680
## 1776	chr19:6821859-6822221_str+	ENSG00000141968	19	6821859
## 1777	chr19:7646020-7646051_str+	ENSG00000076944	19	7646020
## 1778	chr19:8471424-8486212_str+	ENSG00000099783	19	8471424
## 1779	chr19:8486163-8486215_str+	ENSG00000099783	19	8486163
## 1780	chr19:8486207-8486220_str+	ENSG00000099783	19	8486207
## 1781	chr19:10653508-10653719_str-	ENSG00000267100	19	10653508
## 1782	chr19:11446347-11447436_str+	ENSG00000130175	19	11446347
## 1783	chr19:11447160-11447439_str+	ENSG00000130175	19	11447160
## 1784	chr19:11446350-11447439_str+	ENSG00000130175	19	11446350
## 1785	chr19:14464153-14467565_str+	ENSG00000123143	19	14464153
## 1786	chr19:14764369-14765320_str-	ENSG00000127507	19	14764369
## 1787	chr19:16118249-16132784_str+	ENSG00000167461	19	16118249
## 1788	chr19:16324975-16325469_str+	ENSG00000127528	19	16324975
## 1789	chr19:17200426-17200639_str+	ENSG00000099331	19	17200426
## 1790	chr19:17198308-17200639_str+	ENSG00000099331	19	17198308

## 1791	chr19:18869390-18869983_str-	ENSG00000130283	19	18869390
## 1792	chr19:18869390-18869983_str-	ENSG00000223802	19	18869390
## 1793	chr19:18913046-18919223_str-	ENSG00000105669	19	18913046
## 1794	chr19:18913046-18919223_str-	ENSG00000268193	19	18913046
## 1795	chr19:18913046-18931325_str-	ENSG00000268193	19	18913046
## 1796	chr19:18928395-18928491_str+	ENSG00000105671	19	18928395
## 1797	chr19:19055928-19057393_str+	ENSG00000105676	19	19055928
## 1798	chr19:19335735-19336131_str+	ENSG00000129933	19	19335735
## 1799	chr19:19496219-19498443_str+	ENSG00000167491	19	19496219
## 1800	chr19:19627284-19627397_str-	ENSG00000064547	19	19627284
## 1801	chr19:19627284-19628092_str-	ENSG00000064547	19	19627284
## 1802	chr19:19627284-19628428_str-	ENSG00000064547	19	19627284
## 1803	chr19:30007638-30009005_str+	ENSG00000105176	19	30007638
## 1804	chr19:30005708-30009005_str+	ENSG00000105176	19	30005708
## 1805	chr19:33204852-33205246_str+	ENSG00000130881	19	33204852
## 1806	chr19:33202986-33205246_str+	ENSG00000130881	19	33202986
## 1807	chr19:34391696-34392545_str+	ENSG00000105220	19	34391696
## 1808	chr19:35013691-35015824_str+	ENSG00000089351	19	35013691
## 1809	chr19:35014387-35015824_str+	ENSG00000089351	19	35014387
## 1810	chr19:35011554-35015824_str+	ENSG00000089351	19	35011554
## 1811	chr19:35015555-35015824_str+	ENSG00000089351	19	35015555
## 1812	chr19:35014357-35015824_str+	ENSG00000089351	19	35014357
## 1813	chr19:35011553-35015826_str+	ENSG00000089351	19	35011553
## 1814	chr19:35014387-35015827_str+	ENSG00000089351	19	35014387
## 1815	chr19:35013691-35015827_str+	ENSG00000089351	19	35013691
## 1816	chr19:35166304-35169563_str+	ENSG00000089327	19	35166304
## 1817	chr19:35166171-35169566_str+	ENSG00000089327	19	35166171
## 1818	chr19:35166325-35169566_str+	ENSG00000089327	19	35166325
## 1819	chr19:35166307-35169566_str+	ENSG00000089327	19	35166307
## 1820	chr19:35164228-35169658_str+	ENSG00000089327	19	35164228
## 1821	chr19:35164236-35169663_str+	ENSG00000089327	19	35164236
## 1822	chr19:35741223-35742267_str-	ENSG00000126246	19	35741223
## 1823	chr19:35741223-35742396_str-	ENSG00000126246	19	35741223
## 1824	chr19:35741223-35742390_str-	ENSG00000267120	19	35741223
## 1825	chr19:35741223-35742396_str-	ENSG00000267120	19	35741223
## 1826	chr19:35741223-35741483_str-	ENSG00000126246	19	35741223
## 1827	chr19:35741223-35742267_str-	ENSG00000267120	19	35741223
## 1828	chr19:35741223-35741483_str-	ENSG00000267120	19	35741223
## 1829	chr19:35741228-35742390_str-	ENSG00000126246	19	35741228
## 1830	chr19:35741228-35742396_str-	ENSG00000126246	19	35741228
## 1831	chr19:35741228-35742396_str-	ENSG00000267120	19	35741228
## 1832	chr19:35741228-35742390_str-	ENSG00000267120	19	35741228
## 1833	chr19:35903129-35903347_str+	ENSG00000126264	19	35903129
## 1834	chr19:35903132-35903350_str+	ENSG00000126264	19	35903132
## 1835	chr19:35902636-35903351_str+	ENSG00000126264	19	35902636
## 1836	chr19:35902661-35903351_str+	ENSG00000126264	19	35902661
## 1837	chr19:35902802-35903351_str+	ENSG00000126264	19	35902802
## 1838	chr19:35903133-35903351_str+	ENSG00000126264	19	35903133
## 1839	chr19:35902712-35903351_str+	ENSG00000126264	19	35902712
## 1840	chr19:35902641-35903351_str+	ENSG00000126264	19	35902641
## 1841	chr19:35902721-35903351_str+	ENSG00000126264	19	35902721
## 1842	chr19:35903091-35903351_str+	ENSG00000126264	19	35903091
## 1843	chr19:38264751-38264780_str+	ENSG00000167642	19	38264751
## 1844	chr19:39389015-39389093_str-	ENSG00000006712	19	39389015

## 1845	chr19:39389015-39389480_str-	ENSG00000006712	19	39389015
## 1846	chr19:41378517-41383861_str+	ENSG00000255730	19	41378517
## 1847	chr19:41378517-41383861_str+	ENSG00000142046	19	41378517
## 1848	chr19:41382921-41383863_str+	ENSG00000255730	19	41382921
## 1849	chr19:41382921-41383863_str+	ENSG00000142046	19	41382921
## 1850	chr19:41383632-41383863_str+	ENSG00000255730	19	41383632
## 1851	chr19:41383632-41383863_str+	ENSG00000142046	19	41383632
## 1852	chr19:41378519-41383863_str+	ENSG00000255730	19	41378519
## 1853	chr19:41378519-41383863_str+	ENSG00000142046	19	41378519
## 1854	chr19:41423169-41424502_str+	ENSG00000255730	19	41423169
## 1855	chr19:41423169-41424502_str+	ENSG00000248098	19	41423169
## 1856	chr19:41898008-41898039_str+	ENSG00000076928	19	41898008
## 1857	chr19:42485348-42485453_str+	ENSG00000213904	19	42485348
## 1858	chr19:44988173-44990395_str+	ENSG00000104853	19	44988173
## 1859	chr19:45473309-45473463_str+	ENSG00000125740	19	45473309
## 1860	chr19:45641748-45641918_str-	ENSG00000125746	19	45641748
## 1861	chr19:46999409-47000331_str+	ENSG00000160007	19	46999409
## 1862	chr19:47262493-47262506_str+	ENSG00000105321	19	47262493
## 1863	chr19:47675916-47679321_str+	ENSG00000268746	19	47675916
## 1864	chr19:47677276-47679321_str+	ENSG00000268746	19	47677276
## 1865	chr19:47675916-47679321_str+	ENSG00000063169	19	47675916
## 1866	chr19:47677276-47679321_str+	ENSG00000063169	19	47677276
## 1867	chr19:47677831-47679321_str+	ENSG00000268746	19	47677831
## 1868	chr19:47677831-47679321_str+	ENSG00000063169	19	47677831
## 1869	chr19:48325610-48325991_str+	ENSG00000142227	19	48325610
## 1870	chr19:48797333-48799675_str-	ENSG00000105552	19	48797333
## 1871	chr19:48873296-48873329_str+	ENSG00000087074	19	48873296
## 1872	chr19:48872648-48873335_str+	ENSG00000087074	19	48872648
## 1873	chr19:48873818-48873834_str+	ENSG00000087074	19	48873818
## 1874	chr19:48873822-48873838_str+	ENSG00000087074	19	48873822
## 1875	chr19:48873943-48873992_str+	ENSG00000087074	19	48873943
## 1876	chr19:48875672-48875742_str+	ENSG00000087074	19	48875672
## 1877	chr19:48874736-48875754_str+	ENSG00000087074	19	48874736
## 1878	chr19:48874873-48875756_str+	ENSG00000087074	19	48874873
## 1879	chr19:48874796-48875756_str+	ENSG00000087074	19	48874796
## 1880	chr19:49461800-49461884_str+	ENSG00000161618	19	49461800
## 1881	chr19:49460899-49461884_str+	ENSG00000161618	19	49460899
## 1882	chr19:49460899-49461888_str+	ENSG00000161618	19	49460899
## 1883	chr19:49461800-49461884_str+	ENSG00000161618	19	49461800
## 1884	chr19:49460899-49461884_str+	ENSG00000161618	19	49460899
## 1885	chr19:49460899-49461888_str+	ENSG00000161618	19	49460899
## 1886	chr19:49854593-49856552_str+	ENSG00000104960	19	49854593
## 1887	chr19:50382855-50382941_str+	ENSG00000131408	19	50382855
## 1888	chr19:50382669-50382941_str+	ENSG00000131408	19	50382669
## 1889	chr19:55669570-55669610_str+	ENSG00000063244	19	55669570
## 1890	chr19:57802391-57803909_str+	ENSG00000083828	19	57802391
## 1891	chr19:58246794-58253460_str+	ENSG00000198131	19	58246794
## 1892	chr19:58246794-58253460_str+	ENSG00000283515	19	58246794
## 1893	chr19:58393179-58393358_str+	ENSG00000083845	19	58393179
## 1894	chr19:58393160-58393358_str+	ENSG00000083845	19	58393160
## 1895	chr19:58388245-58393359_str+	ENSG00000083845	19	58388245
## 1896	chr19:58393185-58393359_str+	ENSG00000083845	19	58393185
## 1897	chr19:58388480-58393359_str+	ENSG00000083845	19	58388480
## 1898	chr19:58563209-58563297_str+	ENSG00000267858	19	58563209

## 1899	chr20:1375603-1377430_str-	ENSG00000274322	20	1375603
## 1900	chr20:1375603-1392834_str-	ENSG00000274322	20	1375603
## 1901	chr20:1375603-1377430_str-	ENSG00000088832	20	1375603
## 1902	chr20:1375603-1392834_str-	ENSG00000088832	20	1375603
## 1903	chr20:1375603-1392962_str-	ENSG00000088832	20	1375603
## 1904	chr20:1375603-1392962_str-	ENSG00000274322	20	1375603
## 1905	chr20:2861899-2862054_str+	ENSG00000215305	20	2861899
## 1906	chr20:2861280-2862054_str+	ENSG00000215305	20	2861280
## 1907	chr20:3870225-3870330_str+	ENSG00000088888	20	3870225
## 1908	chr20:6119739-6122774_str-	ENSG00000101311	20	6119739
## 1909	chr20:18535742-18542296_str+	ENSG00000101310	20	18535742
## 1910	chr20:25046872-25048085_str-	ENSG00000154930	20	25046872
## 1911	chr20:25284251-25288028_str+	ENSG00000100994	20	25284251
## 1912	chr20:35126375-35126973_str-	ENSG00000088298	20	35126375
## 1913	chr20:35126375-35130870_str-	ENSG00000088298	20	35126375
## 1914	chr20:35126375-35131642_str-	ENSG00000088298	20	35126375
## 1915	chr20:35126375-35134105_str-	ENSG00000088298	20	35126375
## 1916	chr20:35126375-35137880_str-	ENSG00000088298	20	35126375
## 1917	chr20:35126375-35134738_str-	ENSG00000088298	20	35126375
## 1918	chr20:35126375-35142373_str-	ENSG00000088298	20	35126375
## 1919	chr20:35724722-35725038_str-	ENSG00000131051	20	35724722
## 1920	chr20:37860342-37870525_str+	ENSG00000132792	20	37860342
## 1921	chr20:38048479-38057530_str+	ENSG00000101413	20	38048479
## 1922	chr20:38040564-38057532_str+	ENSG00000101413	20	38040564
## 1923	chr20:38048481-38057532_str+	ENSG00000101413	20	38048481
## 1924	chr20:38048618-38057532_str+	ENSG00000101413	20	38048618
## 1925	chr20:38034098-38057532_str+	ENSG00000101413	20	38034098
## 1926	chr20:44197275-44202961_str-	ENSG00000132823	20	44197275
## 1927	chr20:47262428-47276314_str-	ENSG00000101040	20	47262428
## 1928	chr20:47262428-47282102_str-	ENSG00000101040	20	47262428
## 1929	chr20:47262428-47283571_str-	ENSG00000101040	20	47262428
## 1930	chr20:49910572-49915380_str-	ENSG00000158480	20	49910572
## 1931	chr20:56403974-56404122_str+	ENSG00000101138	20	56403974
## 1932	chr20:57392777-57407543_str+	ENSG00000132819	20	57392777
## 1933	chr20:57393333-57407543_str+	ENSG00000132819	20	57393333
## 1934	chr20:57397042-57407543_str+	ENSG00000132819	20	57397042
## 1935	chr20:57399968-57407543_str+	ENSG00000132819	20	57399968
## 1936	chr20:58652087-58662992_str+	ENSG00000124222	20	58652087
## 1937	chr20:58652087-58662992_str+	ENSG00000254995	20	58652087
## 1938	chr20:58715226-58715305_str+	ENSG00000254995	20	58715226
## 1939	chr20:58715226-58715305_str+	ENSG00000215440	20	58715226
## 1940	chr20:58715201-58715306_str+	ENSG00000254995	20	58715201
## 1941	chr20:58715201-58715306_str+	ENSG00000215440	20	58715201
## 1942	chr20:58715611-58715659_str+	ENSG00000215440	20	58715611
## 1943	chr20:58903791-58904231_str+	ENSG00000087460	20	58903791
## 1944	chr20:58910944-58910980_str+	ENSG00000087460	20	58910944
## 1945	chr20:60066452-60067592_str+	ENSG00000176659	20	60066452
## 1946	chr20:60056008-60067592_str+	ENSG00000176659	20	60056008
## 1947	chr20:60058986-60067592_str+	ENSG00000176659	20	60058986
## 1948	chr20:62709921-62710122_str+	ENSG00000101188	20	62709921
## 1949	chr20:62905567-62905887_str-	ENSG00000101191	20	62905567
## 1950	chr20:62967973-62968051_str+	ENSG00000101194	20	62967973
## 1951	chr21:36137932-36146076_str+	ENSG00000159231	21	36137932
## 1952	chr21:38496842-38498363_str-	ENSG00000157554	21	38496842

## 1953	chr21:39181901-39183252_str-	ENSG00000183527	21	39181901
## 1954	chr21:43659793-43669997_str+	ENSG00000160208	21	43659793
## 1955	chr21:43746125-43747116_str+	ENSG00000160209	21	43746125
## 1956	chr21:43760047-43760056_str+	ENSG00000160209	21	43760047
## 1957	chr21:44865151-44865395_str-	ENSG00000183255	21	44865151
## 1958	chr21:44891888-44893404_str-	ENSG00000160255	21	44891888
## 1959	chr21:46277717-46279993_str-	ENSG00000160294	21	46277717
## 1960	chr21:46547042-46548402_str+	ENSG00000160305	21	46547042
## 1961	chr21:46547042-46548402_str+	ENSG00000160305	21	46547042
## 1962	chr21:46561805-46562755_str+	ENSG00000160305	21	46561805
## 1963	chr22:17098869-17101994_str+	ENSG00000177663	22	17098869
## 1964	chr22:17100793-17101995_str+	ENSG00000177663	22	17100793
## 1965	chr22:17098887-17101996_str+	ENSG00000177663	22	17098887
## 1966	chr22:17100481-17101996_str+	ENSG00000177663	22	17100481
## 1967	chr22:17104810-17105591_str+	ENSG00000177663	22	17104810
## 1968	chr22:17739488-17743803_str-	ENSG00000015475	22	17739488
## 1969	chr22:17739488-17750105_str-	ENSG00000015475	22	17739488
## 1970	chr22:17739488-17774381_str-	ENSG00000015475	22	17739488
## 1971	chr22:17739488-17740770_str-	ENSG00000015475	22	17739488
## 1972	chr22:17739488-17773610_str-	ENSG00000015475	22	17739488
## 1973	chr22:17822170-17822947_str-	ENSG00000243156	22	17822170
## 1974	chr22:17822170-17831854_str-	ENSG00000243156	22	17822170
## 1975	chr22:17822170-17841822_str-	ENSG00000243156	22	17822170
## 1976	chr22:20991829-20992214_str+	ENSG00000099949	22	20991829
## 1977	chr22:21622381-21622659_str+	ENSG00000185651	22	21622381
## 1978	chr22:24548073-24548917_str-	ENSG00000138867	22	24548073
## 1979	chr22:24548073-24554949_str-	ENSG00000138867	22	24548073
## 1980	chr22:24548073-24555615_str-	ENSG00000138867	22	24548073
## 1981	chr22:24573084-24574654_str+	ENSG00000100028	22	24573084
## 1982	chr22:24572878-24574654_str+	ENSG00000100028	22	24572878
## 1983	chr22:25763389-25768115_str+	ENSG00000133454	22	25763389
## 1984	chr22:29792535-29793360_str-	ENSG00000100325	22	29792535
## 1985	chr22:29792535-29793360_str-	ENSG00000100325	22	29792535
## 1986	chr22:37297682-37299226_str+	ENSG00000100055	22	37297682
## 1987	chr22:37299022-37299226_str+	ENSG00000100055	22	37299022
## 1988	chr22:38735575-38735740_str+	ENSG00000100226	22	38735575
## 1989	chr22:38735575-38735740_str+	ENSG00000244491	22	38735575
## 1990	chr22:38735575-38735740_str+	ENSG00000230149	22	38735575
## 1991	chr22:39312984-39313191_str-	ENSG00000100316	22	39312984
## 1992	chr22:40277151-40277999_str+	ENSG00000100354	22	40277151
## 1993	chr22:40407070-40407191_str+	ENSG00000100359	22	40407070
## 1994	chr22:40407071-40407201_str+	ENSG00000100359	22	40407071
## 1995	chr22:41141222-41144947_str+	ENSG00000100393	22	41141222
## 1996	chr22:43162946-43162965_str+	ENSG00000100300	22	43162946
## 1997	chr22:43162832-43162973_str+	ENSG00000100300	22	43162832
## 1998	chr22:43162840-43162981_str+	ENSG00000100300	22	43162840
## 1999	chr22:44196415-44198606_str+	ENSG00000138964	22	44196415
## 2000	chr22:44207006-44207811_str+	ENSG00000138964	22	44207006
## 2001	chr22:46675552-46676600_str+	ENSG00000075240	22	46675552
## 2002	chr22:50195883-50195890_str+	ENSG00000170638	22	50195883
## 2003	chr22:50250591-50250771_str-	ENSG00000100429	22	50250591
## 2004	chr22:50250591-50250771_str-	ENSG00000188130	22	50250591
## 2005	chr22:50286287-50287111_str-	ENSG00000196576	22	50286287
## 2006	chr22:50286287-50287667_str-	ENSG00000196576	22	50286287

##	2007	chr22:50286287-50286448_str-	ENSG00000196576	22	50286287
##	2008	chr22:50286287-50307553_str-	ENSG00000196576	22	50286287
##	2009	chr22:50304486-50304897_str-	ENSG00000196576	22	50304486
##	2010	chr22:50571509-50572006_str-	ENSG00000205560	22	50571509
##	2011	chr22:50571509-50572006_str-	ENSG00000254413	22	50571509
##	2012	chrX:16858849-16862951_str-	ENSG00000102054	X	16858849
##	2013	chrX:16858849-16862955_str-	ENSG00000102054	X	16858849
##	2014	chrX:16858849-16862958_str-	ENSG00000102054	X	16858849
##	2015	chrX:23667768-23671529_str+	ENSG00000123131	X	23667768
##	2016	chrX:23667811-23671529_str+	ENSG00000123131	X	23667811
##	2017	chrX:23671433-23671529_str+	ENSG00000123131	X	23671433
##	2018	chrX:23667768-23671529_str+	ENSG00000123131	X	23667768
##	2019	chrX:23667811-23671529_str+	ENSG00000123131	X	23667811
##	2020	chrX:23671433-23671529_str+	ENSG00000123131	X	23671433
##	2021	chrX:48575624-48577021_str+	ENSG00000102317	X	48575624
##	2022	chrX:48576580-48577023_str+	ENSG00000102317	X	48576580
##	2023	chrX:48576348-48577024_str+	ENSG00000102317	X	48576348
##	2024	chrX:48575667-48577026_str+	ENSG00000102317	X	48575667
##	2025	chrX:48576419-48577026_str+	ENSG00000102317	X	48576419
##	2026	chrX:48576604-48577026_str+	ENSG00000102317	X	48576604
##	2027	chrX:48575283-48577026_str+	ENSG00000102317	X	48575283
##	2028	chrX:48576538-48577026_str+	ENSG00000102317	X	48576538
##	2029	chrX:48576604-48577033_str+	ENSG00000102317	X	48576604
##	2030	chrX:48575624-48577021_str+	ENSG00000102317	X	48575624
##	2031	chrX:48576580-48577023_str+	ENSG00000102317	X	48576580
##	2032	chrX:48576348-48577024_str+	ENSG00000102317	X	48576348
##	2033	chrX:48575667-48577026_str+	ENSG00000102317	X	48575667
##	2034	chrX:48576419-48577026_str+	ENSG00000102317	X	48576419
##	2035	chrX:48576604-48577026_str+	ENSG00000102317	X	48576604
##	2036	chrX:48575283-48577026_str+	ENSG00000102317	X	48575283
##	2037	chrX:48576538-48577026_str+	ENSG00000102317	X	48576538
##	2038	chrX:48576604-48577033_str+	ENSG00000102317	X	48576604
##	2039	chrX:72181825-72186458_str+	ENSG00000102309	X	72181825
##	2040	chrX:72181828-72186461_str+	ENSG00000102309	X	72181828
##	2041	chrX:72181416-72186461_str+	ENSG00000102309	X	72181416
##	2042	chrX:130495488-130495638_str+	ENSG00000221930	X	130495488
##	2043	chrX:130495959-130496055_str+	ENSG00000221930	X	130495959
##	2044	chrX:153786449-153786801_str-	ENSG00000067829	X	153786449
##	2045	chrX:153786449-153787051_str-	ENSG00000067829	X	153786449
##	2046	chrX:153786449-153787464_str-	ENSG00000067829	X	153786449
##	2047	chrX:153905170-153905532_str+	ENSG00000126895	X	153905170
##	2048	chrX:153962306-153963225_str-	ENSG00000172534	X	153962306
##	2049	chrX:153962306-153970648_str-	ENSG00000172534	X	153962306
##	2050	chrX:154532280-154532386_str-	ENSG00000160211	X	154532280
##		end width strand sum_raw sum_samples_raw sum_cpm			
##	1	1402462 207 - 1179 48	-1246.496931		
##	2	1873958 34721 - 423 18	-1537.255139		
##	3	3496605 588 - 265 7	-1566.111850		
##	4	6098969 41 + 325 4	-1736.650392		
##	5	6099075 110 + 1224 8	-1699.111781		
##	6	13773078 865 + 881 24	-1438.647977		
##	7	24907259 4594 - 44874 316	624.024284		
##	8	26280764 137 + 163 6	-1681.217800		
##	9	40983278 2718 + 239 10	-1656.351620		

## 10	42823608	4823	+	83	3	-1708.803793
## 11	74736540	3012	+	583	22	-1536.119893
## 12	90027507	44	+	67	3	-1748.379215
## 13	90027493	29	+	135	3	-1744.960384
## 14	111184191	605	+	35021	367	897.698144
## 15	112699683	186	+	209	5	-1687.874873
## 16	159014661	4506	+	475	13	-1538.793862
## 17	159011030	870	+	1402	50	-1295.688364
## 18	159014661	4501	+	87724	363	1205.881699
## 19	167641391	680	+	19457	130	-743.494474
## 20	167683900	43189	+	406	8	-1493.613752
## 21	171557448	23	+	753	11	-1685.311249
## 22	173865471	1168	-	1262	27	-1355.118289
## 23	173865471	768	-	2710	92	-1051.525922
## 24	173865471	190	-	430601	377	2090.972538
## 25	203309417	1495	+	105	4	-1738.524283
## 26	207337329	80	+	5842	49	-1387.518318
## 27	209778419	1006	+	183	3	-1737.225667
## 28	230281144	135	+	203	5	-1732.833561
## 29	271866	2520	+	489	14	-1471.001601
## 30	9488147	601	+	300	5	-1545.107909
## 31	10052493	80	+	139	3	-1743.191429
## 32	10052498	84	+	178	9	-1705.370838
## 33	10312759	747	+	156	4	-1730.217954
## 34	20448543	98	+	684	8	-1709.931147
## 35	20448643	194	+	365	3	-1745.775335
## 36	28929579	1466	+	209	6	-1655.816940
## 37	63856304	13708	+	9284	149	-697.194071
## 38	68250819	33689	-	617	19	-1473.751906
## 39	68250819	33689	-	532	16	-1513.840043
## 40	68395851	71	+	652	4	-1727.116348
## 41	73266173	534	-	232	3	-1588.245738
## 42	74463254	243	-	74	3	-1716.820439
## 43	99364271	410	+	54610	351	1053.504924
## 44	101272842	1099	-	215	3	-1694.921875
## 45	119370740	1565	+	475	13	-1494.004878
## 46	119370740	1565	+	475	13	-1494.004878
## 47	135865013	2266	-	80450	369	1260.159893
## 48	152143827	8225	-	17244	347	478.676939
## 49	159710717	39908	-	1825	66	-1039.135119
## 50	159710717	15298	-	1196	44	-1320.077269
## 51	169630774	7762	+	382	12	-1565.830807
## 52	181493325	6278	+	175	3	-1638.250000
## 53	181535431	174	+	88	3	-1714.294117
## 54	208271509	4867	+	212	3	-1609.625417
## 55	218367591	510	+	921	34	-1342.135632
## 56	223901183	2114	-	30622	357	756.116304
## 57	231712963	473	+	388	8	-1700.433395
## 58	240578408	58	+	93	3	-1746.802371
## 59	9806558	193	+	128	3	-1745.576223
## 60	9806558	193	+	128	3	-1745.576223
## 61	11808335	441	-	352	9	-1528.904188
## 62	11809517	18937	-	736	17	-1295.401385
## 63	11809517	1623	-	11309	292	165.042902



## 64	11809517	935	-	265	3	-1575.730990
## 65	41233341	762	+	180	6	-1662.476491
## 66	41915977	3079	-	3912	127	-665.986288
## 67	42607110	3753	-	219	5	-1611.159501
## 68	47062163	15543	-	1108	46	-1330.745403
## 69	47062163	4674	-	58445	369	1146.244031
## 70	47062163	4736	-	220	8	-1698.375717
## 71	50118044	13	+	42	3	-1750.085064
## 72	52489450	68	+	121	4	-1741.863269
## 73	52686769	711	+	111	4	-1699.640334
## 74	53858719	110	+	581	8	-1691.312811
## 75	113293952	2205	-	199	10	-1711.235490
## 76	125520032	15289	-	24512	342	540.638581
## 77	125520032	15120	-	1201	47	-1351.441946
## 78	128622164	1572	-	243277	377	1847.233027
## 79	128622164	1587	-	143	4	-1740.183165
## 80	129977203	95	+	544	6	-1718.109651
## 81	129977204	95	+	495	4	-1735.754583
## 82	151327458	171	-	93	3	-1732.940079
## 83	170178773	6074	-	2384	74	-849.120275
## 84	170178773	6062	-	46997	363	966.460029
## 85	180933334	17639	+	2426	64	-1263.905924
## 86	194589855	230	+	2797	81	-848.584387
## 87	1000612	8673	+	614	23	-1553.088002
## 88	8209747	4393	+	64	3	-1739.558844
## 89	13578912	1282	-	4591	85	-1091.380736
## 90	48170248	1623	-	30095	312	442.288350
## 91	68039454	93	+	423	16	-1611.261341
## 92	68039454	93	+	407	15	-1620.698052
## 93	73113792	11246	-	29856	372	843.062546
## 94	73113792	482	-	5434	124	-536.214335
## 95	78923857	3177	-	7462	248	-78.329456
## 96	78923857	1437	-	1450	56	-1252.741512
## 97	78923857	5978	-	328	7	-1522.061775
## 98	79984591	622	-	187	3	-1642.594535
## 99	80203673	10	+	117	3	-1745.575793
## 100	123056387	27993	+	5629	215	-158.813474
## 101	138179217	7201	-	82	3	-1742.898100
## 102	145774506	8769	-	7736	212	-272.984324
## 103	184734016	3049	-	22814	193	-295.206833
## 104	475245	20	+	5426	76	-1190.045535
## 105	6611644	560	-	310	11	-1656.559961
## 106	10405558	778	+	454	5	-1538.098078
## 107	37696689	16	+	165	3	-1647.561662
## 108	56894967	265	+	183	7	-1698.721664
## 109	62402036	3156	-	44654	367	927.198011
## 110	127553811	1936	+	568	25	-1541.997372
## 111	127553795	1920	+	68	3	-1725.680082
## 112	160010500	1308	+	44387	359	929.499919
## 113	170452802	16972	+	199	7	-1652.395937
## 114	170452802	16972	+	199	7	-1652.395937
## 115	176529274	185	-	391	11	-1511.514174
## 116	2841322	729	-	2036	48	-1401.209830
## 117	36720372	149	+	411	14	-1663.656036

## 118	36720370	144	+	60	3	-1744.926831
## 119	42080508	826	+	153	8	-1704.690130
## 120	44313081	819	-	9330	256	-108.272726
## 121	111576362	1705	+	90	3	-1714.635891
## 122	116251809	1392	-	165	3	-1633.226614
## 123	116277636	8	+	182	6	-1723.505977
## 124	119348463	41472	-	109923	331	954.706952
## 125	119348463	22165	-	2110	30	-1417.124457
## 126	119348463	21156	-	683	14	-1541.367140
## 127	119348463	16460	-	2081	35	-1416.818842
## 128	119348463	12005	-	2079	34	-1421.404771
## 129	119348463	9423	-	530	16	-1597.428020
## 130	119348463	24605	-	90	3	-1709.587204
## 131	153282692	17	+	76339	25	-1471.706307
## 132	153282688	8	+	44914	24	-1496.888533
## 133	153282691	11	+	3027	3	-1733.781000
## 134	159776147	838	+	608	4	-1732.471090
## 135	159776150	838	+	42801	303	491.646102
## 136	12354350	2638	-	88	3	-1730.461899
## 137	21904110	997	-	82530	370	1169.778563
## 138	21904110	1759	-	251	7	-1597.271659
## 139	21904110	809	-	822	27	-1370.103094
## 140	30573000	4012	-	8536	132	-771.369004
## 141	30573000	194	-	2048	11	-1651.588338
## 142	88208825	261	-	442	9	-1474.459512
## 143	127392548	934	-	686	23	-1424.661369
## 144	135597147	2419	+	745	25	-1426.162436
## 145	135597368	2640	+	27403	356	690.340101
## 146	152122046	108	+	154	5	-1680.353638
## 147	19844596	112	+	683	29	-1445.076426
## 148	19845704	1220	+	772	31	-1539.271552
## 149	20211177	532	+	135642	375	1447.559897
## 150	23247987	994	+	1144	41	-1352.397652
## 151	23249210	2217	+	12459	281	116.406608
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## 154	47933965	3179	-	810	28	-1386.645446
## 155	47933965	794	-	31253	357	791.650578
## 156	94491578	1497	-	21368	368	648.606906
## 157	98044076	869	+	120	4	-1721.163189
## 158	103212919	51864	+	138	7	-1701.141964
## 159	130060579	2504	-	42562	326	579.475890
## 160	130060579	5775	-	151	3	-1660.130800
## 161	133507199	8011	-	1426	46	-1317.696726
## 162	141186025	285	+	209	3	-1621.090487
## 163	142275409	547	-	1101	50	-1332.737470
## 164	144511902	114	-	250	3	-1691.019895
## 165	420949	367	+	74376	367	1177.896735
## 166	420958	376	+	372	9	-1532.783965
## 167	422048	1466	+	890	37	-1440.845242
## 168	434783	809	+	112773	365	1369.936587
## 169	35661220	229	+	266	9	-1674.433819
## 170	35712005	214	-	173759	348	1484.328938
## 171	35757731	535	+	178	3	-1639.625357

## 172	78328051	10248	+	13057	92	-854.386743
## 173	78328981	11178	+	808	23	-1485.274280
## 174	94295633	1739	+	240	5	-1597.531226
## 175	129634054	1190	+	26009	331	497.312618
## 176	131496854	13	+	472	5	-1732.198571
## 177	133101589	1208	-	204	6	-1620.606009
## 178	3129819	3585	+	69	3	-1742.025950
## 179	5903020	5551	+	481	23	-1585.730693
## 180	7753952	351	-	613	20	-1476.093319
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## 182	18676829	917	+	518	14	-1566.741119
## 183	21726269	12324	+	196	4	-1734.973358
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## 186	48453304	2165	-	14007	230	-106.828722
## 187	48453304	6686	-	1836	52	-1229.270799
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## 189	48453304	508	-	629	20	-1479.401281
## 190	71819465	355	-	922098	375	2381.552991
## 191	71819465	742	-	5179	101	-1006.927220
## 192	71819465	397	-	162	3	-1740.639760
## 193	71819465	364	-	1025	5	-1714.697196
## 194	78035350	1037	+	1006	31	-1373.138554
## 195	79139681	12843	+	292	11	-1635.972975
## 196	89635676	612	-	320	7	-1627.381286
## 197	99528590	470	-	1253	48	-1360.248310
## 198	100986749	2933	-	13420	163	-473.725643
## 199	100986749	2676	-	5997	117	-675.611022
## 200	100986749	178	-	1160	36	-1372.720338
## 201	102630065	1272	+	251	3	-1589.722950
## 202	109886246	2099	-	73593	370	1231.037878
## 203	109886246	3605	-	476	11	-1451.593593
## 204	109886248	2101	-	215	6	-1640.928862
## 205	129799666	7633	+	302	11	-1602.825861
## 206	133269307	446	-	167	7	-1701.784483
## 207	133395711	756	+	141	4	-1694.530877
## 208	133395711	756	+	141	4	-1694.530877
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## 211	824832	50	+	227	4	-1728.346696
## 212	874775	4277	-	287	3	-1523.765912
## 213	10806820	774	-	521547	374	2088.742574
## 214	10806820	748	-	369	12	-1532.782453
## 215	10806820	831	-	270	13	-1654.963707
## 216	10806820	811	-	239	9	-1662.806358
## 217	10806820	797	-	57	3	-1742.473409
## 218	34966640	6123	+	20776	353	553.602752
## 219	62665647	316	+	7989	15	-1625.528712
## 220	64319752	1441	+	186	3	-1743.675376
## 221	65422931	28	+	351	3	-1742.153040
## 222	65423326	422	+	771	6	-1719.545667
## 223	65422953	47	+	3805	20	-1605.486309
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## 225	65857093	852	-	298	8	-1589.707981

## 226	66626966	54	+	111	3	-1745.998808
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## 228	67207510	7388	+	398	14	-1550.793460
## 229	67283128	311	+	481356	373	2134.431586
## 230	67487005	2303	+	283	6	-1580.199308
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## 232	95175498	2158	-	16725	294	266.652102
## 233	117293054	1242	-	19809	304	326.641175
## 234	117993999	608	+	1376	34	-1407.803518
## 235	122783053	87	+	214	3	-1644.366015
## 236	125583521	1102	+	45794	340	673.762156
## 237	6873246	250	-	2275	81	-1094.271442
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## 239	6944475	283	+	50	3	-1742.312068
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## 241	10507257	293	+	159	4	-1739.823535
## 242	10507257	84	+	858	33	-1303.539657
## 243	27060905	1446	+	238	3	-1590.314873
## 244	27064276	4817	+	787	34	-1449.609205
## 245	53040142	442	+	963	7	-1705.963545
## 246	53040143	442	+	14146	171	-527.804476
## 247	57476871	221	-	101657	369	1107.757163
## 248	57476871	418	-	91	3	-1713.868337
## 249	57809597	1050	-	743	18	-1391.750194
## 250	76067371	7093	-	842434	377	2622.532143
## 251	76067371	6285	-	801	24	-1337.941600
## 252	76067371	4164	-	2076	61	-1286.627303
## 253	76067371	7102	-	1481	58	-1303.767912
## 254	76067371	7494	-	265	10	-1694.933428
## 255	76067371	11211	-	564	21	-1571.163880
## 256	101761127	985	-	70123	364	1182.837492
## 257	101761127	3471	-	146	4	-1676.658827
## 258	103794744	748	-	498	11	-1600.587676
## 259	104988167	200	+	157	4	-1661.145180
## 260	120737356	222	+	18974	305	317.890501
## 261	121779549	1423	+	247	4	-1566.997190
## 262	121801707	1752	-	16547	155	-548.599747
## 263	121801707	100	-	988	38	-1280.392214
## 264	121801707	1752	-	18361	250	37.891256
## 265	121801707	100	-	1018	38	-1260.398260
## 266	123154382	1914	-	171	3	-1665.452784
## 267	123154382	1758	-	3073	54	-1371.445315
## 268	40949806	5882	-	268718	374	1826.460223
## 269	40949806	1804	-	3803	94	-1093.043430
## 270	40949806	5909	-	97	3	-1741.263058
## 271	40949806	15779	-	582	21	-1534.649692
## 272	40949806	6663	-	954	9	-1679.816752
## 273	43970465	32	+	95	4	-1714.897979
## 274	43970465	32	+	95	4	-1714.897979
## 275	43970465	32	+	95	4	-1714.897979
## 276	52687734	7580	+	52745	374	1038.194047
## 277	24441009	84	-	1523	30	-1500.856538
## 278	24441674	749	-	65265	370	1003.733135
## 279	24441771	846	-	178	6	-1669.798249

## 280	24441771	634	-	281	9	-1654.613324
## 281	24441771	846	-	178	6	-1669.798249
## 282	24441771	634	-	281	9	-1654.613324
## 283	60398017	162	+	72	3	-1744.444618
## 284	60398251	73	+	549	5	-1727.038191
## 285	73718216	2124	-	514	20	-1552.005358
## 286	92121196	2231	-	237	4	-1590.313295
## 287	92121196	3555	-	1418	63	-1276.088101
## 288	100346746	3360	-	144865	373	1529.136483
## 289	103714105	1175	-	130	4	-1696.041596
## 290	66328969	2968	+	282	11	-1621.399337
## 291	68718698	3388	+	727	18	-1437.306446
## 292	74024857	902	+	758	26	-1492.591929
## 293	74802781	53	+	1570	41	-1468.887401
## 294	89808346	1538	-	352	8	-1703.521703
## 295	90233143	817	-	197	8	-1687.574600
## 296	92967423	56	+	61	3	-1738.077395
## 297	101287656	647	-	23175	340	652.706706
## 298	1769756	116	+	1522	47	-1442.696234
## 299	2939871	3642	+	139	3	-1688.767120
## 300	4677463	1012	+	528	16	-1590.344285
## 301	9107338	11	+	67	3	-1748.224370
## 302	9107338	11	+	67	3	-1748.224370
## 303	30953679	64	+	275	9	-1687.977384
## 304	30953679	64	+	255	8	-1701.648150
## 305	30953681	64	+	90	4	-1733.360921
## 306	30953681	64	+	90	4	-1733.360921
## 307	71746588	975	-	36519	359	881.266856
## 308	71746588	965	-	1408	45	-1336.955973
## 309	84058218	2084	-	1690	52	-1350.710701
## 310	84099053	3249	-	88380	371	1250.783088
## 311	85583343	1175	-	1151	18	-1582.150238
## 312	88696883	141	+	183	5	-1730.110860
## 313	88697446	296	+	212	6	-1723.088987
## 314	89269937	1275	-	1191	51	-1313.547583
## 315	7014499	27	+	2261	22	-1605.762104
## 316	7014499	27	+	1934	16	-1644.618605
## 317	7224480	88	+	262144	376	1727.297525
## 318	7224484	92	+	20528	143	-558.368307
## 319	29569018	511	+	3144	65	-1269.629280
## 320	29569018	511	+	3059	63	-1299.932036
## 321	40348316	8250	+	579	19	-1530.112545
## 322	44872446	4097	-	81862	371	1293.508799
## 323	44872446	3968	-	1001	29	-1418.993997
## 324	44872446	7382	-	278	7	-1586.690975
## 325	44872446	4550	-	226	4	-1613.709239
## 326	46955501	6155	+	167	3	-1645.258341
## 327	46952113	2767	+	289	5	-1558.666039
## 328	46952113	2767	+	277	5	-1571.123676
## 329	46966534	17188	+	256	7	-1609.214797
## 330	46966534	17188	+	244	6	-1613.858653
## 331	58275542	1931	-	3257	70	-1260.639032
## 332	58275542	1874	-	3721483	357	2577.321288
## 333	58275542	891	-	8254	47	-1341.085319

## 334	58275542	1817	-	538	24	-1554.140924
## 335	58275542	2060	-	66	3	-1737.104951
## 336	58275542	1344	-	4924	24	-1550.454055
## 337	58275542	2625	-	107	5	-1721.452562
## 338	58275542	3651	-	191	3	-1741.570807
## 339	58275542	1965	-	139	4	-1735.684682
## 340	58311571	359	-	36885	281	401.930168
## 341	67945409	926	+	609	17	-1425.201794
## 342	73201818	211	+	303	13	-1631.460353
## 343	75523657	329	+	328	3	-1742.110125
## 344	75524261	928	+	64	3	-1728.321098
## 345	75588858	120	+	215	5	-1730.063871
## 346	75590626	384	+	7423	59	-1167.477385
## 347	75591616	936	+	1462	48	-1363.303246
## 348	75591977	277	+	267	4	-1739.150678
## 349	75610166	3164	+	3341	31	-1517.391809
## 350	75607196	194	+	1021	13	-1666.691470
## 351	75834920	205	-	103217	368	1273.032980
## 352	75834920	778	-	470	20	-1544.418995
## 353	76738281	365	+	554	15	-1432.135535
## 354	76738281	365	+	524	14	-1450.433333
## 355	77089153	205	+	11536	153	-625.666020
## 356	77089153	205	+	13434	253	-13.943100
## 357	77089154	205	+	1126	17	-1649.028054
## 358	77089154	205	+	1088	15	-1662.811973
## 359	77499852	96	+	82	3	-1747.731790
## 360	81845561	332	-	679012	372	2252.769112
## 361	81845561	1470	-	1907	63	-1216.981367
## 362	81845561	259	-	751	28	-1457.657480
## 363	82457438	3026	-	1109	49	-1372.117873
## 364	3272884	10097	+	332	10	-1606.806805
## 365	35456776	1809	-	167	4	-1700.688313
## 366	35456776	1809	-	163	4	-1703.858238
## 367	35456776	1809	-	163	4	-1703.858238
## 368	63392120	1045	-	4139	74	-1194.587044
## 369	80047086	581	+	491	14	-1474.115409
## 370	1077857	1792	+	484	21	-1553.147296
## 371	1258314	30	+	76	3	-1747.504050
## 372	7646249	536	+	209	8	-1671.510222
## 373	7682699	143	+	213	3	-1741.146918
## 374	7682699	143	+	213	3	-1741.146918
## 375	8486220	14	+	544	7	-1715.622397
## 376	9381148	1010	+	1238	48	-1358.608637
## 377	9381148	1010	+	1903	72	-1035.800333
## 378	9380668	530	+	986	33	-1420.731506
## 379	9380668	530	+	960	33	-1439.455930
## 380	12944182	218	+	561	4	-1729.080429
## 381	14469752	236	+	235911	374	1755.935934
## 382	14469712	196	+	345	11	-1543.550580
## 383	14469912	396	+	2342	18	-1572.076694
## 384	16325778	332	+	231	3	-1742.872829
## 385	17942656	128	+	469	20	-1553.127088
## 386	18569241	675	+	97	4	-1737.578452
## 387	23658029	1208	-	288	12	-1601.482112

## 388	35166142	1898	+	642381	377	2330.156486
## 389	35169688	51	+	610	13	-1675.707581
## 390	36149945	84	+	397	10	-1705.627556
## 391	36149930	66	+	1895	7	-1704.021668
## 392	36489474	12859	-	1324	40	-1168.799995
## 393	39408535	515	+	353	6	-1726.147099
## 394	39433494	77	-	2004	77	-1204.151963
## 395	41410648	57639	+	239	4	-1735.169727
## 396	45473482	29	+	871	3	-1739.673906
## 397	45641879	114	+	1066	40	-1352.457717
## 398	45642225	460	+	1862	64	-1238.771448
## 399	46787400	3257	-	555	18	-1467.678961
## 400	46787400	2842	-	71716	360	1109.874923
## 401	47271349	38	+	110	5	-1730.407314
## 402	49103547	130	+	467	8	-1712.333725
## 403	49103972	555	+	150	3	-1745.103883
## 404	49854406	3452	+	428	11	-1495.130778
## 405	1118753	105	+	220	4	-1647.751944
## 406	1480294	230	-	2201	53	-1357.235464
## 407	4815062	14001	-	88	5	-1728.566891
## 408	35954448	110	-	27906	263	174.219524
## 409	45896965	1828	+	582	22	-1473.659093
## 410	49279104	398	+	85	5	-1739.236533
## 411	62308021	194	+	131750	375	1313.299755
## 412	63736065	42	+	129	3	-1746.517210
## 413	63736065	42	+	129	3	-1746.517210
## 414	43760056	10	+	1151	31	-1494.079430
## 415	46664779	67	+	53	3	-1745.534755
## 416	35410744	364	+	257	10	-1667.953666
## 417	37297564	593	+	83	3	-1726.951804
## 418	45184454	183	+	123	4	-1682.744246
## 419	46278586	3166	+	29182	353	683.088493
## 420	13716419	1915	-	353	8	-1551.240497
## 421	80688069	1067	-	2896	138	-946.023021
## 422	948490	259	-	44444	353	919.864484
## 423	1310634	784	+	14302	276	158.057542
## 424	2406484	651	-	14791	296	249.072201
## 425	3501796	412	-	510	17	-1463.385686
## 426	6098937	13	+	963	10	-1692.599574
## 427	6098973	104	+	815	3	-1740.861709
## 428	6100511	142	+	1143	16	-1650.308907
## 429	6100818	42	+	174	5	-1731.169381
## 430	6100829	39	+	122	4	-1741.345933
## 431	6100818	42	+	174	5	-1731.169381
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## 433	6100911	167	+	931	22	-1609.506639
## 434	6100916	167	+	414	8	-1714.712098
## 435	6198780	1025	-	6559	118	-873.573941
## 436	6199562	1807	-	1162087	347	2275.766515
## 437	6200489	2734	-	1932	34	-1335.726405
## 438	6199439	1684	-	380	10	-1519.837321
## 439	6199451	1696	-	458	10	-1591.425046
## 440	6198180	425	-	349	6	-1716.587748
## 441	6208681	10926	-	385	9	-1669.828295

## 442	6209135	11380	-	282	3	-1740.667571
## 443	6526696	694	-	20167	347	513.822948
## 444	6528994	2992	-	1146	40	-1325.965683
## 445	7780865	2697	+	440	16	-1593.266483
## 446	15584696	1302	-	2453	70	-958.965130
## 447	19161589	443	-	41501	347	874.477266
## 448	19223396	563	-	31451	360	793.713695
## 449	19238795	657	-	29896	357	773.414639
## 450	19239231	1093	-	519	16	-1522.685581
## 451	20854978	1302	-	40511	365	920.537287
## 452	21848643	551	-	25247	277	315.258430
## 453	22030727	78	+	97	5	-1732.115797
## 454	26285823	283	-	73554	356	916.571573
## 455	32217437	87	-	2464	80	-782.134075
## 456	32221131	3781	-	15465	318	343.747449
## 457	36137796	475	-	81838	377	1261.916651
## 458	36149337	12016	-	624	18	-1396.517300
## 459	36178088	144	+	205	5	-1733.295629
## 460	37552645	11891	-	17816	228	75.949331
## 461	37554006	13252	-	410	11	-1510.439847
## 462	37546939	6185	-	346	8	-1544.842222
## 463	37587311	3379	-	52749	366	1024.469237
## 464	39349478	22126	+	12867	265	54.289360
## 465	39349478	2269	+	26752	327	562.591810
## 466	39571097	1096	-	24218	165	-426.463933
## 467	39571234	1233	-	146213	373	1605.613216
## 468	39572393	2392	-	156	3	-1656.094068
## 469	40092398	418	-	253	5	-1584.199955
## 470	40722676	30810	+	131	4	-1699.289530
## 471	41041311	2806	-	345	14	-1590.510180
## 472	52648451	5450	+	370	13	-1590.620206
## 473	53315444	1702	-	251	5	-1583.610732
## 474	53326873	13131	-	162	3	-1628.137454
## 475	54218184	1868	+	168	3	-1744.151100
## 476	58667038	1408	-	24448	336	595.595706
## 477	58689038	3788	-	18273	333	402.632084
## 478	81502479	75	+	557	14	-1434.256998
## 479	81502479	75	+	533	14	-1455.778246
## 480	89574747	6255	+	374	7	-1566.143652
## 481	90022915	571	+	265	5	-1619.870563
## 482	92333391	12758	+	214	4	-1591.686633
## 483	92333391	9017	+	16530	353	482.816149
## 484	92333391	8183	+	487	14	-1463.569245
## 485	93115470	383	+	49142	371	1044.981792
## 486	93136670	2476	+	52166	376	1113.886586
## 487	93136670	1367	+	1737	55	-1249.135655
## 488	99851035	621	+	288	7	-1587.184949
## 489	110899207	1359	+	61	3	-1748.560788
## 490	110899211	59	+	269	3	-1742.550371
## 491	111139501	1916	-	43649	333	747.661920
## 492	111139588	2003	-	3612	60	-1236.559926
## 493	111140038	2453	-	7973	131	-749.305090
## 494	111139521	1936	-	967	36	-1460.311908
## 495	111140043	2458	-	344	14	-1596.475628



## 496	111138896	1311	-	141	3	-1671.447284
## 497	111140038	373	-	15331	168	-501.721131
## 498	113901236	837	-	31712	359	727.337047
## 499	113902638	2239	-	377	6	-1445.758206
## 500	113904605	4206	-	610	8	-1330.123413
## 501	113901755	1356	-	841	28	-1401.338410
## 502	117943396	853	+	27002	359	697.038819
## 503	150974619	2563	-	193	4	-1624.075297
## 504	151002165	337	-	249	8	-1609.491096
## 505	151055016	696	-	177530	374	1613.435847
## 506	151055677	1357	-	2966	87	-1105.279746
## 507	151055885	1565	-	334	6	-1537.428445
## 508	151059479	5159	-	831	30	-1431.710494
## 509	151054983	663	-	105	3	-1695.817569
## 510	151055938	1618	-	82	3	-1721.111848
## 511	154237024	414	+	105389	372	1439.849976
## 512	154251191	29024	+	120	3	-1738.730312
## 513	155061114	283	+	186	4	-1621.942269
## 514	156199835	5589	+	8276	219	-103.424711
## 515	156199835	3663	+	389	8	-1491.277205
## 516	156199835	115	+	2312	89	-1086.831826
## 517	159032524	11996	+	123714	372	1479.506041
## 518	159032524	16538	+	187	3	-1635.503165
## 519	159032530	12002	+	305	6	-1581.770116
## 520	165632230	939	+	1825	60	-1263.282585
## 521	171557439	23	+	391	7	-1717.418732
## 522	171557442	23	+	344	11	-1687.818079
## 523	171557446	23	+	474	12	-1682.132077
## 524	171557448	23	+	753	11	-1685.311249
## 525	179889310	4542	+	27785	230	-58.897806
## 526	179889310	1352	+	466	20	-1555.471368
## 527	179889313	4545	+	56241	339	924.812613
## 528	179889313	1355	+	1567	44	-1317.284137
## 529	181089483	390	+	126	3	-1745.392495
## 530	202954241	3078	-	15697	146	-504.423612
## 531	202957909	6746	-	536	13	-1435.633239
## 532	202958185	7022	-	37965	315	515.777094
## 533	202952840	1677	-	193	6	-1662.991197
## 534	203307869	46	+	3332	45	-1440.979757
## 535	203307871	45	+	3006	18	-1605.393459
## 536	203701635	713	+	207	5	-1624.436826
## 537	206731138	1041	+	1016	31	-1411.740740
## 538	206731138	376	+	234407	371	1699.461617
## 539	206731138	1664	+	190	5	-1642.936103
## 540	207884338	3115	-	99	3	-1707.515884
## 541	209777346	1229	+	433	6	-1694.238749
## 542	209777352	1617	+	73239	370	1120.748890
## 543	209777352	1229	+	8629	91	-1024.287964
## 544	209777355	1660	+	112	3	-1737.627990
## 545	222722886	373	+	425	12	-1520.916540
## 546	223764150	1900	+	116979	353	1116.892507
## 547	224616099	363	+	56	3	-1735.422736
## 548	224616099	363	+	56	3	-1735.422736
## 549	230281106	49	+	152	4	-1735.682624

## 550	236235789	1488	-	1249	47	-1360.402881
## 551	236548005	3098	+	621	5	-1727.312460
## 552	236548012	3098	+	44750	290	497.880744
## 553	236548012	956	+	263	8	-1639.797081
## 554	244970814	834	+	908	43	-1385.611520
## 555	247210691	8579	-	600	17	-1415.546413
## 556	9588165	657	-	241820	376	1898.118135
## 557	9591392	3884	-	2230	74	-1140.378037
## 558	11194256	400	-	21662	351	592.638891
## 559	15597375	613	+	70677	370	1105.971811
## 560	19901706	115	-	469	16	-1496.211876
## 561	24079444	1587	-	218	3	-1597.390305
## 562	26034388	86	+	138	7	-1714.564890
## 563	26034388	86	+	138	7	-1714.564890
## 564	27635140	217	+	52761	197	-101.372314
## 565	27635140	217	+	60525	330	815.559198
## 566	28139148	9769	+	294	9	-1620.553004
## 567	28139148	9769	+	294	9	-1620.553004
## 568	28415509	116	+	593	6	-1721.346311
## 569	30912223	1165	-	19427	251	72.208526
## 570	30924119	13061	-	222	4	-1606.984116
## 571	32418370	2208	+	145	4	-1665.289576
## 572	36581290	2426	-	36526	370	863.967977
## 573	37254204	1104	-	189	4	-1628.138870
## 574	39755889	481	-	20391	337	459.697791
## 575	47073897	34	+	106	4	-1742.259247
## 576	53786821	4653	-	361	5	-1501.668443
## 577	53786821	4653	-	350	5	-1511.597702
## 578	55235410	449	+	2920	103	-992.992435
## 579	55235413	452	+	32285	131	-608.973738
## 580	55299839	1778	-	393	11	-1513.465595
## 581	55573619	782	-	484	14	-1536.989823
## 582	65205933	236	+	128	4	-1740.974172
## 583	65205949	287	+	86	3	-1746.898347
## 584	68395840	7548	+	143	3	-1745.263297
## 585	74878688	1368	+	31627	331	588.505332
## 586	85581622	2562	+	727	8	-1704.074510
## 587	85581629	2554	+	333	4	-1731.494253
## 588	85581746	38	+	1086	6	-1717.618318
## 589	85581754	2588	+	1584	53	-1354.749329
## 590	85581754	99	+	1612	50	-1291.464457
## 591	85581754	2698	+	71	3	-1726.615527
## 592	85581754	150	+	296	6	-1697.231631
## 593	85581754	111	+	111	5	-1733.981255
## 594	85581859	81	+	654	4	-1732.204796
## 595	85581863	93	+	1421	7	-1704.527406
## 596	85581872	2783	+	88	3	-1747.487256
## 597	112655236	601	+	169	5	-1659.695014
## 598	113185331	260	+	498	24	-1590.141672
## 599	113185331	260	+	498	24	-1590.141672
## 600	117948105	1224	-	25655	356	618.059879
## 601	117974850	857	-	21998	344	497.917290
## 602	126663356	7045	+	216	5	-1660.482747
## 603	126696092	39898	+	168	3	-1744.475418

## 604	126696095	15	+	958	8	-1703.341610
## 605	126696096	99	+	198	4	-1734.719078
## 606	126696099	119	+	165	3	-1736.815095
## 607	127942424	261	-	23949	355	584.639468
## 608	128193541	1956	+	135	5	-1715.775353
## 609	143649842	11	+	291	6	-1662.922648
## 610	148691621	1249	+	7179	99	-950.964359
## 611	151468290	145	+	2243	61	-1313.173190
## 612	152669137	4886	-	70818	373	1286.266700
## 613	159136194	38361	+	2811	59	-1267.294010
## 614	159854904	370	-	22876	156	-577.459606
## 615	159854904	370	-	26592	280	205.455327
## 616	170966084	14669	+	46	3	-1749.550225
## 617	179986695	4699	-	20718	347	548.427134
## 618	181482360	678	+	140351	376	1621.753803
## 619	181482360	683	+	997	40	-1350.525003
## 620	181484155	1506	+	119	3	-1742.400381
## 621	181484156	1506	+	741	26	-1450.449116
## 622	190489768	951	+	19877	311	363.028715
## 623	197501074	636	+	218779	199	206.177444
## 624	197501074	157	+	3295	94	-1079.616134
## 625	197501074	636	+	259431	339	1496.500050
## 626	197501074	157	+	3166	88	-1130.185489
## 627	197501078	640	+	108	4	-1709.929710
## 628	197501078	640	+	108	4	-1709.929710
## 629	201279216	2249	+	175	4	-1644.432598
## 630	201279216	2113	+	314	9	-1600.824782
## 631	201286459	1143	+	109415	371	1259.407718
## 632	208345111	2463	+	36773	354	835.788296
## 633	208345111	4981	+	244	3	-1581.939804
## 634	215326822	685	+	100050	361	1361.887637
## 635	215326822	729	+	642	20	-1395.831994
## 636	216499832	435	+	180	3	-1619.469147
## 637	218224907	7364	+	226	9	-1619.745982
## 638	219563355	682	-	35973	274	284.104146
## 639	231712498	3870	+	403	3	-1740.262739
## 640	231712501	3772	+	1265	3	-1735.952454
## 641	239163803	7031	-	23008	317	435.042550
## 642	239163809	7037	-	450	14	-1506.106114
## 643	239176413	19641	-	188	3	-1639.733132
## 644	241320203	4222	+	418	9	-1498.546940
## 645	241493293	258	+	1365	41	-1114.937785
## 646	3175163	903	-	84568	373	1216.953918
## 647	3179621	5361	-	810	26	-1374.265406
## 648	9782981	1382	+	269	4	-1577.188013
## 649	9815695	2352	+	343	7	-1529.120098
## 650	9815695	2352	+	339	7	-1533.512416
## 651	14667424	478	+	13339	323	327.185339
## 652	15690019	3711	-	97676	367	1263.679507
## 653	15694739	8431	-	416	14	-1534.521878
## 654	15689537	3229	-	146	4	-1678.955469
## 655	30671635	13623	+	498	16	-1509.883145
## 656	30671638	21179	+	36263	341	756.239718
## 657	30671638	13817	+	904	28	-1416.837119

## 658	30671638	16914	+	197	5	-1627.085160
## 659	30671638	10000	+	98	3	-1687.502522
## 660	30671638	9893	+	163	7	-1672.993766
## 661	33836021	7054	+	101	3	-1718.496287
## 662	33836024	7057	+	108	7	-1725.997957
## 663	33836027	7060	+	107	5	-1724.586311
## 664	33836141	7173	+	1090	39	-1366.198113
## 665	37121635	100	-	4067	102	-704.620934
## 666	37129063	7528	-	413	12	-1510.282014
## 667	39143855	104	-	275	9	-1615.548160
## 668	39411296	298	+	3109	92	-1129.174713
## 669	39411570	572	+	640	25	-1455.591823
## 670	39411667	748	+	69	3	-1744.745544
## 671	39411670	754	+	464	7	-1715.847416
## 672	39411671	704	+	139	5	-1731.635187
## 673	39411672	755	+	1010	13	-1670.321669
## 674	39411672	806	+	114	3	-1746.190477
## 675	39411675	707	+	49	3	-1749.388884
## 676	39411686	801	+	720	8	-1706.242240
## 677	46680430	405	-	609	24	-1526.704857
## 678	48641851	328	-	3291	89	-900.932076
## 679	48695090	566	-	1642	33	-1275.268647
## 680	49015370	69	+	148	4	-1717.667765
## 681	49280744	854	-	683	24	-1423.520352
## 682	49702083	174	+	23367	347	581.110500
## 683	49715575	1402	+	38475	359	820.724357
## 684	50118044	13	+	42	3	-1750.085064
## 685	52291747	637	+	3876	108	-715.857115
## 686	52524963	83	-	38360	327	679.879093
## 687	52697721	153	-	234	4	-1584.262336
## 688	53233156	1607	-	939367	377	2497.818086
## 689	53232739	1190	-	7308	82	-1003.406954
## 690	53234983	3434	-	109	5	-1729.991838
## 691	53876620	541	-	15473	346	445.045265
## 692	53877214	1135	-	2536	88	-1105.452091
## 693	53877647	1568	-	241	6	-1606.690814
## 694	56662385	1369	-	27521	356	723.551023
## 695	56663541	2525	-	1716	67	-1136.856146
## 696	56727824	137	-	397	13	-1586.247128
## 697	57597074	443	-	332	13	-1584.000263
## 698	58159554	3480	+	44637	326	656.302921
## 699	58159554	4627	+	218	5	-1612.030743
## 700	67654503	44908	-	28674	182	-138.314756
## 701	67617463	7868	-	192	5	-1648.322212
## 702	67637646	28051	-	228	3	-1597.333210
## 703	98590632	1779	-	18385	329	419.138417
## 704	98589662	809	-	967	37	-1352.120105
## 705	101337509	1578	-	271	5	-1601.934272
## 706	108090863	3930	-	211	5	-1617.977488
## 707	111637241	12838	+	311	13	-1613.855457
## 708	111987672	623	+	245	8	-1654.147065
## 709	112570540	1272	+	22114	349	585.747654
## 710	121638817	1314	-	151	3	-1665.873214
## 711	121923206	78	+	292	7	-1572.970089

## 712	123582212	2444	-	323	5	-1556.939667
## 713	124737915	2670	+	894	27	-1365.732010
## 714	126466155	3936	-	61623	366	1042.807900
## 715	126470895	8676	-	946	40	-1353.855623
## 716	126462455	236	-	1087	44	-1336.932683
## 717	128908185	1937	+	35011	361	784.391197
## 718	129976698	744	+	237	3	-1742.761001
## 719	129976698	717	+	371	3	-1740.921728
## 720	129976699	685	+	6069	46	-1322.055446
## 721	129976699	673	+	170573	186	-70.086235
## 722	129976707	681	+	125	4	-1702.059353
## 723	132718994	878	-	1144	47	-1282.830910
## 724	132718994	878	-	1493	51	-1049.918193
## 725	132718649	533	-	501	18	-1507.989604
## 726	132718649	533	-	446	16	-1533.105408
## 727	146544467	3288	-	1950	55	-1215.363348
## 728	152839194	2252	+	132	3	-1734.410096
## 729	172184245	50700	+	292	8	-1570.310033
## 730	179375220	7118	+	12689	328	293.386534
## 731	180609630	821	+	12077	279	94.967340
## 732	183636221	475	+	1415	64	-1247.603222
## 733	183636221	429	+	2747	91	-931.409360
## 734	183643478	7699	+	1851	63	-1244.009737
## 735	183643480	7734	+	5497	127	-863.801915
## 736	183643480	7688	+	10097	208	-83.873344
## 737	183643480	7170	+	2444	86	-810.903172
## 738	183643480	226	+	217	7	-1608.555676
## 739	183643480	7772	+	147	3	-1664.449627
## 740	183643480	6246	+	277	5	-1589.790932
## 741	184171567	839	+	1672	68	-1199.695634
## 742	184178857	3899	+	637	26	-1436.503106
## 743	184178857	1791	+	354769	377	1961.802673
## 744	184178857	1791	+	15827	7	-1686.557616
## 745	193659936	13	+	132	3	-1704.315240
## 746	194497938	9213	+	2643	95	-807.390444
## 747	196233063	540	+	633	18	-1462.343791
## 748	197830770	1098	+	16878	345	502.922476
## 749	1744092	13	+	1648	55	-1331.254075
## 750	1744518	3533	+	137463	377	1502.425925
## 751	3524907	4715	-	259986	374	1722.420075
## 752	5017135	172	-	97125	312	851.652410
## 753	5745204	3391	+	2032	47	-1299.973553
## 754	5745204	2979	+	101	3	-1696.719967
## 755	5835915	7248	-	1990	11	-1633.909415
## 756	8219335	989	+	17954	243	11.981062
## 757	11372718	732	+	41	3	-1750.157213
## 758	15715707	347	+	91976	349	964.965767
## 759	15715707	3819	+	339	12	-1631.370716
## 760	15715708	348	+	259	7	-1598.976491
## 761	15715718	358	+	1250	35	-1339.938828
## 762	17623601	1903	+	97953	376	1416.916547
## 763	17623601	3635	+	551	12	-1428.064536
## 764	37638447	3325	-	36970	336	600.339105
## 765	37647368	12246	-	277	7	-1608.632707

## 766	37636216	1094	-	215	4	-1614.151066
## 767	37636891	1769	-	386	13	-1555.120848
## 768	38060620	6283	+	2123	62	-1214.001749
## 769	39062559	17464	+	393	10	-1489.504134
## 770	48146325	747	-	42932	357	862.087002
## 771	52863268	620	+	155	4	-1691.152857
## 772	55396217	61	+	387	15	-1619.057430
## 773	55396217	61	+	387	15	-1619.057430
## 774	55396220	61	+	255	14	-1657.322404
## 775	56387362	3022	-	6964	208	-201.608706
## 776	56985280	6277	+	422	11	-1510.585404
## 777	80203673	10	+	117	3	-1745.575793
## 778	82429248	363	-	283	5	-1565.592434
## 779	88597950	2337	+	1984	80	-1131.411560
## 780	99062170	526	+	281	5	-1566.681264
## 781	103122871	2539	-	9152	211	-129.318888
## 782	103122871	2539	-	9152	211	-129.318888
## 783	103122871	2539	-	9152	211	-129.318888
## 784	105424196	1764	-	2088	76	-1123.744706
## 785	120065672	3578	-	28451	332	586.608433
## 786	120066662	4568	-	232	3	-1589.046203
## 787	143215057	115	+	267	5	-1584.942795
## 788	145124987	1391	+	294	5	-1726.953532
## 789	145124989	1391	+	170	3	-1745.521866
## 790	145124990	1391	+	20567	269	162.217074
## 791	145124991	1391	+	269	3	-1742.770765
## 792	184390703	1638	-	30078	335	599.985909
## 793	184649395	765	-	9759	183	-491.648410
## 794	184649165	535	-	195	5	-1624.560146
## 795	475245	20	+	5426	76	-1190.045535
## 796	6606820	1413	-	50184	365	954.186889
## 797	7897214	82	+	74	3	-1729.199494
## 798	14290716	3654	+	20057	326	421.571408
## 799	32087130	9526	+	178	8	-1689.257614
## 800	32087131	9526	+	764	29	-1505.591688
## 801	32788097	43	+	91	5	-1734.597926
## 802	37696689	16	+	165	3	-1647.561662
## 803	39373390	683	-	358	7	-1516.067128
## 804	39373390	683	-	307	5	-1542.825163
## 805	56883527	662	+	60253	363	1053.609279
## 806	56938296	599	-	2853	80	-1067.556057
## 807	56938883	1186	-	10015	274	87.775815
## 808	56946926	9229	-	212	4	-1607.757165
## 809	62373687	7207	+	48756	372	1040.604844
## 810	62373687	8335	+	312	5	-1540.477968
## 811	73502913	316	+	1203	4	-1727.901877
## 812	73502916	316	+	267592	173	220.320011
## 813	73502916	343	+	1064	28	-1560.443511
## 814	73502917	316	+	1017096	183	576.137977
## 815	73502919	340	+	380	3	-1741.003643
## 816	79450990	3846	-	1265	25	-1325.886904
## 817	79685747	17797	+	116	3	-1745.776356
## 818	82276030	29	+	81	3	-1747.238827
## 819	94870872	382	-	22967	340	528.137126

## 820	94871315	825	-	2050	61	-1151.791164
## 821	96788531	1983	-	53646	198	-81.193876
## 822	96790296	3748	-	1298	50	-1267.095263
## 823	103263896	5001	+	278	8	-1649.409567
## 824	111737107	1603	+	93	3	-1734.236149
## 825	127554313	46	+	187	5	-1655.658992
## 826	134167170	6041	-	315721	368	1873.830642
## 827	134166867	5738	-	748	26	-1420.916504
## 828	140561844	123	-	1138	48	-1283.748674
## 829	146485713	2085	+	596	17	-1608.238580
## 830	146485713	1321	+	248	9	-1637.530303
## 831	148423998	6795	+	34120	359	769.415234
## 832	150445609	969	-	1835	31	-1530.083022
## 833	150447474	512	-	20912	146	-587.076729
## 834	150447585	623	-	4962271	367	3414.287638
## 835	150447674	712	-	9643	109	-943.051035
## 836	150449703	2741	-	2110	67	-1292.995173
## 837	150447649	687	-	434	3	-1732.272658
## 838	150447656	694	-	1468	6	-1716.165408
## 839	150521251	42	+	195	10	-1695.182125
## 840	150758586	639	-	226	4	-1597.917817
## 841	150758859	912	-	316	10	-1588.049152
## 842	151027909	379	+	6584	104	-794.308700
## 843	151157680	1980	-	469	11	-1489.080167
## 844	170034399	6452	+	110119	347	1190.967878
## 845	176528592	977	-	648	24	-1428.390749
## 846	176532004	375	-	76673	349	1130.637734
## 847	176532366	737	-	223	4	-1593.327176
## 848	176919170	6976	-	342	8	-1562.930320
## 849	176943335	31141	-	533	20	-1498.258874
## 850	177509802	228	-	722	29	-1426.871934
## 851	177510260	686	-	212	4	-1615.584154
## 852	177509758	184	-	1071	36	-1319.433308
## 853	177509758	175	-	413	10	-1507.309847
## 854	178232492	627	-	1067	42	-1314.590619
## 855	180569110	1108	+	13055	215	-317.859558
## 856	180569110	1869	+	242	12	-1675.636002
## 857	181233699	265	+	153	3	-1645.526189
## 858	2768691	2248	+	67169	363	1083.254354
## 859	2835856	1845	-	937468	377	2457.176877
## 860	2836108	2097	-	767	23	-1583.729914
## 861	2837882	3871	-	1907	27	-1539.992549
## 862	2837882	80	-	358	12	-1548.492635
## 863	2838549	551	-	875954	377	2463.148966
## 864	2839335	1337	-	272	6	-1587.839045
## 865	2840349	2351	-	352	10	-1551.424501
## 866	2840419	2421	-	3245	98	-1056.775171
## 867	2840445	2447	-	906	37	-1401.389365
## 868	2838473	475	-	234	7	-1661.073317
## 869	2838367	369	-	104	4	-1707.792807
## 870	7889495	648	-	151556	201	172.654571
## 871	7889495	648	-	185310	336	1350.948873
## 872	7891621	2774	-	637	24	-1472.269791
## 873	7889540	693	-	284	7	-1583.528475

## 874	7889540	693	-	278	7	-1589.868325
## 875	7891621	2774	-	630	24	-1480.820538
## 876	27472288	4369	-	13855	284	191.463297
## 877	28129430	2510	+	3495	130	-496.358978
## 878	35838337	2850	-	28107	364	772.245239
## 879	36718493	376	+	20921	98	-1010.517350
## 880	36718493	1075	+	807	19	-1548.295247
## 881	42208858	487	-	32685	363	843.673804
## 882	42214280	63	-	974	32	-1268.726658
## 883	47577009	420	+	1481	48	-1221.344985
## 884	47577009	408	+	21614	338	521.654425
## 885	73518354	91	-	3286266	335	2817.100083
## 886	73518698	435	-	4442	70	-1266.010914
## 887	73519803	288	-	500	11	-1525.079865
## 888	73519821	306	-	2212	25	-1454.337792
## 889	73519883	368	-	463194	177	382.750196
## 890	73521000	1485	-	380	8	-1698.430192
## 891	75259347	362	-	90845	367	1317.103765
## 892	79214972	6397	-	319885	377	1654.973568
## 893	79234546	25971	-	461	16	-1526.291274
## 894	87230248	16	+	973	24	-1555.830459
## 895	110962392	1777	+	56136	340	971.178409
## 896	116277634	205	+	835	7	-1706.610349
## 897	116277636	8	+	182	6	-1723.505977
## 898	116277638	96	+	309	3	-1739.997866
## 899	116278506	53	+	133	4	-1729.262214
## 900	127285208	4869	+	995	39	-1293.842226
## 901	132460715	1087	-	133	5	-1708.659404
## 902	132814903	121	+	359	10	-1573.147210
## 903	132817194	134	+	217	4	-1729.262192
## 904	137869559	129	+	90	3	-1731.798780
## 905	147310084	31881	+	514	12	-1471.325555
## 906	147310084	18913	+	39501	343	710.053574
## 907	147310084	1493	+	793	23	-1458.341254
## 908	147345944	6561	+	189	6	-1643.656205
## 909	149410770	80	+	458	20	-1617.175701
## 910	153282684	41	+	2213	7	-1700.292186
## 911	153282685	47	+	5670	12	-1650.157866
## 912	153282688	8	+	44914	24	-1496.888533
## 913	153282688	329	+	316	8	-1713.004509
## 914	153282689	414	+	97	3	-1746.779495
## 915	153282691	11	+	3027	3	-1733.781000
## 916	153282692	17	+	76339	25	-1471.706307
## 917	153282696	340	+	215	4	-1738.105526
## 918	153282699	391	+	566	7	-1715.591599
## 919	153282700	87	+	596	9	-1696.327119
## 920	153282700	86	+	306	5	-1732.418754
## 921	153282701	157	+	1499	5	-1721.530142
## 922	158627176	73	+	502	21	-1557.334333
## 923	159778659	380	+	65246	372	1013.255559
## 924	159787743	1747	-	208801	374	1819.236414
## 925	167000060	547	+	18613	180	-415.836784
## 926	167000060	547	+	19448	246	36.739641
## 927	169664166	461	-	805	30	-1365.132980



## 928	169721005	2088	-	73176	358	1154.534183
## 929	170584299	553	-	65511	370	1055.857163
## 930	869725	210	+	274	8	-1586.374659
## 931	1535617	674	+	79	3	-1725.101420
## 932	6388114	832	+	180	3	-1616.909065
## 933	22822677	323	-	939	38	-1295.997192
## 934	23698192	6597	+	1687	58	-1064.754486
## 935	23698192	3280	+	2776	95	-967.880265
## 936	30563723	1596	-	11455	234	-61.716505
## 937	30563731	1604	-	34790	318	535.806319
## 938	30633735	1299	+	92434	377	1319.457069
## 939	32558929	302	+	17774	347	508.388014
## 940	32575955	2538	+	16832	270	25.170323
## 941	32575955	132	+	1004	40	-1340.643893
## 942	32891536	3442	-	849	35	-1382.983290
## 943	32890977	2883	-	192	4	-1625.500670
## 944	33099307	1946	-	27732	351	630.118761
## 945	33098126	765	-	796	33	-1395.198612
## 946	43619597	11198	+	36711	362	711.901433
## 947	44123511	1317	-	310	7	-1550.425781
## 948	44801285	1414	+	58122	72	-1034.891938
## 949	44801285	745	+	4912	96	-1101.616074
## 950	75984777	922	+	41704	354	799.447732
## 951	76048185	54	+	137	8	-1721.528750
## 952	76048200	33	+	93	4	-1742.314370
## 953	77696172	155	-	504	12	-1443.180378
## 954	100153400	3836	+	5481	128	-834.702830
## 955	100153400	3822	+	246110	377	1611.816426
## 956	100153400	644	+	5993	117	-854.380353
## 957	100153400	3849	+	1032	40	-1330.898894
## 958	100153400	4426	+	6363	48	-1281.659804
## 959	100888472	332	+	501	7	-1712.433468
## 960	100888472	92	+	4694	8	-1689.392880
## 961	100888474	332	+	3231	92	-1091.068428
## 962	100888474	92	+	87663	367	1130.073677
## 963	100888474	616	+	446	8	-1553.262024
## 964	100888474	121	+	175	8	-1685.722588
## 965	102467719	1450	+	410	9	-1495.064681
## 966	102467719	241	+	18047	221	-40.449500
## 967	107905361	304	+	76236	371	1230.067294
## 968	107924230	144	-	1044	25	-1489.903626
## 969	107924230	144	-	1044	25	-1489.903626
## 970	127385526	8198	-	12930	118	-841.112474
## 971	127386060	8732	-	23732	345	547.951806
## 972	127391497	14169	-	1110	43	-1250.974955
## 973	128092217	71	+	143	3	-1745.117524
## 974	128092219	161	+	92	3	-1746.806716
## 975	128092226	439815	+	36	3	-1750.576697
## 976	135208791	1590	-	2768	91	-1230.524547
## 977	148790310	485	+	44877	366	929.660826
## 978	150442549	8721	+	1302	36	-1363.352305
## 979	150442549	7180	+	274	6	-1653.183652
## 980	151064526	160	+	47808	348	746.457767
## 981	152146599	1305	-	33475	362	856.815078

## 982	152148033	2739	-	548	16	-1474.150347
## 983	158737288	110	-	2300	82	-1141.418432
## 984	158739023	1845	-	147075	374	1481.697179
## 985	158741523	4345	-	1224	49	-1277.117368
## 986	17935589	12402	+	2411	80	-714.379045
## 987	17935589	10810	+	41017	367	941.433238
## 988	17935589	732	+	3427	109	-905.255163
## 989	22102145	295	+	323	7	-1545.761527
## 990	22102145	295	+	323	7	-1545.761527
## 991	38138816	5271	+	5645	137	-343.805650
## 992	38138816	3051	+	47681	375	1001.960796
## 993	73292689	285	-	120065	195	-226.993345
## 994	73292628	224	-	458	3	-1726.332879
## 995	89947824	1530	-	44599	371	985.846890
## 996	89953244	6950	-	574	14	-1411.719276
## 997	89980734	307	-	7431	89	-1043.509512
## 998	91078356	4446	+	19115	331	373.262360
## 999	91078356	1626	+	5098	144	-547.598078
## 1000	98043688	354	+	157	8	-1716.723466
## 1001	98043688	363	+	306	10	-1695.445754
## 1002	98043688	354	+	157	8	-1716.723466
## 1003	98043688	363	+	306	10	-1695.445754
## 1004	102296893	1112	-	37181	354	839.713440
## 1005	103219838	6219	+	267	10	-1620.038745
## 1006	103440136	4347	+	68000	376	1197.411165
## 1007	125433315	592	+	97	4	-1719.234994
## 1008	125433316	1189	+	102	3	-1709.306876
## 1009	125433317	2056	+	82370	295	533.544847
## 1010	125433317	1190	+	794	26	-1461.968209
## 1011	125433317	994	+	207	7	-1635.878500
## 1012	130124013	5339	-	20834	309	423.970203
## 1013	132845781	1464	+	25056	352	624.174626
## 1014	133248715	790	-	129740	361	1307.612177
## 1015	141185138	3205	+	449	15	-1659.467081
## 1016	141185139	4286	+	17144	173	-481.944130
## 1017	141185139	2653	+	2880	54	-1303.571601
## 1018	141185139	3185	+	215	10	-1679.907793
## 1019	141185141	4286	+	5862	17	-1610.394758
## 1020	141185138	3205	+	449	15	-1659.467081
## 1021	141185139	4286	+	17144	173	-481.944130
## 1022	141185139	2653	+	2880	54	-1303.571601
## 1023	141185139	3185	+	215	10	-1679.907793
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## 1025	142274781	1195	-	318	4	-1564.417214
## 1026	142314384	1681	-	159	3	-1714.863042
## 1027	143310068	526	-	78220	366	1027.074800
## 1028	143839172	73	-	9281	155	-548.301572
## 1029	143936979	966	-	41366	325	685.578340
## 1030	144168295	4448	+	25854	337	604.842096
## 1031	144514936	412	-	18154	295	281.482519
## 1032	4844525	3169	+	21120	346	541.286045
## 1033	5720182	6180	+	21733	344	514.888215
## 1034	5931544	2386	-	1942	69	-1148.477840
## 1035	5933442	4284	-	319	6	-1537.193610

## 1036	5933751	4593	-	1174	49	-1249.519525
## 1037	5944871	15713	-	6850	253	-58.101318
## 1038	5954016	24858	-	3309	124	-462.481796
## 1039	33048106	716	-	42351	374	981.857561
## 1040	35559226	660	+	20627	307	325.475553
## 1041	37426538	545	+	176137	376	1619.657445
## 1042	72360628	408	-	9146	178	-599.001537
## 1043	72363470	2687	-	410	4	-1478.186280
## 1044	72363470	2684	-	59326	360	1020.648314
## 1045	72363539	2753	-	102	3	-1688.796683
## 1046	72364696	3910	-	57258	345	846.265319
## 1047	72361246	460	-	766	25	-1452.903806
## 1048	72364462	3676	-	915	31	-1380.174592
## 1049	72362637	1851	-	119	3	-1726.758672
## 1050	89319877	81	+	362	6	-1535.962840
## 1051	90877208	33171	+	258	6	-1720.988032
## 1052	94298323	5255	+	406	6	-1491.968857
## 1053	95477547	691	-	1111	34	-1379.556644
## 1054	95478055	1199	-	171	3	-1647.932944
## 1055	122998597	1237	+	14436	328	378.128099
## 1056	128226346	3486	+	41	3	-1744.347878
## 1057	128332850	6970	+	842	31	-1321.712467
## 1058	128332850	569	+	50930	360	876.176202
## 1059	128485365	480	+	47898	366	945.887892
## 1060	128691855	2204	+	262	6	-1723.465245
## 1061	128691856	632	+	1509	8	-1699.946697
## 1062	128691858	632	+	196065	364	1766.220166
## 1063	128691858	2204	+	248	5	-1597.811956
## 1064	128693638	658	+	322643	375	2085.889133
## 1065	128720203	187	+	18183	286	265.234490
## 1066	128908650	32	+	188	6	-1727.435733
## 1067	129148872	170	+	59	4	-1739.465269
## 1068	129895838	2601	-	196	4	-1634.348981
## 1069	131496854	13	+	472	5	-1732.198571
## 1070	131496857	37	+	205	5	-1730.565323
## 1071	135504424	50	+	90	3	-1743.636791
## 1072	135504425	256	+	142	8	-1720.735326
## 1073	136218994	187	-	3130	81	-1149.755950
## 1074	136219030	223	-	1585	63	-1411.966300
## 1075	136356342	497	+	27757	285	335.403546
## 1076	136405905	704	-	32734	360	735.269259
## 1077	136475198	713	-	772	34	-1577.488595
## 1078	136475938	1453	-	196	4	-1632.574698
## 1079	136664692	5063	+	37034	254	204.364090
## 1080	136664692	4764	+	401	8	-1518.750308
## 1081	136664692	1585	+	35525	160	-332.600663
## 1082	136664692	1195	+	259	6	-1613.501343
## 1083	136664692	1070	+	1523	48	-1202.181234
## 1084	136664692	359	+	2237	48	-1366.771113
## 1085	136664692	594	+	184	7	-1670.258338
## 1086	136664695	5066	+	4461	102	-1019.707860
## 1087	136664695	1073	+	3003	71	-1186.053898
## 1088	136664695	1588	+	4788	75	-1049.584932
## 1089	136664695	1198	+	363	14	-1557.091611

## 1090	136664695	362	+	394	18	-1575.033348
## 1091	136672382	101	+	170	6	-1694.436580
## 1092	1548081	21183	+	404	12	-1628.831033
## 1093	3129819	9776	+	141071	374	1289.849555
## 1094	3129819	4571	+	859	31	-1382.539299
## 1095	3129819	1533	+	344	6	-1540.574675
## 1096	3129819	1203	+	182	4	-1659.120012
## 1097	3129819	10951	+	246	4	-1621.848498
## 1098	3129819	1233	+	367	11	-1553.304729
## 1099	3129819	3585	+	69	3	-1742.025950
## 1100	3143607	106	+	689	23	-1454.770203
## 1101	3143607	106	+	675	23	-1467.132421
## 1102	3148171	109	-	37541	360	780.205434
## 1103	3149621	1559	-	330	7	-1547.179818
## 1104	3160204	269	-	55327	370	1058.535362
## 1105	5640696	1326	-	283	4	-1560.512232
## 1106	5723677	2708	+	15260	318	296.801746
## 1107	6233273	184	+	243	11	-1685.763751
## 1108	12250456	55	+	510	13	-1676.442426
## 1109	13638701	582	+	1172	43	-1285.022342
## 1110	13638701	582	+	1075	42	-1320.349792
## 1111	15119343	6381	-	9105	210	-214.669946
## 1112	21728632	705	+	205	3	-1605.401033
## 1113	26550926	9235	+	1741	65	-1251.490697
## 1114	29731803	842	-	878	19	-1521.435186
## 1115	30442571	3298	+	662	22	-1470.303189
## 1116	31826304	5817	-	11702	271	96.820372
## 1117	50266290	136	+	219	4	-1632.410042
## 1118	68749136	1571	+	72687	370	1246.512256
## 1119	71755356	3543	+	324	3	-1743.452900
## 1120	73130703	3877	+	4065	116	-620.917912
## 1121	73240946	1563	+	12057	247	62.212086
## 1122	73842169	4659	-	49201	367	973.289559
## 1123	73839539	2029	-	351	7	-1513.259378
## 1124	80510106	636	+	396	17	-1625.083588
## 1125	86971057	451	-	441	10	-1517.352252
## 1126	91817884	656	+	1089	35	-1405.000798
## 1127	96528031	536	-	92220	371	1390.182957
## 1128	96560416	681	-	876	28	-1406.470165
## 1129	96561978	2243	-	70743	371	1250.174538
## 1130	97738477	1157	+	16999	231	-60.728841
## 1131	97738477	1153	+	489	3	-1532.447450
## 1132	97750331	746	+	26925	351	645.549992
## 1133	97750331	1968	+	216	4	-1622.755282
## 1134	98157463	1317	+	465	11	-1456.204105
## 1135	98159217	3071	+	202	7	-1657.259500
## 1136	100989644	2032	+	427	15	-1520.215028
## 1137	100989644	192	+	7800	249	-68.471410
## 1138	100989644	1765	+	355	8	-1569.039293
## 1139	100990868	207	+	350	5	-1503.100557
## 1140	100990869	327	+	11533	299	162.805798
## 1141	100990869	986	+	322	3	-1515.001543
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##	1144	100990869	986	+	322	3	-1515.001543
##	1145	102369211	1652	+	1026	48	-1354.433898
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##	1148	102397981	297	+	36427	321	518.699215
##	1149	102485609	1234	-	97583	372	1310.326781
##	1150	102488150	3775	-	533	22	-1518.281039
##	1151	102812334	2281	+	783	27	-1419.769584
##	1152	104032204	612	-	586	12	-1624.062904
##	1153	104032674	1082	-	310	6	-1706.366115
##	1154	110872027	1590	-	9045	137	-770.328721
##	1155	114833233	2304	+	28824	330	543.583355
##	1156	119158009	83	-	55502	367	1008.640951
##	1157	119172382	2955	-	584	16	-1446.158231
##	1158	120858643	6009	+	32424	360	772.352774
##	1159	120858643	2514	+	773	29	-1361.632033
##	1160	120858643	7138	+	271	7	-1584.119260
##	1161	128056123	6458	+	85260	365	1046.919050
##	1162	128056123	3493	+	169	7	-1680.043031
##	1163	128084385	1446	+	241	4	-1597.952334
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##	1165	314209	5144	+	143	3	-1741.171261
##	1166	803174	284	-	7874	200	-183.676845
##	1167	838551	86	+	227	7	-1716.580736
##	1168	838553	33	+	52	3	-1747.655161
##	1169	838558	44	+	184	5	-1726.899502
##	1170	865513	1003	+	50727	346	775.715350
##	1171	6604853	494	+	535	18	-1466.130414
##	1172	8687349	1079	+	407	19	-1615.478814
##	1173	8687359	1093	+	242	12	-1668.218734
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##	1176	9795831	5149	-	7875	239	-102.193036
##	1177	9808000	17318	-	336	8	-1537.915713
##	1178	9808901	18219	-	180	3	-1631.579543
##	1179	11340819	7989	-	823	17	-1541.879533
##	1180	11352754	62	+	51	3	-1739.544756
##	1181	14498838	4400	-	45989	198	-95.051462
##	1182	14498838	4400	-	54386	332	839.848332
##	1183	14494532	94	-	144	5	-1676.889937
##	1184	14494573	135	-	287	8	-1586.672159
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##	1186	14494532	94	-	130	4	-1686.168386
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##	1192	14494532	94	-	130	4	-1686.168386
##	1193	17317584	2110	+	600	20	-1450.816499
##	1194	17317584	5465	+	112	5	-1720.347687
##	1195	20407911	4928	+	18264	343	453.005921
##	1196	20407911	2929	+	274	3	-1556.861582
##	1197	20407913	4928	+	155	4	-1739.833972

## 1198	33033262	296	+	8109	179	-354.697659
## 1199	35176575	37206	+	441328	366	1934.188608
## 1200	35176575	9437	+	93	3	-1713.027991
## 1201	35176575	22474	+	291	3	-1742.739596
## 1202	35176575	22657	+	51	3	-1744.010218
## 1203	36274274	1783	-	405	14	-1585.297854
## 1204	44067628	1307	+	1298	53	-1211.811076
## 1205	44067628	928	+	27371	319	501.548386
## 1206	44067628	333	+	2257	78	-1138.662478
## 1207	44939114	749	-	700	21	-1420.029514
## 1208	44939166	801	-	2562	73	-1023.936796
## 1209	44941003	2638	-	372	11	-1542.654593
## 1210	44950677	12312	-	6740	129	-705.235959
## 1211	44950877	12512	-	803	36	-1389.537596
## 1212	45914604	137	-	51160	360	816.311588
## 1213	46662548	3064	+	555	19	-1479.402637
## 1214	47172281	482	-	88823	374	1223.143980
## 1215	57426588	273	-	1358	30	-1487.594987
## 1216	57427062	747	-	367	11	-1537.654832
## 1217	58624028	6463	+	331	14	-1663.807219
## 1218	58624030	1165	+	274	9	-1645.031124
## 1219	58624030	1165	+	264	9	-1657.488761
## 1220	58624034	1169	+	790	31	-1378.307116
## 1221	58624034	1169	+	867	31	-1309.698796
## 1222	60385088	1801	+	12715	76	-1150.028983
## 1223	60385088	1801	+	14400	126	-760.257579
## 1224	60385088	1801	+	12136	69	-1218.842839
## 1225	60898862	237	-	159657	353	1383.972187
## 1226	61803313	202	+	180	4	-1650.388570
## 1227	64243968	93	+	22413	209	-310.340459
## 1228	64371457	35	+	90	4	-1739.723903
## 1229	65181225	154	-	6549	127	-637.376892
## 1230	65422928	97	+	721	7	-1711.081954
## 1231	65504381	176	+	89	3	-1723.784390
## 1232	65551972	190	-	306	5	-1556.364041
## 1233	65614010	585	-	130	3	-1692.445724
## 1234	65713321	264	+	1712	59	-1230.266911
## 1235	65856555	314	+	766	33	-1420.585686
## 1236	66363269	2526	+	390	11	-1500.842191
## 1237	66368537	669	-	4836	160	-539.142761
## 1238	67611384	179	+	172	5	-1681.504207
## 1239	68556907	2651	+	585	21	-1456.076209
## 1240	68556910	2654	+	314	4	-1532.375650
## 1241	72024274	1128	-	94390	369	1383.817181
## 1242	72069842	1226	-	448	13	-1512.104302
## 1243	72696983	156	-	184	7	-1718.948317
## 1244	72821664	171	+	139	4	-1730.635088
## 1245	72821668	3814	+	31864	276	289.554495
## 1246	74965762	647	+	220	8	-1694.994215
## 1247	74965763	647	+	6056	176	-687.484347
## 1248	85990250	5704	-	150	3	-1659.004720
## 1249	94420013	3840	-	576	17	-1425.615435
## 1250	94417801	1628	-	1199	50	-1295.709685
## 1251	112227671	142	+	75	4	-1733.254872

##	1252	117169097	317	+	1104	8	-1696.347614
##	1253	117396054	333	+	10989	275	121.477521
##	1254	117396057	336	+	2665	93	-1028.694299
##	1255	117998973	26	+	240	4	-1733.958250
##	1256	119092124	600	+	87	4	-1740.455488
##	1257	119092125	600	+	37028	299	416.562733
##	1258	119092125	1732	+	288	6	-1652.875804
##	1259	123739434	525	-	754	27	-1403.339872
##	1260	123740117	1208	-	193	5	-1616.574209
##	1261	130120706	10046	+	646206	376	2288.865494
##	1262	130120706	50625	+	1333	39	-1276.183563
##	1263	130120706	2848	+	664	25	-1458.210277
##	1264	130120706	10122	+	106	3	-1709.151857
##	1265	134161781	1708	-	26374	351	667.468071
##	1266	565217	537	-	31684	337	590.480365
##	1267	565316	636	-	151	5	-1662.887935
##	1268	6873246	261	-	146	5	-1717.928534
##	1269	6873246	250	-	2275	81	-1094.271442
##	1270	6873246	250	-	2275	81	-1094.271442
##	1271	8942416	477	-	172530	375	1655.883695
##	1272	10704051	433	-	2589	64	-1235.320312
##	1273	11893501	3058	+	647	14	-1659.778892
##	1274	14460495	3862	+	5189	158	-341.136564
##	1275	14460495	3201	+	49490	366	1065.614561
##	1276	16348894	1185	+	239	3	-1588.460724
##	1277	20552039	107	+	289	5	-1598.494062
##	1278	20552039	107	+	235	4	-1614.218602
##	1279	20552308	165	+	395	14	-1566.814462
##	1280	20552308	165	+	384	13	-1571.338024
##	1281	24817480	2264	-	131	4	-1727.150959
##	1282	26653976	21918	-	21376	333	485.124237
##	1283	26655708	23650	-	710	24	-1445.716735
##	1284	26681874	1152	-	133	3	-1662.771880
##	1285	26711173	9943	-	533	23	-1527.763999
##	1286	26995237	4611	-	180628	374	1646.932220
##	1287	26996742	6116	-	81	4	-1707.931328
##	1288	26999526	580	-	597	26	-1518.877410
##	1289	40536923	440	+	881	24	-1511.075683
##	1290	42086355	1763	-	400	9	-1506.757928
##	1291	46365107	406	-	145491	371	1616.208647
##	1292	46366864	2163	-	2555	71	-1224.140359
##	1293	46366107	1406	-	488	11	-1521.020010
##	1294	46370512	3173	-	87520	368	1361.597937
##	1295	46370776	3437	-	17716	292	246.420670
##	1296	49805980	1901	-	13773	222	48.277412
##	1297	49806016	1937	-	299	5	-1565.195033
##	1298	50430495	1406	+	17000	352	512.928633
##	1299	50430498	1409	+	113	4	-1694.963086
##	1300	54373973	1383	-	549	20	-1539.638093
##	1301	54412311	348	-	681	22	-1389.916312
##	1302	54418981	7018	-	62576	360	992.107566
##	1303	56421727	235	-	28546	330	578.008027
##	1304	57091125	1772	+	10617	182	-266.067193
##	1305	66130705	1593	-	58386	199	-78.829267

## 1306	66130705	1593	-	72705	323	891.855855
## 1307	66138051	8939	-	254	9	-1623.669240
## 1308	68714681	874	+	545	14	-1466.693662
## 1309	69585751	228	+	413	9	-1510.253218
## 1310	74540867	26	+	121	3	-1745.584697
## 1311	74540867	26	+	121	3	-1745.584697
## 1312	75481812	761	+	248	7	-1718.011947
## 1313	75508274	1359	-	70822	372	1095.835721
## 1314	76059798	285	-	1025	31	-1542.145506
## 1315	89351711	58	+	1018	10	-1694.234339
## 1316	89351713	688	+	1204	6	-1712.157840
## 1317	89351713	21	+	854	5	-1726.082799
## 1318	96259731	11998	+	29185	329	578.496327
## 1319	98549304	265	+	356	10	-1676.605607
## 1320	103979829	13772	+	128	3	-1721.908005
## 1321	103979831	13772	+	2049	79	-1016.606397
## 1322	103979831	2772	+	2872	147	-919.244711
## 1323	105058073	5143	-	1232	38	-1397.765604
## 1324	105189772	1326	-	18244	320	365.211855
## 1325	106971103	3043	+	144	5	-1685.598673
## 1326	106971105	3926	+	19762	314	379.089870
## 1327	106971105	401	+	1138	41	-1402.404092
## 1328	106971105	1744	+	269	6	-1586.685033
## 1329	111890440	297	+	218	3	-1579.499196
## 1330	111893514	493	+	2680	88	-1072.820231
## 1331	112022356	59	+	266	3	-1740.781631
## 1332	120198854	128	-	119	3	-1735.102092
## 1333	120198854	116	-	408293	232	909.610912
## 1334	120198895	157	-	2364	83	-1160.261633
## 1335	120199118	380	-	510	21	-1545.157289
## 1336	120694091	6561	+	68075	366	1079.320208
## 1337	120694091	964	+	6494	118	-885.308898
## 1338	123467485	1215	+	1330	54	-1328.569765
## 1339	123467487	1135	+	890	36	-1356.883701
## 1340	123467487	257	+	1424	53	-1267.110516
## 1341	123618597	726	+	3419	102	-1000.374764
## 1342	130806982	2440	-	6678	83	-1073.251888
## 1343	132582062	239	+	68717	347	957.928805
## 1344	132582062	547	+	2582	80	-1135.513391
## 1345	132632315	309	-	343	8	-1534.908652
## 1346	132774157	864	-	21315	325	429.063275
## 1347	133038875	1331	+	489	16	-1482.801526
## 1348	19782917	127	-	283	6	-1601.311704
## 1349	21148056	22	+	77	3	-1744.205614
## 1350	21148057	19	+	264	10	-1694.194893
## 1351	27445088	3847	-	2629	89	-1119.221553
## 1352	27445088	3840	-	1171	31	-1538.608790
## 1353	41331774	407	+	35	3	-1747.842405
## 1354	41331775	407	+	417	9	-1522.824728
## 1355	41463956	1838	+	154	4	-1728.569082
## 1356	43969099	35	+	2449	63	-1328.939880
## 1357	43969099	35	+	2438	63	-1340.213093
## 1358	43969099	35	+	2438	63	-1340.213093
## 1359	43969102	38	+	217	5	-1624.390180



## 1360	43969102	38	+	216	5	-1625.975142
## 1361	43969102	38	+	216	5	-1625.975142
## 1362	43970059	30	+	275	3	-1742.003891
## 1363	43970059	30	+	275	3	-1742.003891
## 1364	43970059	30	+	275	3	-1742.003891
## 1365	43970061	30	+	414	8	-1711.450729
## 1366	43970061	30	+	414	8	-1711.450729
## 1367	43970061	30	+	414	8	-1711.450729
## 1368	43970375	46189	+	936	16	-1657.615700
## 1369	43970375	46189	+	936	16	-1657.615700
## 1370	43970626	68812	+	536	10	-1695.638991
## 1371	45503244	6933	+	5694	190	-636.707921
## 1372	46791346	3012	-	402	9	-1525.975910
## 1373	49178781	127	+	767	23	-1432.495745
## 1374	49480219	3522	+	1611	55	-1156.774278
## 1375	49480219	3181	+	28017	359	738.133868
## 1376	49480219	12260	+	322	7	-1706.958822
## 1377	49534032	214	-	365	11	-1552.396304
## 1378	49551326	840	-	73	3	-1722.476019
## 1379	51771821	327	-	422	13	-1495.904789
## 1380	75312738	2588	-	5319	152	-539.134147
## 1381	75310467	317	-	234	8	-1620.187199
## 1382	99546985	2991	+	188797	375	1696.215449
## 1383	100670360	1567	-	9623	246	-84.342712
## 1384	100674744	5951	-	3126	107	-825.166924
## 1385	100670283	1490	-	605	15	-1448.832283
## 1386	102655025	1688	+	116	4	-1717.073250
## 1387	102655027	3631	+	111	3	-1693.348732
## 1388	112858145	226	+	16591	304	316.323784
## 1389	112881816	5876	+	3261	94	-829.380087
## 1390	112881816	3514	+	941	32	-1435.948298
## 1391	112881816	582	+	281	7	-1601.407895
## 1392	112881816	1168	+	272	7	-1601.263436
## 1393	113233897	559	+	42506	361	926.849062
## 1394	113239433	2544	+	60450	366	1132.654223
## 1395	20892060	608	+	3351	19	-1602.532267
## 1396	21363034	88	-	93676	372	1393.904560
## 1397	24434098	1069	+	75	3	-1735.193332
## 1398	24574245	396	-	95	3	-1731.019715
## 1399	24574245	390	-	111	3	-1732.058995
## 1400	35096709	77	-	49057	370	1005.628534
## 1401	39181045	217	+	124	4	-1737.756940
## 1402	39181045	29	+	147	4	-1740.449194
## 1403	39181047	31	+	158	4	-1739.244740
## 1404	43300478	43	+	132	6	-1712.027753
## 1405	50516023	3392	-	134	4	-1688.973041
## 1406	51249468	98	+	72896	293	705.238006
## 1407	60097965	5547	+	651	22	-1482.324116
## 1408	60398017	162	+	72	3	-1744.444618
## 1409	60398082	156	+	352	8	-1714.008189
## 1410	60398082	156	+	352	8	-1714.008189
## 1411	60398194	83	+	303	3	-1741.740880
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## 1413	64957940	5370	-	365	11	-1557.565474

## 1414	64971953	19383	-	3319	108	-864.755587
## 1415	65054575	1227	+	9024	162	-640.612287
## 1416	65054575	1227	+	11951	300	113.063311
## 1417	67650715	2533	+	4464	115	-790.181487
## 1418	72942994	1171	+	12820	309	236.243004
## 1419	72958612	2113	+	9829	235	-49.455679
## 1420	74809380	6705	+	42987	367	1003.125315
## 1421	74898369	4946	+	8666	115	-879.065774
## 1422	74898369	3961	+	79776	371	1258.339197
## 1423	75766062	1291	+	12975	301	211.877560
## 1424	76807922	421	-	16618	328	408.890195
## 1425	76807922	421	-	16618	328	408.890195
## 1426	76807922	421	-	16618	328	408.890195
## 1427	91225017	206	+	214	8	-1706.802844
## 1428	100292181	116	+	185	3	-1739.947107
## 1429	100375283	1040	-	3063	53	-1336.703513
## 1430	100376260	2017	-	299	11	-1591.781145
## 1431	102086986	569	-	1211	47	-1294.265937
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## 1433	102930722	72	+	108	5	-1729.138100
## 1434	103657546	2722	+	43194	187	-197.286489
## 1435	103657546	2722	+	58836	321	864.662148
## 1436	103703173	3598	-	14903	315	319.848086
## 1437	103715424	2494	-	909	25	-1422.064965
## 1438	103713870	940	-	226	4	-1603.983754
## 1439	103715337	2407	-	192	4	-1634.425402
## 1440	103714105	1175	-	130	4	-1696.041596
## 1441	103714108	1165	+	313	12	-1608.643833
## 1442	104714380	35	+	138	3	-1741.954045
## 1443	104719344	88	+	64	3	-1734.738532
## 1444	105020999	580	-	389	17	-1622.551196
## 1445	40412967	1277	+	313	3	-1515.191201
## 1446	41305480	3295	+	205	8	-1682.808343
## 1447	41305487	3295	+	79	3	-1742.819067
## 1448	42638700	614	+	3004	103	-829.601966
## 1449	50359596	1590	+	71	3	-1739.987577
## 1450	50361949	6405	+	198	3	-1618.039219
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## 1454	55289504	359	-	145	5	-1667.652840
## 1455	55289452	307	-	152	4	-1658.062821
## 1456	57272274	9001	+	904	32	-1509.869228
## 1457	59679592	1506	-	191750	376	1650.603458
## 1458	59680241	2155	-	10923	120	-853.892422
## 1459	59678748	662	-	419	9	-1515.326670
## 1460	59678776	690	-	463	17	-1524.366945
## 1461	59679743	1657	-	71	3	-1725.606143
## 1462	59682408	4322	-	577	16	-1481.747032
## 1463	59689063	488	+	2106	69	-1206.006036
## 1464	60479003	367	-	439	10	-1510.213662
## 1465	65534349	3632	+	241	5	-1593.042928
## 1466	66501375	242	-	202	6	-1704.565325
## 1467	66655876	73629	+	119	5	-1730.683253

## 1468	66655876	73629	+	119	5	-1730.683253
## 1469	72346235	460	-	483	20	-1540.788681
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## 1471	74848600	1678	-	1251	52	-1267.840939
## 1472	74902604	476	-	973	41	-1375.370738
## 1473	80158060	4926	+	80408	361	987.156904
## 1474	80158060	4551	+	315	8	-1557.222294
## 1475	80158060	1332	+	135	3	-1673.105552
## 1476	80725022	29004	+	159	5	-1684.099526
## 1477	85746838	178	+	328	12	-1669.096962
## 1478	85746840	6569	+	224	3	-1609.326170
## 1479	85746840	949	+	283	5	-1577.893001
## 1480	89632820	1111	-	2557	75	-981.158100
## 1481	89797575	4450	-	92680	358	1179.988851
## 1482	89799260	6135	-	3995	70	-1137.805677
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## 1484	90090479	313	-	80	3	-1711.384934
## 1485	90885412	155	+	119341	371	1299.711239
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## 1487	90907309	397	+	95993	361	1243.818598
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## 1494	92892004	5751	+	167923	338	1237.259453
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## 1497	92892004	3784	+	125	4	-1721.758920
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## 1500	92892005	5752	+	1057	35	-1500.201168
## 1501	92967325	11814	+	2988	74	-1086.283478
## 1502	92967325	10677	+	24584	353	557.316578
## 1503	92967325	1713	+	606	18	-1505.069061
## 1504	55459	1402	+	62120	367	965.321118
## 1505	55459	257	+	1050	44	-1307.149227
## 1506	552051	388	+	40321	341	717.435067
## 1507	552605	76	+	33927	326	600.228147
## 1508	724681	173	-	481	14	-1512.533076
## 1509	1314293	198	+	231345	376	1784.985538
## 1510	1314293	4521	+	125	3	-1696.453719
## 1511	2936332	1533	+	613	26	-1467.054973
## 1512	3025707	1445	+	810	31	-1462.340380
## 1513	3025708	1344	+	45599	358	818.823770
## 1514	3025712	1348	+	405	11	-1520.138116
## 1515	3140689	1592	+	7707	226	-125.389947
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## 1517	3674465	1645	+	577	27	-1500.853602
## 1518	3677498	1354	-	65335	364	1064.088539
## 1519	8646107	3544	+	159	3	-1739.446881
## 1520	8646108	3544	+	6245	137	-775.269831
## 1521	8646108	1384	+	488	8	-1465.570564

##	1522	8646108	82	+	127	3	-1684.391136
##	1523	9107338	11	+	67	3	-1748.224370
##	1524	9107338	11	+	67	3	-1748.224370
##	1525	11677624	21	+	549	7	-1690.863819
##	1526	24003300	14711	+	249	7	-1594.364852
##	1527	28211366	868	-	196	4	-1631.405218
##	1528	28904940	437	-	419	11	-1530.310109
##	1529	29668337	851	+	516	7	-1698.127249
##	1530	29669086	456	+	1074	20	-1619.541310
##	1531	29810428	202	+	3506	87	-1073.607393
##	1532	29810428	202	+	3446	86	-1108.543725
##	1533	31131073	178	+	54	3	-1749.175829
##	1534	50035417	1262	+	7242	277	8.252647
##	1535	50106240	1284	+	103	4	-1703.641261
##	1536	50227839	2555	+	22739	341	580.298759
##	1537	53314823	308	+	28489	355	732.990442
##	1538	58534147	1753	-	98122	372	1461.407626
##	1539	66565886	13094	+	5472	123	-852.609482
##	1540	66565886	7539	+	18210	159	-524.610503
##	1541	66565886	2670	+	119573	203	111.089814
##	1542	66565886	13094	+	5804	123	-579.078163
##	1543	66565886	7539	+	18914	216	31.511126
##	1544	66565886	2670	+	130382	338	1102.307931
##	1545	66565886	83	+	135	3	-1674.071068
##	1546	66565886	83	+	133	3	-1676.392996
##	1547	69347788	4149	-	961	33	-1293.240035
##	1548	69347788	4149	-	854	33	-1377.200782
##	1549	69347788	4149	-	840	33	-1387.677529
##	1550	70785702	865	-	29869	355	719.585271
##	1551	71748251	1560	-	29482	360	784.654567
##	1552	71749894	3203	-	1397	47	-1277.582856
##	1553	84181043	700	-	21380	317	405.860345
##	1554	84180864	521	-	297	6	-1568.497593
##	1555	85670995	2572	+	77881	367	1195.078252
##	1556	88722218	153	-	96458	353	1198.814781
##	1557	88722583	518	-	1028	36	-1376.657848
##	1558	89739706	154	-	821	30	-1343.361000
##	1559	89739994	442	-	21534	343	571.154938
##	1560	89770564	103	-	791	31	-1389.276494
##	1561	89805280	1940	-	16886	323	375.680833
##	1562	89977715	4951	+	363	4	-1498.630977
##	1563	2068778	3100	-	13554	291	207.434932
##	1564	2068778	3100	-	13554	291	207.434932
##	1565	4087434	780	-	16166	321	363.311764
##	1566	4088678	2024	-	161	4	-1642.403042
##	1567	4717217	610	+	145888	366	1291.457528
##	1568	4717217	547	+	253	9	-1601.159412
##	1569	4717217	6474	+	261	6	-1571.375795
##	1570	5399552	4572	-	44999	367	1010.354996
##	1571	5404099	9119	-	730	27	-1384.347805
##	1572	6761671	1071	+	285	7	-1597.827610
##	1573	7014390	59	+	156	3	-1744.939727
##	1574	7014390	59	+	156	3	-1744.939727
##	1575	7014390	42	+	182	3	-1740.000547

## 1576	7014390	42	+	182	3	-1740.000547
## 1577	7014399	65	+	1545	10	-1688.528338
## 1578	7014399	65	+	1545	10	-1688.528338
## 1579	7014499	27	+	2261	22	-1605.762104
## 1580	7014499	27	+	1934	16	-1644.618605
## 1581	7015774	619	+	35757	72	-1104.363753
## 1582	7015774	619	+	46832	232	7.997416
## 1583	7015774	316	+	296	10	-1676.009074
## 1584	7015774	316	+	285	10	-1686.630210
## 1585	7015775	619	+	4912	11	-1666.952336
## 1586	7015775	619	+	4849	10	-1673.941021
## 1587	7015776	621	+	353	5	-1729.882430
## 1588	7015776	621	+	353	5	-1729.882430
## 1589	7226893	255	-	1495	68	-1216.072419
## 1590	7227090	452	-	25144	350	631.774674
## 1591	7908694	185	+	600	20	-1392.965034
## 1592	7908697	188	+	91369	365	1263.559786
## 1593	8229891	446	-	13709	245	-144.919409
## 1594	8230294	849	-	341	11	-1648.886294
## 1595	15704750	79	+	101	5	-1706.208566
## 1596	15704750	79	+	99	5	-1708.530494
## 1597	17191228	70522	+	401	14	-1684.466242
## 1598	28620988	359	-	113523	368	1461.947779
## 1599	28672757	10416	+	782	20	-1363.525054
## 1600	28673371	11030	+	12834	170	-471.834870
## 1601	28673371	514	+	820	24	-1345.180835
## 1602	28673371	10687	+	149	3	-1672.991907
## 1603	28673371	4742	+	239	7	-1635.427604
## 1604	28673371	2141	+	2524	42	-1442.855123
## 1605	28673371	245	+	240	12	-1668.676249
## 1606	28673371	11125	+	61	3	-1744.943539
## 1607	28860633	67	+	108	3	-1743.936705
## 1608	28950895	650	-	32647	341	606.925431
## 1609	28951467	1222	-	332	6	-1529.178800
## 1610	28950422	177	-	291	9	-1591.343457
## 1611	29110436	336	-	78776	358	1164.766222
## 1612	31525090	1095	+	6010	144	-577.020197
## 1613	31525090	1480	+	179	4	-1649.169289
## 1614	39258305	4702	-	284	7	-1557.012755
## 1615	39259204	624	-	154	3	-1649.587300
## 1616	41996311	1368	-	86281	374	1357.256250
## 1617	41997115	2172	-	702	22	-1350.226430
## 1618	43013477	98	+	16378	162	-539.150574
## 1619	43013478	143	+	90	3	-1698.748092
## 1620	43013479	104	+	14223	162	-542.689417
## 1621	44082585	1663	-	455	11	-1476.944033
## 1622	44181623	4982	-	86	3	-1737.560547
## 1623	44186565	9924	-	317	12	-1667.218017
## 1624	44176856	215	-	233	9	-1696.172113
## 1625	44464472	25758	-	2153	68	-885.684173
## 1626	44872446	3968	-	1001	29	-1418.993997
## 1627	45149532	83	+	77	3	-1747.505148
## 1628	47819729	631	-	16267	312	317.406809
## 1629	47819971	873	-	1599	63	-1184.932326

## 1630	48849252	798	+	213266	371	1662.592079
## 1631	48849252	1171	+	160	4	-1666.869274
## 1632	48849252	426	+	188	7	-1643.958180
## 1633	50472428	1294	+	18129	274	135.229433
## 1634	50551969	291	+	27416	315	424.061754
## 1635	50554251	2072	+	53278	350	823.999096
## 1636	55756165	2078	+	183	3	-1630.903455
## 1637	55756165	4922	+	261	5	-1623.278311
## 1638	55773724	2540	+	52127	371	908.860109
## 1639	55773724	2540	+	52127	371	908.860109
## 1640	57679512	2453	+	91	4	-1719.249099
## 1641	57679512	2454	+	106	4	-1732.976882
## 1642	57679521	2464	+	85	4	-1743.055945
## 1643	58085139	1457	+	256	4	-1588.994056
## 1644	58275542	891	-	8254	47	-1341.085319
## 1645	58280723	279	-	96	3	-1722.358337
## 1646	58280590	132	-	17532	104	-891.242078
## 1647	58280599	141	-	5196	75	-1149.006903
## 1648	58280605	147	-	2765516	353	2314.139642
## 1649	58280925	467	-	19217	96	-931.095908
## 1650	58280617	159	-	1424	45	-1390.957144
## 1651	62674063	2227	+	545	20	-1467.758210
## 1652	62674063	1912	+	19324	251	72.369338
## 1653	63699257	145	-	852	28	-1362.520746
## 1654	63829494	1286	+	189427	374	1474.187696
## 1655	63829494	1981	+	204	3	-1623.305660
## 1656	63835412	393	-	303	7	-1553.976729
## 1657	68528847	948	+	759	28	-1538.353996
## 1658	73092611	496	-	256	4	-1569.950921
## 1659	73205553	1761	+	15670	335	368.098530
## 1660	73242896	5902	+	3353	107	-601.511242
## 1661	73242896	546	+	8920	263	29.233957
## 1662	74777264	688	+	7638	132	-761.625725
## 1663	75131181	77	-	42578	366	839.685544
## 1664	75239375	358	-	612	26	-1449.932724
## 1665	75261548	14753	-	26384	310	450.059401
## 1666	75248840	2045	-	2122	75	-899.924360
## 1667	75493491	390	+	26075	343	646.805010
## 1668	75493491	360	+	2625	91	-1092.337261
## 1669	75589607	415	+	88	3	-1723.164913
## 1670	75589607	415	+	88	3	-1723.164913
## 1671	75589621	656	+	4842	98	-1035.347646
## 1672	75589621	198	+	243	4	-1591.724712
## 1673	75590163	26	+	771	18	-1631.401985
## 1674	75592464	164	+	62458	323	850.216830
## 1675	75592474	174	+	614	22	-1471.035900
## 1676	75706340	249	+	82541	377	1205.013479
## 1677	75843484	219	-	107098	368	1231.210878
## 1678	75844221	956	-	106	3	-1690.811399
## 1679	75843663	398	-	193	8	-1700.187408
## 1680	75843484	200	-	379	6	-1501.597154
## 1681	75849604	943	-	109867	373	1416.740661
## 1682	76001412	924	+	1912	79	-1155.211261
## 1683	76001412	718	+	301	6	-1570.314053

## 1684	76084006	257	-	101532	377	1368.076756
## 1685	76089175	253	-	84764	374	1305.612580
## 1686	76568713	1162	-	3714	86	-930.920197
## 1687	76737025	28	+	356	4	-1736.374103
## 1688	76737025	28	+	356	4	-1736.374103
## 1689	78118971	197	-	241	7	-1611.576420
## 1690	78870898	5679	-	942	35	-1397.875683
## 1691	80376301	432	+	64653	361	1099.229026
## 1692	81670534	82	+	901	34	-1358.807621
## 1693	81670534	82	+	901	34	-1358.807621
## 1694	81701530	444	+	62	3	-1739.243185
## 1695	81701534	408	+	159	3	-1738.987842
## 1696	81701535	408	+	167	5	-1732.901733
## 1697	81701538	408	+	735	28	-1416.043977
## 1698	81843415	102	+	287	3	-1742.868643
## 1699	82050402	397	-	20777	333	457.587201
## 1700	82050402	397	-	20777	333	457.587201
## 1701	82091222	154	-	33083	333	683.777109
## 1702	82436667	796	+	30150	308	491.302570
## 1703	82572259	390	+	621	20	-1527.456905
## 1704	674161	1086	-	16478	278	229.948089
## 1705	712504	5927	-	17714	219	-86.237482
## 1706	712360	5783	-	806	22	-1294.100512
## 1707	2771533	1426	+	64915	370	1165.531280
## 1708	9221852	4953	+	28445	186	-291.746974
## 1709	9221852	1857	+	472	13	-1514.744535
## 1710	9221852	4953	+	28255	316	476.780694
## 1711	9221852	1857	+	432	12	-1540.301711
## 1712	9478302	2017	+	244	6	-1618.249841
## 1713	9512988	37301	+	196	3	-1740.813475
## 1714	9512991	37301	+	27709	338	531.465713
## 1715	9512991	36706	+	5107	126	-841.269376
## 1716	9512991	37816	+	271	6	-1585.372402
## 1717	9512991	34470	+	491	7	-1427.129949
## 1718	9957577	3503	+	128	6	-1716.732337
## 1719	9957578	3419	+	481	19	-1545.918702
## 1720	9957578	3503	+	89	3	-1745.011536
## 1721	10539760	5267	+	78	3	-1743.614155
## 1722	10539761	734	+	955	36	-1402.288056
## 1723	10539762	5267	+	16745	289	248.650181
## 1724	10539762	789	+	975	33	-1396.521879
## 1725	10539762	13605	+	286	4	-1545.808437
## 1726	11906203	251	-	3292	96	-801.532787
## 1727	12315354	4302	+	257	5	-1598.917619
## 1728	12317622	6570	+	155	4	-1677.493430
## 1729	49331864	10488	-	1759	61	-1236.142139
## 1730	74635540	102	+	145	4	-1668.704470
## 1731	77066298	599	-	267	4	-1579.235295
## 1732	80037324	615	+	459	4	-1445.962116
## 1733	80037324	615	+	447	4	-1458.168215
## 1734	80037330	621	+	25754	189	-293.580090
## 1735	80037330	621	+	28810	321	445.028684
## 1736	583276	73	+	586	5	-1725.779140
## 1737	1038234	252	+	129	3	-1745.160116

## 1738	1038237	152	+	117	3	-1746.491331
## 1739	1038238	182	+	147	5	-1729.838616
## 1740	1038240	181	+	3309	66	-1313.153772
## 1741	1038584	121	+	976	12	-1676.250715
## 1742	1075986	1108	+	302	9	-1576.237777
## 1743	1086370	50	+	446	4	-1731.206450
## 1744	1611704	2106	-	5794	115	-887.180950
## 1745	2043124	255	-	119932	363	1377.484150
## 1746	2043503	634	-	174	6	-1657.971480
## 1747	2226678	86	+	124	3	-1746.026367
## 1748	2233998	602	-	167	6	-1665.640194
## 1749	2271385	1642	+	908360	204	746.975983
## 1750	2271385	710	+	5697	102	-969.654592
## 1751	2271385	310	+	450	13	-1518.867834
## 1752	2271385	1642	+	986411	339	2122.611897
## 1753	2271385	1502	+	1012	43	-1344.441992
## 1754	2271385	1502	+	1002	43	-1354.978239
## 1755	2271385	710	+	5529	96	-1054.978498
## 1756	2271385	310	+	446	13	-1523.511690
## 1757	2271385	195	+	107	5	-1712.433963
## 1758	2271385	195	+	107	5	-1712.433963
## 1759	2271385	952	+	135	3	-1683.712429
## 1760	2271385	952	+	135	3	-1683.712429
## 1761	2271391	1648	+	4571	128	-860.856523
## 1762	2271391	1648	+	5030	134	-607.126045
## 1763	2271400	1681	+	312	3	-1742.364107
## 1764	2271400	1681	+	312	3	-1742.364107
## 1765	2271401	1720	+	324	3	-1741.317121
## 1766	2271401	1720	+	324	3	-1741.317121
## 1767	2271405	1692	+	893	7	-1709.562718
## 1768	2271405	1692	+	775	6	-1717.451461
## 1769	2325176	983	+	123	3	-1742.322651
## 1770	2328387	2187	-	2998	72	-1272.043667
## 1771	3533294	645	+	7899	172	-666.178839
## 1772	3544809	1833	-	1653	60	-1128.518106
## 1773	3611766	502	+	230	9	-1651.616999
## 1774	5786467	677	-	41137	347	762.623504
## 1775	6822221	542	+	881	27	-1400.676031
## 1776	6822221	363	+	81118	372	1249.247521
## 1777	7646051	32	+	372	5	-1730.296987
## 1778	8486212	14789	+	253	6	-1727.167803
## 1779	8486215	53	+	280	3	-1739.973444
## 1780	8486220	14	+	544	7	-1715.622397
## 1781	10653719	212	-	80	4	-1729.837996
## 1782	11447436	1090	+	111	3	-1745.838322
## 1783	11447439	280	+	423889	375	1992.030271
## 1784	11447439	1090	+	481	15	-1483.266199
## 1785	14467565	3413	+	198977	376	1658.308425
## 1786	14765320	952	-	895	30	-1405.804384
## 1787	16132784	14536	+	200	3	-1744.078497
## 1788	16325469	495	+	1609	6	-1712.644559
## 1789	17200639	214	+	98549	358	1243.475707
## 1790	17200639	2332	+	182	5	-1644.186611
## 1791	18869983	594	-	500	14	-1550.077463



## 1792	18869983	594	-	486	14	-1558.700735
## 1793	18919223	6178	-	185436	157	-120.958286
## 1794	18919223	6178	-	212400	306	1135.042252
## 1795	18931325	18280	-	520	17	-1569.760719
## 1796	18928491	97	+	292	8	-1687.882732
## 1797	19057393	1466	+	1339	55	-1237.309730
## 1798	19336131	397	+	1491	26	-1503.141894
## 1799	19498443	2225	+	68370	364	1121.087356
## 1800	19627397	114	-	20572	286	299.498910
## 1801	19628092	809	-	5599	91	-820.525660
## 1802	19628428	1145	-	244	6	-1621.970028
## 1803	30009005	1368	+	100197	374	1408.847858
## 1804	30009005	3298	+	394	6	-1485.853027
## 1805	33205246	395	+	38819	260	216.556007
## 1806	33205246	2261	+	361	9	-1559.638577
## 1807	34392545	850	+	464	4	-1733.186235
## 1808	35015824	2134	+	2348	64	-1265.596576
## 1809	35015824	1438	+	63986	348	916.950724
## 1810	35015824	4271	+	813	29	-1498.980430
## 1811	35015824	270	+	154	3	-1649.069860
## 1812	35015824	1468	+	502	24	-1509.969097
## 1813	35015826	4274	+	952	33	-1545.910830
## 1814	35015827	1441	+	14422	103	-971.293673
## 1815	35015827	2137	+	1080	31	-1498.765148
## 1816	35169563	3260	+	198	3	-1745.110963
## 1817	35169566	3396	+	3458	100	-994.032416
## 1818	35169566	3242	+	695778	377	2385.285048
## 1819	35169566	3260	+	3349	68	-1293.587120
## 1820	35169658	5431	+	786	3	-1737.398379
## 1821	35169663	5428	+	1259	4	-1728.094044
## 1822	35742267	1045	-	144	3	-1644.516779
## 1823	35742396	1174	-	15951	153	-597.478689
## 1824	35742390	1168	-	212	5	-1658.397645
## 1825	35742396	1174	-	18571	209	-253.543952
## 1826	35741483	261	-	323	6	-1639.168269
## 1827	35742267	1045	-	128	3	-1660.740800
## 1828	35741483	261	-	316	6	-1644.453671
## 1829	35742390	1163	-	1180	38	-1351.048485
## 1830	35742396	1169	-	10969	126	-783.387379
## 1831	35742396	1169	-	12670	166	-514.666941
## 1832	35742390	1163	-	1124	37	-1389.876108
## 1833	35903347	219	+	175	6	-1707.291221
## 1834	35903350	219	+	80	3	-1740.052404
## 1835	35903351	716	+	706285	367	1828.009852
## 1836	35903351	691	+	6130	89	-996.191704
## 1837	35903351	550	+	262	8	-1602.936506
## 1838	35903351	219	+	1555	45	-1423.734530
## 1839	35903351	640	+	218	6	-1618.272499
## 1840	35903351	711	+	186	4	-1635.499388
## 1841	35903351	631	+	381	14	-1584.420980
## 1842	35903351	261	+	65	3	-1731.488408
## 1843	38264780	30	+	117	3	-1744.048689
## 1844	39389093	79	-	57022	372	1052.698795
## 1845	39389480	466	-	388	8	-1615.184090

## 1846	41383861	5345	+	71	3	-1740.061377
## 1847	41383861	5345	+	66	3	-1745.190660
## 1848	41383863	943	+	6619	130	-798.992573
## 1849	41383863	943	+	7221	146	-499.983241
## 1850	41383863	232	+	2911	79	-1118.483279
## 1851	41383863	232	+	2870	79	-1155.668763
## 1852	41383863	5345	+	375	12	-1528.716220
## 1853	41383863	5345	+	369	12	-1536.530001
## 1854	41424502	1334	+	1999	74	-1166.769218
## 1855	41424502	1334	+	1967	74	-1196.225810
## 1856	41898039	32	+	219	3	-1743.052378
## 1857	42485453	106	+	1905	48	-1430.205429
## 1858	44990395	2223	+	57806	360	1069.198568
## 1859	45473463	155	+	622	8	-1700.927509
## 1860	45641918	171	-	1994	63	-1078.610709
## 1861	47000331	923	+	34066	353	841.439184
## 1862	47262506	14	+	91	5	-1720.335333
## 1863	47679321	3406	+	8338	129	-782.218796
## 1864	47679321	2046	+	617	18	-1419.604231
## 1865	47679321	3406	+	9980	226	-261.098227
## 1866	47679321	2046	+	605	18	-1432.909865
## 1867	47679321	1491	+	393	6	-1506.551137
## 1868	47679321	1491	+	389	6	-1511.194993
## 1869	48325991	382	+	5418	96	-936.065030
## 1870	48799675	2343	-	19029	323	380.445934
## 1871	48873329	34	+	270	3	-1741.997120
## 1872	48873335	688	+	1189	9	-1692.691068
## 1873	48873834	17	+	295	3	-1742.701393
## 1874	48873838	17	+	2766	9	-1681.780574
## 1875	48873992	50	+	1221	11	-1687.462202
## 1876	48875742	71	+	538	3	-1741.155824
## 1877	48875754	1019	+	757	5	-1725.913019
## 1878	48875756	884	+	1399	3	-1736.895487
## 1879	48875756	961	+	163	3	-1744.622925
## 1880	49461884	85	+	26951	292	391.031742
## 1881	49461884	986	+	329	7	-1536.940780
## 1882	49461888	990	+	211	6	-1606.506305
## 1883	49461884	85	+	26951	292	391.031742
## 1884	49461884	986	+	329	7	-1536.940780
## 1885	49461888	990	+	211	6	-1606.506305
## 1886	49856552	1960	+	55	3	-1746.431053
## 1887	50382941	87	+	185	5	-1723.684095
## 1888	50382941	273	+	123	3	-1745.788767
## 1889	55669610	41	+	607	4	-1734.928648
## 1890	57803909	1519	+	488	15	-1539.077094
## 1891	58253460	6667	+	126	4	-1732.274101
## 1892	58253460	6667	+	126	4	-1732.274101
## 1893	58393358	180	+	3692	10	-1659.705038
## 1894	58393358	199	+	8887	9	-1672.167071
## 1895	58393359	5115	+	9432	153	-662.775040
## 1896	58393359	175	+	1982561	375	2983.596770
## 1897	58393359	4880	+	688	32	-1534.371128
## 1898	58563297	89	+	54	3	-1735.518155
## 1899	1377430	1828	-	887	31	-1348.680835

## 1900	1392834	17232	-	6722	50	-1375.826507
## 1901	1377430	1828	-	904	31	-1334.140983
## 1902	1392834	17232	-	29841	216	-53.636129
## 1903	1392962	17360	-	735	25	-1463.279051
## 1904	1392962	17360	-	717	25	-1484.772862
## 1905	2862054	156	+	28971	349	608.994193
## 1906	2862054	775	+	287	4	-1564.845707
## 1907	3870330	106	+	69	3	-1734.962528
## 1908	6122774	3036	-	312	11	-1651.777933
## 1909	18542296	6555	+	76305	371	1193.327606
## 1910	25048085	1214	-	320	4	-1530.190969
## 1911	25288028	3778	+	439	10	-1479.013780
## 1912	35126973	599	-	492	15	-1463.026774
## 1913	35130870	4496	-	1071	45	-1313.977468
## 1914	35131642	5268	-	57473	371	1069.893116
## 1915	35134105	7731	-	357	11	-1526.841749
## 1916	35137880	11506	-	2039	85	-1063.140950
## 1917	35134738	8364	-	703	14	-1238.717891
## 1918	35142373	15999	-	1119	42	-1242.939067
## 1919	35725038	317	-	386902	376	2052.800911
## 1920	37870525	10184	+	248	11	-1670.768490
## 1921	38057530	9052	+	85	4	-1739.160414
## 1922	38057532	16969	+	400	6	-1475.855586
## 1923	38057532	9052	+	12845	327	297.606886
## 1924	38057532	8915	+	623	17	-1410.282761
## 1925	38057532	23435	+	157	3	-1642.057091
## 1926	44202961	5687	-	248	4	-1690.369948
## 1927	47276314	13887	-	34482	365	844.949800
## 1928	47282102	19675	-	2239	64	-1226.565534
## 1929	47283571	21144	-	177	3	-1638.334005
## 1930	49915380	4809	-	130	3	-1684.237095
## 1931	56404122	149	+	406	10	-1503.200025
## 1932	57407543	14767	+	19422	199	-59.210467
## 1933	57407543	14211	+	69202	336	945.630132
## 1934	57407543	10502	+	539	17	-1501.200029
## 1935	57407543	7576	+	373	11	-1554.297634
## 1936	58662992	10906	+	657	20	-1446.222478
## 1937	58662992	10906	+	644	20	-1456.810255
## 1938	58715305	80	+	155	6	-1710.103343
## 1939	58715305	80	+	155	6	-1710.103343
## 1940	58715306	106	+	86	4	-1732.933738
## 1941	58715306	106	+	86	4	-1732.933738
## 1942	58715659	49	+	73	3	-1732.375023
## 1943	58904231	441	+	1277	54	-1363.151968
## 1944	58910980	37	+	548	3	-1740.762739
## 1945	60067592	1141	+	629	23	-1443.212563
## 1946	60067592	11585	+	1152	40	-1352.416869
## 1947	60067592	8607	+	232	3	-1595.914619
## 1948	62710122	202	+	235	4	-1639.320605
## 1949	62905887	321	-	484	15	-1489.807599
## 1950	62968051	79	+	200	6	-1714.273209
## 1951	36146076	8145	+	2101	66	-1011.190529
## 1952	38498363	1522	-	149	3	-1662.920528
## 1953	39183252	1352	-	414	5	-1458.231648

## 1954	43669997	10205	+	803	27	-1446.982856
## 1955	43747116	992	+	389	13	-1555.899652
## 1956	43760056	10	+	1151	31	-1494.079430
## 1957	44865395	245	-	380	9	-1555.738579
## 1958	44893404	1517	-	673	27	-1513.681596
## 1959	46279993	2277	-	47650	362	972.122576
## 1960	46548402	1361	+	177	4	-1679.771685
## 1961	46548402	1361	+	177	4	-1679.771685
## 1962	46562755	951	+	2883	83	-1139.947115
## 1963	17101994	3126	+	140	3	-1744.862569
## 1964	17101995	1203	+	744	30	-1456.045927
## 1965	17101996	3110	+	7495	85	-1031.321866
## 1966	17101996	1516	+	74064	342	945.693424
## 1967	17105591	782	+	39813	282	421.860477
## 1968	17743803	4316	-	86453	371	1177.814723
## 1969	17750105	10618	-	1164	50	-1285.767440
## 1970	17774381	34894	-	12045	137	-646.158074
## 1971	17740770	1283	-	109	3	-1696.448064
## 1972	17773610	34123	-	127	5	-1719.099593
## 1973	17822947	778	-	6613	206	-260.677387
## 1974	17831854	9685	-	2963	104	-702.404492
## 1975	17841822	19653	-	344	9	-1569.020681
## 1976	20992214	386	+	29132	333	555.465423
## 1977	21622659	279	+	97	4	-1742.535187
## 1978	24548917	845	-	39817	365	842.818591
## 1979	24554949	6877	-	1246	47	-1315.017040
## 1980	24555615	7543	-	1819	72	-1192.216416
## 1981	24574654	1571	+	61	3	-1735.769244
## 1982	24574654	1777	+	35	3	-1750.687728
## 1983	25768115	4727	+	3100	47	-1403.120085
## 1984	29793360	826	-	64362	370	1063.603232
## 1985	29793360	826	-	64362	370	1063.603232
## 1986	37299226	1545	+	47769	332	781.963802
## 1987	37299226	205	+	496	16	-1505.269565
## 1988	38735740	166	+	190	4	-1737.423890
## 1989	38735740	166	+	190	4	-1737.423890
## 1990	38735740	166	+	190	4	-1737.423890
## 1991	39313191	208	-	14375	182	-551.509595
## 1992	40277999	849	+	23392	345	646.677325
## 1993	40407191	122	+	38	3	-1747.459622
## 1994	40407201	131	+	56705	366	1024.206522
## 1995	41144947	3726	+	370	15	-1589.297706
## 1996	43162965	20	+	267	3	-1742.515891
## 1997	43162973	142	+	213	4	-1737.912398
## 1998	43162981	142	+	748	3	-1740.778651
## 1999	44198606	2192	+	986	39	-1331.885577
## 2000	44207811	806	+	2557	75	-1193.144144
## 2001	46676600	1049	+	43033	354	875.082145
## 2002	50195890	8	+	131	6	-1700.857040
## 2003	50250771	181	-	493	12	-1471.268826
## 2004	50250771	181	-	489	12	-1476.760680
## 2005	50287111	825	-	94222	344	1077.471647
## 2006	50287667	1381	-	1429	45	-1307.471929
## 2007	50286448	162	-	479	13	-1511.953749

##	2008	50307553	21267	-	104	3	-1693.707690	
##	2009	50304897	412	-	199	3	-1623.572389	
##	2010	50572006	498	-	516	21	-1501.414791	
##	2011	50572006	498	-	497	20	-1510.761305	
##	2012	16862951	4103	-	215	4	-1623.176442	
##	2013	16862955	4107	-	164182	374	1667.892640	
##	2014	16862958	4110	-	81	4	-1720.897812	
##	2015	23671529	3762	+	304	4	-1559.381783	
##	2016	23671529	3719	+	96428	361	1169.362680	
##	2017	23671529	97	+	408	12	-1519.955591	
##	2018	23671529	3762	+	304	4	-1559.381783	
##	2019	23671529	3719	+	96428	361	1169.362680	
##	2020	23671529	97	+	408	12	-1519.955591	
##	2021	48577021	1398	+	190	3	-1746.067142	
##	2022	48577023	444	+	141	4	-1741.298101	
##	2023	48577024	677	+	924	32	-1458.343061	
##	2024	48577026	1360	+	535	20	-1515.421289	
##	2025	48577026	608	+	1047	33	-1461.326010	
##	2026	48577026	423	+	699454	377	2284.623801	
##	2027	48577026	1744	+	668	27	-1464.080968	
##	2028	48577026	489	+	149	6	-1719.990731	
##	2029	48577033	430	+	124	3	-1693.383312	
##	2030	48577021	1398	+	190	3	-1746.067142	
##	2031	48577023	444	+	141	4	-1741.298101	
##	2032	48577024	677	+	924	32	-1458.343061	
##	2033	48577026	1360	+	535	20	-1515.421289	
##	2034	48577026	608	+	1047	33	-1461.326010	
##	2035	48577026	423	+	699454	377	2284.623801	
##	2036	48577026	1744	+	668	27	-1464.080968	
##	2037	48577026	489	+	149	6	-1719.990731	
##	2038	48577033	430	+	124	3	-1693.383312	
##	2039	72186458	4634	+	737	17	-1651.724884	
##	2040	72186461	4634	+	14468	266	47.798394	
##	2041	72186461	5046	+	808	27	-1386.632247	
##	2042	130495638	151	+	106	5	-1727.246675	
##	2043	130496055	97	+	258	13	-1668.692508	
##	2044	153786801	353	-	103527	377	1388.951167	
##	2045	153787051	603	-	1490	60	-1200.089467	
##	2046	153787464	1016	-	329	6	-1541.351057	
##	2047	153905532	363	+	185	4	-1656.548461	
##	2048	153963225	920	-	45991	359	1033.320366	
##	2049	153970648	8343	-	1154	39	-1334.468564	
##	2050	154532386	107	-	142156	368	1453.812666	
##		sum_samples_cpm		mean_raw	mean_cpm	ss	ss_start	ss_end
##	1		377	24.56250	-3.30635791	5	1402456	1402464
##	2		377	23.50000	-4.07759984	5	1873952	1873960
##	3		377	37.85714	-4.15414284	5	3496599	3496607
##	4		377	81.25000	-4.60649971	5	6098927	6098935
##	5		377	153.00000	-4.50692780	5	6098964	6098972
##	6		377	36.70833	-3.81604238	5	13772212	13772220
##	7		377	142.00633	1.65523683	5	24907253	24907261
##	8		377	27.16667	-4.45946366	5	26280626	26280634
##	9		377	23.90000	-4.39350562	5	40980559	40980567
##	10		377	27.66667	-4.53263606	5	42818784	42818792

## 11	377	26.50000	-4.07458858	5	74733527	74733535
## 12	377	22.33333	-4.63761065	5	90027462	90027470
## 13	377	45.00000	-4.62854213	5	90027463	90027471
## 14	377	95.42507	2.38116219	5	111183585	111183593
## 15	377	41.80000	-4.47712168	5	112699496	112699504
## 16	377	36.53846	-4.08168133	5	159010154	159010162
## 17	377	28.04000	-3.43683916	5	159010159	159010167
## 18	377	241.66391	3.19862520	5	159010159	159010167
## 19	377	149.66923	-1.97213388	5	167640710	167640718
## 20	377	50.75000	-3.96184019	5	167640710	167640718
## 21	377	68.45455	-4.47032162	5	171557424	171557432
## 22	377	46.74074	-3.59447822	5	173865465	173865473
## 23	377	29.45652	-2.78919343	5	173865465	173865473
## 24	377	1142.17772	5.54634626	5	173865465	173865473
## 25	377	26.25000	-4.61147025	5	203307921	203307929
## 26	377	119.22449	-3.68041994	5	207337248	207337256
## 27	377	61.00000	-4.60802564	5	209777412	209777420
## 28	377	40.60000	-4.59637549	5	230281008	230281016
## 29	377	34.92857	-3.90186101	5	269345	269353
## 30	377	60.00000	-4.09842947	5	9487545	9487553
## 31	377	46.33333	-4.62384994	5	10052412	10052420
## 32	377	19.77778	-4.52353007	5	10052413	10052421
## 33	377	39.00000	-4.58943754	5	10312011	10312019
## 34	377	85.50000	-4.53562638	5	20448444	20448452
## 35	377	121.66667	-4.63070381	5	20448448	20448456
## 36	377	34.83333	-4.39208737	5	28928112	28928120
## 37	377	62.30872	-1.84932114	5	63842595	63842603
## 38	377	32.47368	-3.90915625	5	68250813	68250821
## 39	377	33.25000	-4.01549083	5	68250813	68250821
## 40	377	163.00000	-4.58121047	5	68395779	68395787
## 41	377	77.33333	-4.21285342	5	73266167	73266175
## 42	377	24.66667	-4.55390037	5	74463248	74463256
## 43	377	155.58405	2.79444277	5	99363860	99363868
## 44	377	71.66667	-4.49581399	5	101272836	101272844
## 45	377	36.53846	-3.96287766	5	119369174	119369182
## 46	377	36.53846	-3.96287766	5	119369174	119369182
## 47	377	218.02168	3.34259918	5	135865007	135865015
## 48	377	49.69452	1.26970010	5	152143821	152143829
## 49	377	27.65152	-2.75632658	5	159710711	159710719
## 50	377	27.18182	-3.50153122	5	159710711	159710719
## 51	377	31.83333	-4.15339737	5	169623011	169623019
## 52	377	58.33333	-4.34549072	5	181487046	181487054
## 53	377	29.33333	-4.54719925	5	181535256	181535264
## 54	377	70.66667	-4.26956344	5	208266641	208266649
## 55	377	27.08824	-3.56004147	5	218367080	218367088
## 56	377	85.77591	2.00561354	5	223901177	223901185
## 57	377	48.50000	-4.51043341	5	231712489	231712497
## 58	377	31.00000	-4.63342804	5	240578349	240578357
## 59	377	42.66667	-4.63017566	5	9806364	9806372
## 60	377	42.66667	-4.63017566	5	9806364	9806372
## 61	377	39.11111	-4.05544877	5	11808329	11808337
## 62	377	43.29412	-3.43607794	5	11809511	11809519
## 63	377	38.72945	0.43777958	5	11809511	11809519
## 64	377	88.33333	-4.17965780	5	11809511	11809519

## 65	377	30.00000	-4.40975196	5	41232578	41232586
## 66	377	30.80315	-1.76654188	5	41915971	41915979
## 67	377	43.80000	-4.27363263	5	42607104	42607112
## 68	377	24.08696	-3.52982865	5	47062157	47062165
## 69	377	158.38753	3.04043509	5	47062157	47062165
## 70	377	27.50000	-4.50497538	5	47062157	47062165
## 71	377	14.00000	-4.64213545	5	50118030	50118038
## 72	377	30.25000	-4.62032697	5	52489381	52489389
## 73	377	27.75000	-4.50832980	5	52686057	52686065
## 74	377	72.62500	-4.48624088	5	53858608	53858616
## 75	377	19.90000	-4.53908618	5	113293946	113293954
## 76	377	71.67251	1.43405459	5	125520026	125520034
## 77	377	25.55319	-3.58472665	5	125520026	125520034
## 78	377	645.29708	4.89982235	5	128622158	128622166
## 79	377	35.75000	-4.61587046	5	128622158	128622166
## 80	377	90.66667	-4.55732003	5	129977107	129977115
## 81	377	123.75000	-4.60412356	5	129977108	129977116
## 82	377	31.00000	-4.59665804	5	151327452	151327460
## 83	377	32.21622	-2.25230842	5	170178767	170178775
## 84	377	129.46832	2.56355445	5	170178767	170178775
## 85	377	37.90625	-3.35253561	5	180915694	180915702
## 86	377	34.53086	-2.25088697	5	194589624	194589632
## 87	377	26.69565	-4.11959682	5	991938	991946
## 88	377	21.33333	-4.61421444	5	8205353	8205361
## 89	377	54.01176	-2.89490911	5	13578906	13578914
## 90	377	96.45833	1.17317865	5	48170242	48170250
## 91	377	26.43750	-4.27390276	5	68039360	68039368
## 92	377	27.13333	-4.29893383	5	68039360	68039368
## 93	377	80.25806	2.23624018	5	73113786	73113794
## 94	377	43.82258	-1.42231919	5	73113786	73113794
## 95	377	30.08871	-0.20777044	5	78923851	78923859
## 96	377	25.89286	-3.32292178	5	78923851	78923859
## 97	377	46.85714	-4.03729914	5	78923851	78923859
## 98	377	62.33333	-4.35701468	5	79984585	79984593
## 99	377	39.00000	-4.63017452	5	80203662	80203670
## 100	377	26.18140	-0.42125590	5	123028393	123028401
## 101	377	27.33333	-4.62307188	5	138179211	138179219
## 102	377	36.49057	-0.72409635	5	145774500	145774508
## 103	377	118.20725	-0.78304200	5	184734010	184734018
## 104	377	71.39474	-3.15661946	5	475224	475232
## 105	377	28.18182	-4.39405825	5	6611638	6611646
## 106	377	90.80000	-4.07983575	5	10404779	10404787
## 107	377	55.00000	-4.37019008	5	37696672	37696680
## 108	377	26.14286	-4.50589301	5	56894701	56894709
## 109	377	121.67302	2.45941117	5	62402030	62402038
## 110	377	22.72000	-4.09017870	5	127551874	127551882
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## 112	377	123.64067	2.46551703	5	160009191	160009199
## 113	377	28.42857	-4.38301310	5	170435829	170435837
## 114	377	28.42857	-4.38301310	5	170435829	170435837
## 115	377	35.54545	-4.00932142	5	176529268	176529276
## 116	377	42.41667	-3.71673695	5	2841316	2841324
## 117	377	29.35714	-4.41288073	5	36720222	36720230
## 118	377	20.00000	-4.62845313	5	36720225	36720233

## 119	377	19.12500	-4.52172448	5	42079681	42079689
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## 121	377	30.00000	-4.54810581	5	111574656	111574664
## 122	377	55.00000	-4.33216609	5	116251803	116251811
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## 124	377	332.09366	2.53237918	5	119348457	119348465
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## 127	377	59.45714	-3.75814016	5	119348457	119348465
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## 131	377	3053.56000	-3.90373026	5	153282674	153282682
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## 134	377	152.00000	-4.59541403	5	159775308	159775316
## 135	377	141.25743	1.30410107	5	159775311	159775319
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## 137	377	223.05405	3.10286091	5	21904104	21904112
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## 142	377	49.11111	-3.91103319	5	88208819	88208827
## 143	377	29.82609	-3.77894262	5	127392542	127392550
## 144	377	29.80000	-3.78292423	5	135594727	135594735
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## 146	377	30.80000	-4.45717145	5	152121937	152121945
## 147	377	23.55172	-3.83309397	5	19844483	19844491
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## 149	377	361.71200	3.83968142	5	20210644	20210652
## 150	377	27.90244	-3.58726168	5	23246992	23247000
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## 154	377	28.92857	-3.67810463	5	47933959	47933967
## 155	377	87.54342	2.09986891	5	47933959	47933967
## 156	377	58.06522	1.72044272	5	94491572	94491580
## 157	377	30.00000	-4.56541960	5	98043206	98043214
## 158	377	19.71429	-4.51231290	5	103161054	103161062
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## 162	377	69.66667	-4.29997477	5	141185739	141185747
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## 164	377	83.33333	-4.48546391	5	144511896	144511904
## 165	377	202.65940	3.12439452	5	420581	420589
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## 167	377	24.05405	-3.82187067	5	420581	420589
## 168	377	308.96712	3.63378405	5	433973	433981
## 169	377	29.55556	-4.44146901	5	35660990	35660998
## 170	377	499.30747	3.93721204	5	35711999	35712007
## 171	377	59.33333	-4.34913888	5	35757195	35757203
## 172	377	141.92391	-2.26627783	5	78317802	78317810



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## 174	377	48.00000	-4.23748336	5	94293893	94293901
## 175	377	78.57704	1.31913161	5	129632863	129632871
## 176	377	94.40000	-4.59469117	5	131496840	131496848
## 177	377	34.00000	-4.29868968	5	133101583	133101591
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## 180	377	30.65000	-3.91536689	5	7753946	7753954
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## 186	377	60.90000	-0.28336531	5	48453298	48453306
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## 190	377	2458.92800	6.31711669	5	71819459	71819467
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## 194	377	32.45161	-3.64227733	5	78034312	78034320
## 195	377	26.54545	-4.33945086	5	79126837	79126845
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## 202	377	198.90000	3.26535246	5	109886240	109886248
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## 205	377	27.45455	-4.25152748	5	129792032	129792040
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## 207	377	35.25000	-4.49477686	5	133394954	133394962
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## 228	377	28.42857	-4.11351050	5	67200121	67200129
## 229	377	1290.49866	5.66162224	5	67282816	67282824
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## 231	377	46.07692	-3.43100788	5	69648140	69648148
## 232	377	56.88776	0.70730000	5	95175492	95175500
## 233	377	65.16118	0.86642221	5	117293048	117293056
## 234	377	40.47059	-3.73422684	5	117993390	117993398
## 235	377	71.33333	-4.36171357	5	122782965	122782973
## 236	377	134.68824	1.78716752	5	125582418	125582426
## 237	377	28.08642	-2.90257677	5	6873240	6873248
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## 239	377	16.66667	-4.62151742	5	6944191	6944199
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## 243	377	79.33333	-4.21834184	5	27059458	27059466
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## 245	377	137.57143	-4.52510224	5	53039699	53039707
## 246	377	82.72515	-1.40001187	5	53039700	53039708
## 247	377	275.49322	2.93834791	5	57476865	57476873
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## 250	377	2234.57294	6.95631868	5	76067365	76067373
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## 256	377	192.64560	3.13749998	5	101761121	101761129
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## 260	377	62.20984	0.84321088	5	120737133	120737141
## 261	377	61.75000	-4.15649122	5	121778125	121778133
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## 266	377	57.00000	-4.41764664	5	123154376	123154384
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## 276	377	141.02941	2.75383036	5	52680153	52680161
## 277	377	50.76667	-3.98105182	5	24441003	24441011
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## 279	377	29.66667	-4.42917308	5	24441765	24441773
## 280	377	31.22222	-4.38889476	5	24441765	24441773

## 281	377	29.66667	-4.42917308	5	24441765	24441773
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## 283	377	24.00000	-4.62717405	5	60397854	60397862
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## 291	377	40.38889	-3.81248394	5	68715309	68715317
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## 297	377	68.16176	1.73131752	5	101287650	101287658
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## 310	377	238.22102	3.31772702	5	84099047	84099055
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## 314	377	23.35294	-3.48421110	5	89269931	89269939
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## 317	377	697.19149	4.58169105	5	7224391	7224399
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## 326	377	55.66667	-4.36408048	5	46949345	46949353
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## 331	377	46.52857	-3.34387011	5	58275536	58275544
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## 342	377	23.30769	-4.32748104	5	73201606	73201614
## 343	377	109.33333	-4.62098176	5	75523327	75523335
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## 345	377	43.00000	-4.58902884	5	75588737	75588745
## 346	377	125.81356	-3.09675699	5	75590241	75590249
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## 351	377	280.48098	3.37674531	5	75834914	75834922
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## 355	377	75.39869	-1.65959157	5	77088947	77088955
## 356	377	53.09881	-0.03698435	5	77088947	77088955
## 357	377	66.23529	-4.37407972	5	77088948	77088956
## 358	377	72.53333	-4.41064184	5	77088948	77088956
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## 365	377	41.75000	-4.51110958	5	35456770	35456778
## 366	377	40.75000	-4.51951787	5	35456770	35456778
## 367	377	40.75000	-4.51951787	5	35456770	35456778
## 368	377	55.93243	-3.16866590	5	63392114	63392122
## 369	377	35.07143	-3.91012045	5	80046504	80046512
## 370	377	23.04762	-4.11975410	5	1076064	1076072
## 371	377	25.33333	-4.63528926	5	1258283	1258291
## 372	377	26.12500	-4.43371412	5	7645712	7645720
## 373	377	71.00000	-4.61842684	5	7682555	7682563
## 374	377	71.00000	-4.61842684	5	7682555	7682563
## 375	377	77.71429	-4.55072254	5	8486205	8486213
## 376	377	25.79167	-3.60373644	5	9380137	9380145
## 377	377	26.43056	-2.74748099	5	9380137	9380145
## 378	377	29.87879	-3.76851858	5	9380137	9380145
## 379	377	29.09091	-3.81818549	5	9380137	9380145
## 380	377	140.25000	-4.58642024	5	12943963	12943971
## 381	377	630.77807	4.65765500	5	14469515	14469523
## 382	377	31.36364	-4.09429862	5	14469515	14469523
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## 384	377	77.00000	-4.62300485	5	16325445	16325453
## 385	377	23.45000	-4.11970050	5	17942527	17942535
## 386	377	24.25000	-4.60896141	5	18568565	18568573
## 387	377	24.00000	-4.24796316	5	23658023	23658031
## 388	377	1703.92838	6.18078643	5	35164243	35164251

## 389	377	46.92308	-4.44484770	5	35169636	35169644
## 390	377	39.70000	-4.52421102	5	36149860	36149868
## 391	377	270.71429	-4.51995137	5	36149863	36149871
## 392	377	33.10000	-3.10026524	5	36489468	36489476
## 393	377	58.83333	-4.57863952	5	39408019	39408027
## 394	377	26.02597	-3.19403704	5	39433488	39433496
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## 399	377	30.83333	-3.89304764	5	46787394	46787402
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## 401	377	22.00000	-4.58993982	5	47271310	47271318
## 402	377	58.37500	-4.54199927	5	49103416	49103424
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## 404	377	38.90909	-3.96586413	5	49850953	49850961
## 405	377	55.00000	-4.37069481	5	1118647	1118655
## 406	377	41.52830	-3.60009407	5	1480288	1480296
## 407	377	17.60000	-4.58505807	5	4815056	4815064
## 408	377	106.10646	0.46212075	5	35954442	35954450
## 409	377	26.45455	-3.90891006	5	45895136	45895144
## 410	377	17.00000	-4.61335950	5	49278705	49278713
## 411	377	351.33333	3.48355373	5	62307826	62307834
## 412	377	43.00000	-4.63267164	5	63736022	63736030
## 413	377	43.00000	-4.63267164	5	63736022	63736030
## 414	377	37.12903	-3.96307541	5	43760045	43760053
## 415	377	17.66667	-4.63006566	5	46664711	46664719
## 416	377	25.70000	-4.42428028	5	35410379	35410387
## 417	377	27.66667	-4.58077402	5	37296970	37296978
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## 419	377	82.66856	1.81190582	5	46275419	46275427
## 420	377	44.12500	-4.11469628	5	13716413	13716421
## 421	377	20.98551	-2.50934488	5	80688063	80688071
## 422	377	125.90368	2.43995884	3	948230	948252
## 423	377	51.81884	0.41925077	3	1310614	1310636
## 424	377	49.96959	0.66066897	3	2405832	2405854
## 425	377	30.00000	-3.88165964	3	3501383	3501405
## 426	377	96.30000	-4.48965404	3	6098917	6098939
## 427	377	271.66667	-4.61767032	3	6098953	6098975
## 428	377	71.43750	-4.37747721	3	6100491	6100513
## 429	377	34.80000	-4.59196122	3	6100798	6100820
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## 433	377	42.31818	-4.26924838	3	6100891	6100913
## 434	377	51.75000	-4.54830795	3	6100896	6100918
## 435	377	55.58475	-2.31717226	3	6197754	6197776
## 436	377	3348.95389	6.03651595	3	6197754	6197776
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## 443	377	58.11816	1.36292559	3	6526001	6526023
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## 446	377	35.04286	-2.54367408	3	15583393	15583415
## 447	377	119.59942	2.31956835	3	19161145	19161167
## 448	377	87.36389	2.10534137	3	19222832	19222854
## 449	377	83.74230	2.05149772	3	19238137	19238159
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## 451	377	110.98904	2.44174347	3	20853675	20853697
## 452	377	91.14440	0.83622926	3	21848091	21848113
## 453	377	19.40000	-4.59447161	3	22030707	22030729
## 454	377	206.61236	2.43122433	3	26285539	26285561
## 455	377	30.80000	-2.07462619	3	32217349	32217371
## 456	377	48.63208	0.91179695	3	32217349	32217371
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## 458	377	34.66667	-3.70428992	3	36137320	36137342
## 459	377	41.00000	-4.59760114	3	36178068	36178090
## 460	377	78.14035	0.20145711	3	37540753	37540775
## 461	377	37.27273	-4.00647174	3	37540753	37540775
## 462	377	43.25000	-4.09772473	3	37540753	37540775
## 463	377	144.12295	2.71742503	3	37583931	37583953
## 464	377	48.55472	0.14400361	3	39349458	39349480
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## 466	377	146.77576	-1.13120407	3	39570000	39570022
## 467	377	391.99196	4.25892100	3	39570000	39570022
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## 469	377	50.60000	-4.20212190	3	40091979	40092001
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## 471	377	24.64286	-4.21885989	3	41038504	41038526
## 472	377	28.46154	-4.21915174	3	52648431	52648453
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## 475	377	56.00000	-4.62639549	3	54218164	54218186
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## 477	377	54.87387	1.06798961	3	58685249	58685271
## 478	377	39.78571	-3.80439522	3	81502459	81502481
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## 482	377	53.50000	-4.22198046	3	92333371	92333393
## 483	377	46.82720	1.28067944	3	92333371	92333393
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## 485	377	132.45822	2.77183499	3	93115450	93115472
## 486	377	138.73936	2.95460633	3	93136650	93136672
## 487	377	31.58182	-3.31335718	3	93136650	93136672
## 488	377	41.14286	-4.21003965	3	99851015	99851037
## 489	377	20.33333	-4.63809228	3	110899187	110899209
## 490	377	89.66667	-4.62214953	3	110899191	110899213
## 491	377	131.07808	1.98318812	3	111137584	111137606
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## 497	377	91.25595	-1.33082528	3	111139664	111139686
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## 505	377	474.67914	4.27967068	3	151054319	151054341
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## 511	377	283.30376	3.81923070	3	154237004	154237026
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## 514	377	37.78995	-0.27433610	3	156199815	156199837
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## 517	377	332.56452	3.92441921	3	159032504	159032526
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## 520	377	30.41667	-3.35088219	3	165632210	165632232
## 521	377	55.85714	-4.55548735	3	171557419	171557441
## 522	377	31.27273	-4.47697103	3	171557422	171557444
## 523	377	39.50000	-4.46188880	3	171557426	171557448
## 524	377	68.45455	-4.47032162	3	171557428	171557450
## 525	377	120.80435	-0.15622760	3	179889290	179889312
## 526	377	23.30000	-4.12591875	3	179889290	179889312
## 527	377	165.90265	2.45308385	3	179889293	179889315
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## 529	377	42.00000	-4.62968832	3	181089463	181089485
## 530	377	107.51370	-1.33799367	3	202951162	202951184
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## 534	377	74.04444	-3.82222747	3	203307849	203307871
## 535	377	167.00000	-4.25833809	3	203307851	203307873
## 536	377	41.40000	-4.30885100	3	203701615	203701637
## 537	377	32.77419	-3.74467040	3	206731118	206731140
## 538	377	631.82480	4.50785575	3	206731118	206731140
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## 540	377	33.00000	-4.52921985	3	207881222	207881244
## 541	377	72.16667	-4.49400199	3	209777326	209777348
## 542	377	197.94324	2.97280873	3	209777332	209777354
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## 544	377	37.33333	-4.60909281	3	209777335	209777357
## 545	377	35.41667	-4.03426138	3	222722866	222722888
## 546	377	331.38527	2.96257959	3	223764130	223764152
## 547	377	18.66667	-4.60324333	3	224616079	224616101
## 548	377	18.66667	-4.60324333	3	224616079	224616101
## 549	377	38.00000	-4.60393269	3	230281086	230281108
## 550	377	26.57447	-3.60849571	3	236234300	236234322

## 551	377	124.20000	-4.58173066	3	236547985	236548007
## 552	377	154.31034	1.32063858	3	236547992	236548014
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## 554	377	21.11628	-3.67536212	3	244970794	244970816
## 555	377	35.29412	-3.75476502	3	247202111	247202133
## 556	377	643.13830	5.03479611	3	9587507	9587529
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## 558	377	61.71510	1.57198645	3	11193855	11193877
## 559	377	191.01892	2.93361223	3	15597355	15597377
## 560	377	29.31250	-3.96873177	3	19901590	19901612
## 561	377	72.66667	-4.23710956	3	24077856	24077878
## 562	377	19.71429	-4.54791748	3	26034368	26034390
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## 564	377	267.82234	-0.26889208	3	27635120	27635142
## 565	377	183.40909	2.16328700	3	27635120	27635142
## 566	377	32.66667	-4.29854908	3	28139128	28139150
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## 568	377	98.83333	-4.56590533	3	28415489	28415511
## 569	377	77.39841	0.19153455	3	30911057	30911079
## 570	377	55.50000	-4.26255734	3	30911057	30911079
## 571	377	36.25000	-4.41721373	3	32418350	32418372
## 572	377	98.71892	2.29169225	3	36578863	36578885
## 573	377	47.25000	-4.31867074	3	37253099	37253121
## 574	377	60.50742	1.21935753	3	39755407	39755429
## 575	377	26.50000	-4.62137731	3	47073877	47073899
## 576	377	72.20000	-3.98320542	3	53782167	53782189
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## 578	377	28.34951	-2.63393219	3	55235390	55235412
## 579	377	246.45038	-1.61531495	3	55235393	55235415
## 580	377	35.72727	-4.01449760	3	55298060	55298082
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## 582	377	32.00000	-4.61796863	3	65205913	65205935
## 583	377	28.66667	-4.63368262	3	65205929	65205951
## 584	377	47.66667	-4.62934561	3	68395820	68395842
## 585	377	95.54985	1.56102210	3	74878668	74878690
## 586	377	90.87500	-4.52009154	3	85581602	85581624
## 587	377	83.25000	-4.59282295	3	85581609	85581631
## 588	377	181.00000	-4.55601676	3	85581726	85581748
## 589	377	29.88679	-3.59349955	3	85581734	85581756
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## 594	377	163.50000	-4.59470768	3	85581839	85581861
## 595	377	203.00000	-4.52129286	3	85581843	85581865
## 596	377	29.33333	-4.63524471	3	85581852	85581874
## 597	377	33.80000	-4.40237404	3	112655216	112655238
## 598	377	20.75000	-4.21788242	3	113185311	113185333
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## 600	377	72.06461	1.63941612	3	117946880	117946902
## 601	377	63.94767	1.32073552	3	117973992	117974014
## 602	377	43.20000	-4.40446352	3	126663336	126663358
## 603	377	56.00000	-4.62725575	3	126696072	126696094
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## 605	377	49.50000	-4.60137687	3	126696076	126696098
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## 607	377	67.46197	1.55076782	3	127942162	127942184
## 608	377	27.00000	-4.55112826	3	128193521	128193543
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## 610	377	72.51515	-2.52245188	3	148691601	148691623
## 611	377	36.77049	-3.48321801	3	151468270	151468292
## 612	377	189.86059	3.41184801	3	152664250	152664272
## 613	377	47.64407	-3.36152257	3	159136174	159136196
## 614	377	146.64103	-1.53172309	3	159854533	159854555
## 615	377	94.97143	0.54497434	3	159854533	159854555
## 616	377	15.33333	-4.64071678	3	170966064	170966086
## 617	377	59.70605	1.45471388	3	179981995	179982017
## 618	377	373.27394	4.30173423	3	181482340	181482362
## 619	377	24.92500	-3.58229444	3	181482340	181482362
## 620	377	39.66667	-4.62175167	3	181484135	181484157
## 621	377	28.50000	-3.84734514	3	181484136	181484158
## 622	377	63.91318	0.96294089	3	190489748	190489770
## 623	377	1099.39196	0.54688977	3	197501054	197501076
## 624	377	35.05319	-2.86370327	3	197501054	197501076
## 625	377	765.28319	3.96949615	3	197501054	197501076
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## 627	377	27.00000	-4.53562257	3	197501058	197501080
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## 629	377	43.75000	-4.36189018	3	201279196	201279218
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## 631	377	294.91914	3.34060403	3	201286439	201286461
## 632	377	103.87853	2.21694508	3	208345091	208345113
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## 634	377	277.14681	3.61243405	3	215326802	215326824
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## 636	377	60.00000	-4.29567413	3	216499812	216499834
## 637	377	25.11111	-4.29640844	3	218224887	218224909
## 638	377	131.28832	0.75359190	3	219562672	219562694
## 639	377	134.33333	-4.61608154	3	231712478	231712500
## 640	377	421.66667	-4.60464842	3	231712481	231712503
## 641	377	72.58044	1.15395902	3	239156771	239156793
## 642	377	32.14286	-3.99497643	3	239156771	239156793
## 643	377	62.66667	-4.34942475	3	239156771	239156793
## 644	377	46.44444	-3.97492557	3	241320183	241320205
## 645	377	33.29268	-2.95739466	3	241493273	241493295
## 646	377	226.72386	3.22799448	3	3174259	3174281
## 647	377	31.15385	-3.64526633	3	3174259	3174281
## 648	377	67.25000	-4.18352258	3	9782961	9782983
## 649	377	49.00000	-4.05602148	3	9815675	9815697
## 650	377	48.42857	-4.06767219	3	9815675	9815697
## 651	377	41.29721	0.86786562	3	14667404	14667426
## 652	377	266.14714	3.35193503	3	15686307	15686329
## 653	377	29.71429	-4.07034981	3	15686307	15686329
## 654	377	36.50000	-4.45346278	3	15686307	15686329
## 655	377	31.12500	-4.00499508	3	30671615	30671637
## 656	377	106.34311	2.00594090	3	30671618	30671640
## 657	377	32.28571	-3.75818864	3	30671618	30671640
## 658	377	39.40000	-4.31587576	3	30671618	30671640

## 659	377	32.66667	-4.47613401	3	30671618	30671640
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## 661	377	33.66667	-4.55834559	3	33836001	33836023
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## 663	377	21.40000	-4.57449950	3	33836007	33836029
## 664	377	27.94872	-3.62386767	3	33836121	33836143
## 665	377	39.87255	-1.86902104	3	37121534	37121556
## 666	377	34.41667	-4.00605309	3	37121534	37121556
## 667	377	30.55556	-4.28527363	3	39143750	39143772
## 668	377	33.79348	-2.99515839	3	39411276	39411298
## 669	377	25.60000	-3.86098627	3	39411550	39411572
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## 673	377	77.69231	-4.43056146	3	39411652	39411674
## 674	377	38.00000	-4.63180498	3	39411652	39411674
## 675	377	16.33333	-4.64028882	3	39411655	39411677
## 676	377	90.00000	-4.52584148	3	39411666	39411688
## 677	377	25.37500	-4.04961500	3	46680024	46680046
## 678	377	36.97753	-2.38974026	3	48641522	48641544
## 679	377	49.75758	-3.38267546	3	48694523	48694545
## 680	377	37.00000	-4.55614792	3	49015350	49015372
## 681	377	28.45833	-3.77591605	3	49279889	49279911
## 682	377	67.34006	1.54140716	3	49702063	49702085
## 683	377	107.17270	2.17698768	3	49715555	49715577
## 684	377	14.00000	-4.64213545	3	50118024	50118046
## 685	377	35.88889	-1.89882524	3	52291727	52291749
## 686	377	117.30887	1.80339282	3	52524879	52524901
## 687	377	58.50000	-4.20228736	3	52697567	52697589
## 688	377	2491.68966	6.62551216	3	53231548	53231570
## 689	377	89.12195	-2.66155691	3	53231548	53231570
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## 691	377	44.71965	1.18049142	3	53876078	53876100
## 692	377	28.81818	-2.93223366	3	53876078	53876100
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## 694	377	77.30618	1.91923348	3	56661015	56661037
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## 696	377	30.53846	-4.20755206	3	56727686	56727708
## 697	377	25.53846	-4.20159221	3	57596630	57596652
## 698	377	136.92331	1.74085656	3	58159534	58159556
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## 700	377	157.54945	-0.36688264	3	67609594	67609616
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## 703	377	55.88146	1.11177299	3	98588852	98588874
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## 705	377	54.20000	-4.24916252	3	101335930	101335952
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## 708	377	30.62500	-4.38765800	3	111987652	111987674
## 709	377	63.36390	1.55370731	3	112570520	112570542
## 710	377	50.33333	-4.41876184	3	121637502	121637524
## 711	377	41.71429	-4.17233445	3	121923186	121923208
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## 713	377	33.11111	-3.62263133	3	124737895	124737917
## 714	377	168.36885	2.76606870	3	126462218	126462240
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## 717	377	96.98338	2.08061325	3	128908165	128908187
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## 722	377	31.25000	-4.51474629	3	129976687	129976709
## 723	377	24.34043	-3.40273451	3	132718115	132718137
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## 725	377	27.83333	-3.99997242	3	132718115	132718137
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## 727	377	35.45455	-3.22377546	3	146541178	146541200
## 728	377	44.00000	-4.60055728	3	152839174	152839196
## 729	377	36.50000	-4.16527860	3	172184225	172184247
## 730	377	38.68598	0.77821362	3	179375200	179375222
## 731	377	43.28674	0.25190276	3	180609610	180609632
## 732	377	22.10938	-3.30929236	3	183636201	183636223
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## 734	377	29.38095	-3.29976058	3	183643458	183643480
## 735	377	43.28346	-2.29125176	3	183643460	183643482
## 736	377	48.54327	-0.22247571	3	183643460	183643482
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## 743	377	941.03183	5.20372062	3	184178837	184178859
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## 748	377	48.92174	1.33401187	3	197830750	197830772
## 749	377	29.96364	-3.53117792	3	1744072	1744094
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## 752	377	311.29808	2.25902496	3	5016962	5016984
## 753	377	43.23404	-3.44820571	3	5745184	5745206
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## 755	377	180.90909	-4.33397723	3	5828666	5828688
## 756	377	73.88477	0.03178001	3	8219315	8219337
## 757	377	13.66667	-4.64232683	3	11372698	11372720
## 758	377	263.54155	2.55959089	3	15715687	15715709
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## 761	377	35.71429	-3.55421440	3	15715698	15715720
## 762	377	260.51330	3.75839933	3	17623581	17623603
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## 764	377	110.02976	1.59241142	3	37635121	37635143
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## 767	377	29.69231	-4.12498899	3	37635121	37635143
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## 774	377	18.21429	-4.39608065	3	55396200	55396222
## 775	377	33.48077	-0.53477110	3	56384339	56384361
## 776	377	38.36364	-4.00685784	3	56985260	56985282
## 777	377	39.00000	-4.63017452	3	80203653	80203675
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## 780	377	56.20000	-4.15565322	3	99062150	99062172
## 781	377	43.37441	-0.34302092	3	103120331	103120353
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## 784	377	27.47368	-2.98075519	3	105422431	105422453
## 785	377	85.69578	1.55599054	3	120062093	120062115
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## 787	377	53.40000	-4.20409230	3	143215037	143215059
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## 789	377	56.66667	-4.63003147	3	145124969	145124991
## 790	377	76.45725	0.43028402	3	145124970	145124992
## 791	377	89.66667	-4.62273412	3	145124971	145124993
## 792	377	89.78507	1.59147456	3	184389064	184389086
## 793	377	53.32787	-1.30410719	3	184648629	184648651
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## 795	377	71.39474	-3.15661946	3	475225	475247
## 796	377	137.49041	2.53099970	3	6605406	6605428
## 797	377	24.66667	-4.58673606	3	7897194	7897216
## 798	377	61.52454	1.11822655	3	14290696	14290718
## 799	377	22.25000	-4.48078943	3	32087110	32087132
## 800	377	26.34483	-3.99361191	3	32087111	32087133
## 801	377	18.20000	-4.60105551	3	32788077	32788099
## 802	377	55.00000	-4.37019008	3	37696669	37696691
## 803	377	51.14286	-4.02139822	3	39372706	39372728
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## 805	377	165.98623	2.79471957	3	56883507	56883529
## 806	377	35.66250	-2.83171368	3	56937696	56937718
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## 809	377	131.06452	2.76022505	3	62373667	62373689
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## 811	377	300.75000	-4.58329410	3	73502893	73502915
## 812	377	1546.77457	0.58440321	3	73502896	73502918
## 813	377	38.00000	-4.13910746	3	73502896	73502918
## 814	377	5557.90164	1.52821745	3	73502897	73502919
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## 817	377	38.66667	-4.63070651	3	79685727	79685749
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## 821	377	270.93939	-0.21536837	3	96786547	96786569
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## 823	377	34.75000	-4.37509169	3	103263876	103263898
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## 826	377	857.93750	4.97037306	3	134161128	134161150
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## 831	377	95.04178	2.04088922	3	148423978	148424000
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## 833	377	143.23288	-1.55723270	3	150446961	150446983
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## 842	377	63.30769	-2.10691963	3	151027889	151027911
## 843	377	42.63636	-3.94981477	3	151155699	151155721
## 844	377	317.34582	3.15906599	3	170034379	170034401
## 845	377	27.00000	-3.78883488	3	176527614	176527636
## 846	377	219.69341	2.99903908	3	176531628	176531650
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## 848	377	42.75000	-4.14570377	3	176912193	176912215
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## 850	377	24.89655	-3.78480619	3	177509573	177509595
## 851	377	53.00000	-4.28536911	3	177509573	177509595
## 852	377	29.75000	-3.49982310	3	177509573	177509595
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## 854	377	25.40476	-3.48697777	3	178231864	178231886
## 855	377	60.72093	-0.84312880	3	180569090	180569112
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## 858	377	185.03857	2.87335372	3	2768671	2768693
## 859	377	2486.65252	6.51771055	3	2834010	2834032
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## 862	377	29.83333	-4.10740752	3	2837801	2837823
## 863	377	2323.48541	6.53355163	3	2837997	2838019
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## 870	377	754.00995	0.45796968	3	7888846	7888868
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## 876	377	48.78521	0.50786020	3	27467918	27467940
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## 878	377	77.21703	2.04839586	3	35835486	35835508
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## 881	377	90.04132	2.23786155	3	42208370	42208392
## 882	377	30.43750	-3.36532270	3	42214216	42214238
## 883	377	30.85417	-3.23964187	3	47576989	47577011
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## 885	377	9809.74925	7.47241401	3	73518262	73518284
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## 887	377	45.45455	-4.04530468	3	73519514	73519536
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## 891	377	247.53406	3.49364394	3	75258984	75259006
## 892	377	848.50133	4.38985031	3	79208574	79208596
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## 894	377	40.54167	-4.12687124	3	87230228	87230250
## 895	377	165.10588	2.57607005	3	110962372	110962394
## 896	377	119.28571	-4.52681790	3	116277614	116277636
## 897	377	30.33333	-4.57163389	3	116277616	116277638
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## 900	377	25.51282	-3.43194224	3	127285188	127285210
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## 905	377	42.83333	-3.90272030	3	147310064	147310086
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## 907	377	34.47826	-3.86827919	3	147310064	147310086
## 908	377	31.50000	-4.35983078	3	147345924	147345946
## 909	377	22.90000	-4.28959072	3	149410750	149410772
## 910	377	316.14286	-4.51005885	3	153282664	153282686
## 911	377	472.50000	-4.37707657	3	153282665	153282687
## 912	377	1871.41667	-3.97052661	3	153282668	153282690
## 913	377	39.50000	-4.54377854	3	153282668	153282690
## 914	377	32.33333	-4.63336736	3	153282669	153282691
## 915	377	1009.00000	-4.59888859	3	153282671	153282693
## 916	377	3053.56000	-3.90373026	3	153282672	153282694
## 917	377	53.75000	-4.61035949	3	153282676	153282698
## 918	377	80.85714	-4.55064085	3	153282679	153282701
## 919	377	66.22222	-4.49954143	3	153282680	153282702
## 920	377	61.20000	-4.59527521	3	153282680	153282702
## 921	377	299.80000	-4.56639295	3	153282681	153282703
## 922	377	23.90476	-4.13086030	3	158627156	158627178
## 923	377	175.39247	2.68768053	3	159778639	159778661
## 924	377	558.29144	4.82556078	3	159785995	159786017
## 925	377	103.40556	-1.10301534	3	167000040	167000062
## 926	377	79.05691	0.09745263	3	167000040	167000062
## 927	377	26.83333	-3.62104239	3	169663704	169663726
## 928	377	204.40223	3.06242489	3	169718916	169718938

## 929	377	177.05676	2.80068213	3	170583745	170583767
## 930	377	34.25000	-4.20789034	3	869705	869727
## 931	377	26.33333	-4.57586583	3	1535597	1535619
## 932	377	60.00000	-4.28888346	3	6388094	6388116
## 933	377	24.71053	-3.43765833	3	22822353	22822375
## 934	377	29.08621	-2.82428246	3	23698172	23698194
## 935	377	29.22105	-2.56732166	3	23698172	23698194
## 936	377	48.95299	-0.16370426	3	30562126	30562148
## 937	377	109.40252	1.42123692	3	30562126	30562148
## 938	377	245.18302	3.49988612	3	30633715	30633737
## 939	377	51.22190	1.34850932	3	32558909	32558931
## 940	377	62.34074	0.06676478	3	32575935	32575957
## 941	377	25.10000	-3.55608460	3	32575935	32575957
## 942	377	24.25714	-3.66839069	3	32888093	32888115
## 943	377	48.00000	-4.31167286	3	32888093	32888115
## 944	377	79.00855	1.67140255	3	33097360	33097382
## 945	377	24.12121	-3.70079208	3	33097360	33097382
## 946	377	101.41160	1.88833271	3	43619577	43619599
## 947	377	44.28571	-4.11253523	3	44122193	44122215
## 948	377	807.25000	-2.74507145	3	44801265	44801287
## 949	377	51.16667	-2.92205855	3	44801265	44801287
## 950	377	117.80791	2.12055101	3	75984757	75984779
## 951	377	17.12500	-4.56638926	3	76048165	76048187
## 952	377	23.25000	-4.62152353	3	76048180	76048202
## 953	377	42.00000	-3.82806466	3	77696016	77696038
## 954	377	42.82031	-2.21406586	3	100153380	100153402
## 955	377	652.81167	4.27537514	3	100153380	100153402
## 956	377	51.22222	-2.26626088	3	100153380	100153402
## 957	377	25.80000	-3.53023579	3	100153380	100153402
## 958	377	132.56250	-3.39962813	3	100153380	100153402
## 959	377	71.57143	-4.54226384	3	100888452	100888474
## 960	377	586.75000	-4.48114822	3	100888452	100888474
## 961	377	35.11957	-2.89408071	3	100888454	100888476
## 962	377	238.86376	2.99754291	3	100888454	100888476
## 963	377	55.75000	-4.12005842	3	100888454	100888476
## 964	377	21.87500	-4.47141270	3	100888454	100888476
## 965	377	45.55556	-3.96568881	3	102467699	102467721
## 966	377	81.66063	-0.10729310	3	102467699	102467721
## 967	377	205.48787	3.26277797	3	107905341	107905363
## 968	377	41.76000	-3.95199901	3	107924085	107924107
## 969	377	41.76000	-3.95199901	3	107924085	107924107
## 970	377	109.57627	-2.23106757	3	127377327	127377349
## 971	377	68.78841	1.45345307	3	127377327	127377349
## 972	377	25.81395	-3.31823595	3	127377327	127377349
## 973	377	47.66667	-4.62895895	3	128092197	128092219
## 974	377	30.66667	-4.63343957	3	128092199	128092221
## 975	377	12.00000	-4.64343951	3	128092206	128092228
## 976	377	30.41758	-3.26399084	3	135207200	135207222
## 977	377	122.61475	2.46594383	3	148790290	148790312
## 978	377	36.16667	-3.61631911	3	150442529	150442551
## 979	377	45.66667	-4.38510252	3	150442529	150442551
## 980	377	137.37931	1.97999408	3	151064506	151064528
## 981	377	92.47238	2.27271904	3	152145293	152145315
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## 983	377	28.04878	-3.02763510	3	158737177	158737199
## 984	377	393.24866	3.93023124	3	158737177	158737199
## 985	377	24.97959	-3.38757923	3	158737177	158737199
## 986	377	30.13750	-1.89490463	3	17935569	17935591
## 987	377	111.76294	2.49717039	3	17935569	17935591
## 988	377	31.44037	-2.40120733	3	17935569	17935591
## 989	377	46.14286	-4.10016320	3	22102125	22102147
## 990	377	46.14286	-4.10016320	3	22102125	22102147
## 991	377	41.20438	-0.91195133	3	38138796	38138818
## 992	377	127.14933	2.65772095	3	38138796	38138818
## 993	377	615.71795	-0.60210436	3	73292403	73292425
## 994	377	152.66667	-4.57913231	3	73292403	73292425
## 995	377	120.21294	2.61497849	3	89946293	89946315
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## 997	377	83.49438	-2.76792974	3	89980426	89980448
## 998	377	57.74924	0.99008583	3	91078336	91078358
## 999	377	35.40278	-1.45251480	3	91078336	91078358
## 1000	377	19.62500	-4.55364315	3	98043668	98043690
## 1001	377	30.60000	-4.49720359	3	98043668	98043690
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## 1003	377	30.60000	-4.49720359	3	98043668	98043690
## 1004	377	105.03107	2.22735660	3	102295780	102295802
## 1005	377	26.70000	-4.29718500	3	103219818	103219840
## 1006	377	180.85106	3.17615694	3	103440116	103440138
## 1007	377	24.25000	-4.56030503	3	125433295	125433317
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## 1012	377	67.42395	1.12458940	3	130118673	130118695
## 1013	377	71.18182	1.65563561	3	132845761	132845783
## 1014	377	359.39058	3.46846731	3	133247924	133247946
## 1015	377	29.93333	-4.40176945	3	141185118	141185140
## 1016	377	99.09827	-1.27836639	3	141185119	141185141
## 1017	377	53.33333	-3.45774960	3	141185119	141185141
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## 1019	377	344.82353	-4.27160413	3	141185121	141185143
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## 1021	377	99.09827	-1.27836639	3	141185119	141185141
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## 1025	377	79.50000	-4.14964778	3	142273585	142273607
## 1026	377	53.00000	-4.54870833	3	142312702	142312724
## 1027	377	213.71585	2.72433634	3	143309541	143309563
## 1028	377	59.87742	-1.45438083	3	143839098	143839120
## 1029	377	127.28000	1.81851019	3	143936012	143936034
## 1030	377	76.71810	1.60435569	3	144168275	144168297
## 1031	377	61.53898	0.74663798	3	144514523	144514545
## 1032	377	61.04046	1.43577200	3	4844505	4844527
## 1033	377	63.17733	1.36575123	3	5720162	5720184
## 1034	377	28.14493	-3.04636032	3	5929157	5929179
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## 1037	377	27.07510	-0.15411490	3	5929157	5929179
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## 1039	377	113.23797	2.60439671	3	33047389	33047411
## 1040	377	67.18893	0.86333038	3	35559206	35559228
## 1041	377	468.44947	4.29617359	3	37426518	37426540
## 1042	377	51.38202	-1.58886349	3	72360219	72360241
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## 1044	377	164.79444	2.70728996	3	72360785	72360807
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## 1046	377	165.96522	2.24473559	3	72360785	72360807
## 1047	377	30.64000	-3.85385625	3	72360785	72360807
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## 1049	377	39.66667	-4.58026173	3	72360785	72360807
## 1050	377	60.33333	-4.07417199	3	89319857	89319879
## 1051	377	43.00000	-4.56495499	3	90877188	90877210
## 1052	377	67.66667	-3.95747707	3	94298303	94298325
## 1053	377	32.67647	-3.65930144	3	95476855	95476877
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## 1055	377	44.01220	1.00299230	3	122998577	122998599
## 1056	377	13.66667	-4.62691745	3	128226326	128226348
## 1057	377	27.16129	-3.50586861	3	128332830	128332852
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## 1059	377	130.86885	2.50898645	3	128485345	128485367
## 1060	377	43.66667	-4.57152585	3	128691835	128691857
## 1061	377	188.62500	-4.50914243	3	128691836	128691858
## 1062	377	538.64011	4.68493413	3	128691838	128691860
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## 1064	377	860.38133	5.53286242	3	128693618	128693640
## 1065	377	63.57692	0.70353976	3	128720183	128720205
## 1066	377	31.33333	-4.58205765	3	128908630	128908652
## 1067	377	14.75000	-4.61396623	3	129148852	129148874
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## 1069	377	94.40000	-4.59469117	3	131496834	131496856
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## 1071	377	30.00000	-4.62503128	3	135504404	135504426
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## 1073	377	38.64198	-3.04975053	3	136218806	136218828
## 1074	377	25.15873	-3.74526870	3	136218806	136218828
## 1075	377	97.39298	0.88966458	3	136356322	136356344
## 1076	377	90.92778	1.95031634	3	136405200	136405222
## 1077	377	22.70588	-4.18431988	3	136474484	136474506
## 1078	377	49.00000	-4.33043686	3	136474484	136474506
## 1079	377	145.80315	0.54207981	3	136664672	136664694
## 1080	377	50.12500	-4.02851541	3	136664672	136664694
## 1081	377	222.03125	-0.88222988	3	136664672	136664694
## 1082	377	43.16667	-4.27984441	3	136664672	136664694
## 1083	377	31.72917	-3.18880964	3	136664672	136664694
## 1084	377	46.60417	-3.62538757	3	136664672	136664694
## 1085	377	26.28571	-4.43039347	3	136664672	136664694
## 1086	377	43.73529	-2.70479538	3	136664675	136664697
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## 1088	377	63.84000	-2.78404491	3	136664675	136664697
## 1089	377	25.92857	-4.13021647	3	136664675	136664697
## 1090	377	21.88889	-4.17780729	3	136664675	136664697

## 1091	377	28.33333	-4.49452674	3	136672362	136672384
## 1092	377	33.66667	-4.32050672	3	1548061	1548083
## 1093	377	377.19519	3.42135161	3	3129799	3129821
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## 1100	377	29.95652	-3.85880691	3	3143587	3143609
## 1101	377	29.34783	-3.89159793	3	3143587	3143609
## 1102	377	104.28056	2.06951043	3	3148061	3148083
## 1103	377	47.14286	-4.10392525	3	3148061	3148083
## 1104	377	149.53243	2.80778611	3	3159934	3159956
## 1105	377	70.75000	-4.13928974	3	5639369	5639391
## 1106	377	47.98742	0.78727254	3	5723657	5723679
## 1107	377	22.09091	-4.47152189	3	6233253	6233275
## 1108	377	39.23077	-4.44679689	3	12250436	12250458
## 1109	377	27.25581	-3.40854733	3	13638681	13638703
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## 1111	377	43.35714	-0.56941630	3	15112961	15112983
## 1112	377	68.33333	-4.25835818	3	21728612	21728634
## 1113	377	26.78462	-3.31960397	3	26550906	26550928
## 1114	377	46.21053	-4.03563710	3	29730960	29730982
## 1115	377	30.09091	-3.90000846	3	30442551	30442573
## 1116	377	43.18081	0.25681796	3	31820486	31820508
## 1117	377	54.75000	-4.33000011	3	50266270	50266292
## 1118	377	196.45135	3.30639856	3	68749116	68749138
## 1119	377	108.00000	-4.62454350	3	71755336	71755358
## 1120	377	35.04310	-1.64699711	3	73130683	73130705
## 1121	377	48.81377	0.16501880	3	73240926	73240948
## 1122	377	134.06267	2.58166992	3	73837509	73837531
## 1123	377	50.14286	-4.01395060	3	73837509	73837531
## 1124	377	23.29412	-4.31056655	3	80510086	80510108
## 1125	377	44.10000	-4.02480704	3	86970605	86970627
## 1126	377	31.11429	-3.72679257	3	91817864	91817886
## 1127	377	248.57143	3.68748795	3	96527494	96527516
## 1128	377	31.28571	-3.73069009	3	96559734	96559756
## 1129	377	190.68194	3.31611283	3	96559734	96559756
## 1130	377	73.58874	-0.16108446	3	97738457	97738479
## 1131	377	163.00000	-4.06484735	3	97738457	97738479
## 1132	377	76.70940	1.71233420	3	97750311	97750333
## 1133	377	54.00000	-4.30439067	3	97750311	97750333
## 1134	377	42.27273	-3.86261036	3	98157443	98157465
## 1135	377	28.85714	-4.39591379	3	98159197	98159219
## 1136	377	28.46667	-4.03240061	3	100989624	100989646
## 1137	377	31.32530	-0.18162178	3	100989624	100989646
## 1138	377	44.37500	-4.16190794	3	100989624	100989646
## 1139	377	70.00000	-3.98700413	3	100990848	100990870
## 1140	377	38.57191	0.43184562	3	100990849	100990871
## 1141	377	107.33333	-4.01857173	3	100990849	100990871
## 1142	377	70.00000	-3.98700413	3	100990848	100990870
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## 1145	377	21.37500	-3.59266286	3	102369191	102369213
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## 1147	377	95.57627	2.22372750	3	102369191	102369213
## 1148	377	113.47975	1.37585999	3	102397961	102397983
## 1149	377	262.31989	3.47566785	3	102484374	102484396
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## 1151	377	29.00000	-3.76596707	3	102812314	102812336
## 1152	377	48.83333	-4.30785916	3	104031591	104031613
## 1153	377	51.66667	-4.52617007	3	104031591	104031613
## 1154	377	66.02190	-2.04331226	3	110870436	110870458
## 1155	377	87.34545	1.44186566	3	114833213	114833235
## 1156	377	151.23161	2.67544019	3	119157925	119157947
## 1157	377	36.50000	-3.83596348	3	119169426	119169448
## 1158	377	90.06667	2.04868110	3	120858623	120858645
## 1159	377	26.65517	-3.61175606	3	120858623	120858645
## 1160	377	38.71429	-4.20190785	3	120858623	120858645
## 1161	377	233.58904	2.77697361	3	128056103	128056125
## 1162	377	24.14286	-4.45634756	3	128056103	128056125
## 1163	377	60.25000	-4.23860036	3	128084365	128084387
## 1164	377	27.80000	-3.70250471	3	128084431	128084453
## 1165	377	47.66667	-4.61849141	3	314189	314211
## 1166	377	39.37000	-0.48720649	3	802889	802911
## 1167	377	32.42857	-4.55326455	3	838531	838553
## 1168	377	17.33333	-4.63569008	3	838533	838555
## 1169	377	36.80000	-4.58063528	3	838538	838560
## 1170	377	146.60983	2.05760040	3	865493	865515
## 1171	377	29.72222	-3.88894009	3	6604833	6604855
## 1172	377	21.42105	-4.28508969	3	8687329	8687351
## 1173	377	20.16667	-4.42498338	3	8687339	8687361
## 1174	377	21.42105	-4.28508969	3	8687329	8687351
## 1175	377	20.16667	-4.42498338	3	8687339	8687361
## 1176	377	32.94979	-0.27106906	3	9790681	9790703
## 1177	377	42.00000	-4.07935202	3	9790681	9790703
## 1178	377	60.00000	-4.32779720	3	9790681	9790703
## 1179	377	48.41176	-4.08986614	3	11332829	11332851
## 1180	377	17.00000	-4.61417707	3	11352734	11352756
## 1181	377	232.26768	-0.25212590	3	14494437	14494459
## 1182	377	163.81325	2.22771441	3	14494437	14494459
## 1183	377	28.80000	-4.44798392	3	14494437	14494459
## 1184	377	35.87500	-4.20867947	3	14494437	14494459
## 1185	377	37.85714	-4.24795534	3	14494437	14494459
## 1186	377	32.50000	-4.47259519	3	14494437	14494459
## 1187	377	232.26768	-0.25212590	3	14494437	14494459
## 1188	377	163.81325	2.22771441	3	14494437	14494459
## 1189	377	28.80000	-4.44798392	3	14494437	14494459
## 1190	377	35.87500	-4.20867947	3	14494437	14494459
## 1191	377	37.85714	-4.24795534	3	14494437	14494459
## 1192	377	32.50000	-4.47259519	3	14494437	14494459
## 1193	377	30.00000	-3.84831963	3	17317564	17317586
## 1194	377	22.40000	-4.56325646	3	17317564	17317586
## 1195	377	53.24781	1.20160722	3	20407891	20407913
## 1196	377	91.33333	-4.12960632	3	20407891	20407913
## 1197	377	38.75000	-4.61494422	3	20407893	20407915
## 1198	377	45.30168	-0.94084260	3	33033242	33033264

## 1199	377	1205.81421	5.13047376	3	35176555	35176577
## 1200	377	31.00000	-4.54384083	3	35176555	35176577
## 1201	377	97.00000	-4.62265145	3	35176555	35176577
## 1202	377	17.00000	-4.62602180	3	35176555	35176577
## 1203	377	28.92857	-4.20503410	3	36272490	36272512
## 1204	377	24.49057	-3.21435299	3	44067608	44067630
## 1205	377	85.80251	1.33036707	3	44067608	44067630
## 1206	377	28.93590	-3.02032487	3	44067608	44067630
## 1207	377	33.33333	-3.76665654	3	44938364	44938386
## 1208	377	35.09589	-2.71601272	3	44938364	44938386
## 1209	377	33.81818	-4.09192200	3	44938364	44938386
## 1210	377	52.24806	-1.87065241	3	44938364	44938386
## 1211	377	22.30556	-3.68577612	3	44938364	44938386
## 1212	377	142.11111	2.16528273	3	45914466	45914488
## 1213	377	29.21053	-3.92414493	3	46662528	46662550
## 1214	377	237.49465	3.24441374	3	47171798	47171820
## 1215	377	45.26667	-3.94587530	3	57426314	57426336
## 1216	377	33.36364	-4.07866003	3	57426314	57426336
## 1217	377	23.64286	-4.41328175	3	58624008	58624030
## 1218	377	30.44444	-4.36347778	3	58624010	58624032
## 1219	377	29.33333	-4.39652191	3	58624010	58624032
## 1220	377	25.48387	-3.65598705	3	58624014	58624036
## 1221	377	27.96774	-3.47400211	3	58624014	58624036
## 1222	377	167.30263	-3.05047476	3	60385068	60385090
## 1223	377	114.28571	-2.01659835	3	60385068	60385090
## 1224	377	175.88406	-3.23300488	3	60385068	60385090
## 1225	377	452.28612	3.67101376	3	60898624	60898646
## 1226	377	45.00000	-4.37768851	3	61803293	61803315
## 1227	377	107.23923	-0.82318424	3	64243948	64243970
## 1228	377	22.50000	-4.61465226	3	64371437	64371459
## 1229	377	51.56693	-1.69065489	3	65181070	65181092
## 1230	377	103.00000	-4.53867892	3	65422908	65422930
## 1231	377	29.66667	-4.57237239	3	65504361	65504383
## 1232	377	61.20000	-4.12828658	3	65551781	65551803
## 1233	377	43.33333	-4.48924595	3	65613424	65613446
## 1234	377	29.01695	-3.26330745	3	65713301	65713323
## 1235	377	23.21212	-3.76813179	3	65856535	65856557
## 1236	377	35.45455	-3.98101377	3	66363249	66363271
## 1237	377	30.22500	-1.43008690	3	66367867	66367889
## 1238	377	34.40000	-4.46022336	3	67611364	67611386
## 1239	377	27.85714	-3.86227111	3	68556887	68556909
## 1240	377	78.50000	-4.06465690	3	68556890	68556912
## 1241	377	255.79946	3.67060260	3	72023145	72023167
## 1242	377	34.46154	-4.01088674	3	72068615	72068637
## 1243	377	26.28571	-4.55954461	3	72696826	72696848
## 1244	377	34.75000	-4.59054400	3	72821644	72821666
## 1245	377	115.44928	0.76804906	3	72821648	72821670
## 1246	377	27.50000	-4.49600588	3	74965742	74965764
## 1247	377	34.40909	-1.82356591	3	74965743	74965765
## 1248	377	50.00000	-4.40054303	3	85984545	85984567
## 1249	377	33.88235	-3.78147330	3	94416172	94416194
## 1250	377	23.98000	-3.43689572	3	94416172	94416194
## 1251	377	18.75000	-4.59749303	3	112227651	112227673
## 1252	377	138.00000	-4.49959579	3	117169077	117169099

## 1253	377	39.96000	0.32222154	3	117396034	117396056
## 1254	377	28.65591	-2.72863209	3	117396037	117396059
## 1255	377	60.00000	-4.59935875	3	117998953	117998975
## 1256	377	21.75000	-4.61659281	3	119092104	119092126
## 1257	377	123.83946	1.10494094	3	119092105	119092127
## 1258	377	48.00000	-4.38428595	3	119092105	119092127
## 1259	377	27.92593	-3.72238693	3	123738908	123738930
## 1260	377	38.60000	-4.28799525	3	123738908	123738930
## 1261	377	1718.63298	6.07126126	3	130120686	130120708
## 1262	377	34.17949	-3.38510229	3	130120686	130120708
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## 1264	377	35.33333	-4.53355930	3	130120686	130120708
## 1265	377	75.13960	1.77047234	3	134160072	134160094
## 1266	377	94.01780	1.56626092	3	564679	564701
## 1267	377	30.20000	-4.41084333	3	564679	564701
## 1268	377	29.20000	-4.55683961	3	6872984	6873006
## 1269	377	28.08642	-2.90257677	3	6872995	6873017
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## 1271	377	460.08000	4.39226444	3	8941938	8941960
## 1272	377	40.45312	-3.27671170	3	10703617	10703639
## 1273	377	46.21429	-4.40259653	3	11893481	11893503
## 1274	377	32.84177	-0.90487152	3	14460475	14460497
## 1275	377	135.21858	2.82656382	3	14460475	14460497
## 1276	377	79.66667	-4.21342367	3	16348874	16348896
## 1277	377	57.80000	-4.24003730	3	20552019	20552041
## 1278	377	58.75000	-4.28174696	3	20552019	20552041
## 1279	377	28.21429	-4.15600653	3	20552288	20552310
## 1280	377	29.53846	-4.16800537	3	20552288	20552310
## 1281	377	32.75000	-4.58130228	3	24815215	24815237
## 1282	377	64.19219	1.28680169	3	26632057	26632079
## 1283	377	29.58333	-3.83479240	3	26632057	26632079
## 1284	377	44.33333	-4.41053549	3	26680721	26680743
## 1285	377	23.17391	-4.05242440	3	26701229	26701251
## 1286	377	482.96257	4.36852048	3	26990625	26990647
## 1287	377	20.25000	-4.53032182	3	26990625	26990647
## 1288	377	22.96154	-4.02885255	3	26998945	26998967
## 1289	377	36.70833	-4.00815831	3	40536903	40536925
## 1290	377	44.44444	-3.99670538	3	42084591	42084613
## 1291	377	392.15903	4.28702559	3	46364700	46364722
## 1292	377	35.98592	-3.24705665	3	46364700	46364722
## 1293	377	44.36364	-4.03453583	3	46364700	46364722
## 1294	377	237.82609	3.61166561	3	46367338	46367360
## 1295	377	60.67123	0.65363573	3	46367338	46367360
## 1296	377	62.04054	0.12805680	3	49804078	49804100
## 1297	377	59.80000	-4.15171096	3	49804078	49804100
## 1298	377	48.29545	1.36055340	3	50430475	50430497
## 1299	377	28.25000	-4.49592331	3	50430478	50430500
## 1300	377	27.45000	-4.08392067	3	54372589	54372611
## 1301	377	30.95455	-3.68678067	3	54411962	54411984
## 1302	377	173.82222	2.63158505	3	54411962	54411984
## 1303	377	86.50303	1.53317779	3	56421491	56421513
## 1304	377	58.33516	-0.70574852	3	57091105	57091127
## 1305	377	293.39698	-0.20909620	3	66129111	66129133
## 1306	377	225.09288	2.36566540	3	66129111	66129133

## 1307	377	28.22222	-4.30681496	3	66129111	66129133
## 1308	377	38.92857	-3.89043412	3	68714661	68714683
## 1309	377	45.88889	-4.00597670	3	69585731	69585753
## 1310	377	40.33333	-4.63019813	3	74540847	74540869
## 1311	377	40.33333	-4.63019813	3	74540847	74540869
## 1312	377	35.42857	-4.55706087	3	75481792	75481814
## 1313	377	190.38172	2.90672605	3	75506914	75506936
## 1314	377	33.06452	-4.09057164	3	76059512	76059534
## 1315	377	101.80000	-4.49399029	3	89351691	89351713
## 1316	377	200.66667	-4.54153273	3	89351693	89351715
## 1317	377	170.80000	-4.57846896	3	89351693	89351715
## 1318	377	88.70821	1.53447302	3	96259711	96259733
## 1319	377	35.60000	-4.44722973	3	98549284	98549306
## 1320	377	42.66667	-4.56739524	3	103979809	103979831
## 1321	377	25.93671	-2.69656869	3	103979811	103979833
## 1322	377	19.53741	-2.43831488	3	103979811	103979833
## 1323	377	32.42105	-3.70760107	3	105052929	105052951
## 1324	377	57.01250	0.96873171	3	105188445	105188467
## 1325	377	28.80000	-4.47108401	3	106971083	106971105
## 1326	377	62.93631	1.00554342	3	106971085	106971107
## 1327	377	27.75610	-3.71990475	3	106971085	106971107
## 1328	377	44.83333	-4.20871362	3	106971085	106971107
## 1329	377	72.66667	-4.18965304	3	111890420	111890442
## 1330	377	30.45455	-2.84567701	3	111893494	111893516
## 1331	377	88.66667	-4.61745791	3	112022336	112022358
## 1332	377	39.66667	-4.60239282	3	120198725	120198747
## 1333	377	1759.88362	2.41276104	3	120198737	120198759
## 1334	377	28.48193	-3.07761706	3	120198737	120198759
## 1335	377	24.28571	-4.09856045	3	120198737	120198759
## 1336	377	185.99727	2.86291832	3	120694071	120694093
## 1337	377	55.03390	-2.34829946	3	120694071	120694093
## 1338	377	24.62963	-3.52405773	3	123467465	123467487
## 1339	377	24.72222	-3.59916101	3	123467467	123467489
## 1340	377	26.86792	-3.36103585	3	123467467	123467489
## 1341	377	33.51961	-2.65351396	3	123618577	123618599
## 1342	377	80.45783	-2.84682198	3	130804541	130804563
## 1343	377	198.03170	2.54092521	3	132582042	132582064
## 1344	377	32.27500	-3.01197186	3	132582042	132582064
## 1345	377	42.87500	-4.07137573	3	132632005	132632027
## 1346	377	65.58462	1.13809887	3	132773292	132773314
## 1347	377	30.56250	-3.93316055	3	133038855	133038877
## 1348	377	47.16667	-4.24751115	3	19782789	19782811
## 1349	377	25.66667	-4.62654009	3	21148036	21148058
## 1350	377	26.40000	-4.49388566	3	21148037	21148059
## 1351	377	29.53933	-2.96875743	3	27441240	27441262
## 1352	377	37.77419	-4.08119042	3	27441247	27441269
## 1353	377	11.66667	-4.63618675	3	41331754	41331776
## 1354	377	46.33333	-4.03932289	3	41331755	41331777
## 1355	377	38.50000	-4.58506388	3	41463936	41463958
## 1356	377	38.87302	-3.52503947	3	43969079	43969101
## 1357	377	38.69841	-3.55494189	3	43969079	43969101
## 1358	377	38.69841	-3.55494189	3	43969079	43969101
## 1359	377	43.40000	-4.30872727	3	43969082	43969104
## 1360	377	43.20000	-4.31293141	3	43969082	43969104

## 1361	377	43.20000	-4.31293141	3	43969082	43969104
## 1362	377	91.66667	-4.62069998	3	43970039	43970061
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## 1364	377	91.66667	-4.62069998	3	43970039	43970061
## 1365	377	51.75000	-4.53965711	3	43970041	43970063
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## 1367	377	51.75000	-4.53965711	3	43970041	43970063
## 1368	377	58.50000	-4.39685862	3	43970355	43970377
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## 1370	377	53.60000	-4.49771616	3	43970606	43970628
## 1371	377	29.96842	-1.68888043	3	45503224	45503246
## 1372	377	44.66667	-4.04768146	3	46788333	46788355
## 1373	377	33.34783	-3.79972346	3	49178761	49178783
## 1374	377	29.29091	-3.06836678	3	49480199	49480221
## 1375	377	78.04178	1.95791477	3	49480199	49480221
## 1376	377	46.00000	-4.52774223	3	49480199	49480221
## 1377	377	33.18182	-4.11776208	3	49533817	49533839
## 1378	377	24.33333	-4.56890191	3	49550485	49550507
## 1379	377	32.46154	-3.96791721	3	51771493	51771515
## 1380	377	34.99342	-1.43006405	3	75310149	75310171
## 1381	377	29.25000	-4.29757878	3	75310149	75310171
## 1382	377	503.45867	4.49924522	3	99546965	99546987
## 1383	377	39.11789	-0.22372072	3	100668792	100668814
## 1384	377	29.21495	-2.18877168	3	100668792	100668814
## 1385	377	40.33333	-3.84305645	3	100668792	100668814
## 1386	377	29.00000	-4.55457096	3	102655005	102655027
## 1387	377	37.00000	-4.49164120	3	102655007	102655029
## 1388	377	54.57566	0.83905513	3	112858125	112858147
## 1389	377	34.69149	-2.19994718	3	112881796	112881818
## 1390	377	29.40625	-3.80888143	3	112881796	112881818
## 1391	377	40.14286	-4.24776630	3	112881796	112881818
## 1392	377	38.85714	-4.24738312	3	112881796	112881818
## 1393	377	117.74515	2.45848558	3	113233877	113233899
## 1394	377	165.16393	3.00438786	3	113239413	113239435
## 1395	377	176.36842	-4.25074872	3	20892040	20892062
## 1396	377	251.81720	3.69735958	3	21362945	21362967
## 1397	377	25.00000	-4.60263483	3	24434078	24434100
## 1398	377	31.66667	-4.59156423	3	24573848	24573870
## 1399	377	37.00000	-4.59432094	3	24573854	24573876
## 1400	377	132.58649	2.66744969	3	35096631	35096653
## 1401	377	31.00000	-4.60943485	3	39181025	39181047
## 1402	377	36.75000	-4.61657611	3	39181025	39181047
## 1403	377	39.50000	-4.61338127	3	39181027	39181049
## 1404	377	22.00000	-4.54118767	3	43300458	43300480
## 1405	377	33.50000	-4.48003459	3	50512630	50512652
## 1406	377	248.79181	1.87065784	3	51249448	51249470
## 1407	377	29.59091	-3.93189421	3	60097945	60097967
## 1408	377	24.00000	-4.62717405	3	60397997	60398019
## 1409	377	44.00000	-4.54644082	3	60398062	60398084
## 1410	377	44.00000	-4.54644082	3	60398062	60398084
## 1411	377	101.00000	-4.62000234	3	60398174	60398196
## 1412	377	101.00000	-4.62000234	3	60398174	60398196
## 1413	377	33.18182	-4.13147341	3	64952569	64952591
## 1414	377	30.73148	-2.29378140	3	64952569	64952591

## 1415	377	55.70370	-1.69923684	3	65054555	65054577
## 1416	377	39.83667	0.29990268	3	65054555	65054577
## 1417	377	38.81739	-2.09597211	3	67650695	67650717
## 1418	377	41.48867	0.62663927	3	72942974	72942996
## 1419	377	41.82553	-0.13118217	3	72958592	72958614
## 1420	377	117.13079	2.66080985	3	74809360	74809382
## 1421	377	75.35652	-2.33173945	3	74898349	74898371
## 1422	377	215.02965	3.33776975	3	74898349	74898371
## 1423	377	43.10631	0.56200944	3	75766042	75766064
## 1424	377	50.66463	1.08458938	3	76807500	76807522
## 1425	377	50.66463	1.08458938	3	76807500	76807522
## 1426	377	50.66463	1.08458938	3	76807500	76807522
## 1427	377	26.75000	-4.52732850	3	91224997	91225019
## 1428	377	61.66667	-4.61524431	3	100292161	100292183
## 1429	377	57.79245	-3.54563266	3	100374242	100374264
## 1430	377	27.18182	-4.22223115	3	100374242	100374264
## 1431	377	25.76596	-3.43306614	3	102086416	102086438
## 1432	377	25.76596	-3.43306614	3	102086416	102086438
## 1433	377	21.60000	-4.58657321	3	102930702	102930724
## 1434	377	230.98396	-0.52330634	3	103657526	103657548
## 1435	377	183.28972	2.29353355	3	103657526	103657548
## 1436	377	47.31111	0.84840341	3	103699574	103699596
## 1437	377	36.36000	-3.77205561	3	103712929	103712951
## 1438	377	56.50000	-4.25459882	3	103712929	103712951
## 1439	377	48.00000	-4.33534589	3	103712929	103712951
## 1440	377	32.50000	-4.49878408	3	103712929	103712951
## 1441	377	26.08333	-4.26695977	3	103714088	103714110
## 1442	377	46.00000	-4.62056776	3	104714360	104714382
## 1443	377	21.33333	-4.60142847	3	104719324	104719346
## 1444	377	22.88235	-4.30384933	3	105020418	105020440
## 1445	377	104.33333	-4.01907480	3	40412947	40412969
## 1446	377	25.62500	-4.46368261	3	41305460	41305482
## 1447	377	26.33333	-4.62286225	3	41305467	41305489
## 1448	377	29.16505	-2.20053572	3	42638680	42638702
## 1449	377	23.66667	-4.61535166	3	50359576	50359598
## 1450	377	66.00000	-4.29188122	3	50361929	50361951
## 1451	377	40.37500	-4.13770232	3	50361929	50361951
## 1452	377	34.17544	-3.38547406	3	50361929	50361951
## 1453	377	29.00000	-4.61987816	3	50361929	50361951
## 1454	377	29.00000	-4.42348233	3	55289144	55289166
## 1455	377	38.00000	-4.39804462	3	55289144	55289166
## 1456	377	28.25000	-4.00495817	3	57272254	57272276
## 1457	377	509.97340	4.37825851	3	59678085	59678107
## 1458	377	91.02500	-2.26496664	3	59678085	59678107
## 1459	377	46.55556	-4.01943414	3	59678085	59678107
## 1460	377	27.23529	-4.04341365	3	59678085	59678107
## 1461	377	23.66667	-4.57720462	3	59678085	59678107
## 1462	377	36.06250	-3.93036348	3	59678085	59678107
## 1463	377	30.52174	-3.19895500	3	59689043	59689065
## 1464	377	43.90000	-4.00587178	3	60478635	60478657
## 1465	377	48.20000	-4.22557806	3	65534329	65534351
## 1466	377	33.66667	-4.52139344	3	66501132	66501154
## 1467	377	23.80000	-4.59067176	3	66655856	66655878
## 1468	377	23.80000	-4.59067176	3	66655856	66655878



## 1469	377	24.15000	-4.08697263	3	72345774	72345796
## 1470	377	23.75000	-4.10802472	3	72345774	72345796
## 1471	377	24.05769	-3.36297331	3	74846921	74846943
## 1472	377	23.73171	-3.64819824	3	74902127	74902149
## 1473	377	222.73684	2.61845333	3	80158040	80158062
## 1474	377	39.37500	-4.13056311	3	80158040	80158062
## 1475	377	45.00000	-4.43794576	3	80158040	80158062
## 1476	377	31.80000	-4.46710750	3	80725002	80725024
## 1477	377	27.33333	-4.42731290	3	85746818	85746840
## 1478	377	74.66667	-4.26876968	3	85746820	85746842
## 1479	377	56.60000	-4.18539258	3	85746820	85746842
## 1480	377	34.09333	-2.60254138	3	89631708	89631730
## 1481	377	258.88268	3.12994390	3	89793124	89793146
## 1482	377	57.07143	-3.01805219	3	89793124	89793146
## 1483	377	35.80000	-4.33193493	3	89793124	89793146
## 1484	377	26.66667	-4.53948258	3	90090165	90090187
## 1485	377	321.67385	3.44750992	3	90885392	90885414
## 1486	377	31.05263	-3.90005700	3	90907289	90907311
## 1487	377	265.90859	3.29925358	3	90907289	90907311
## 1488	377	296.57300	3.38532144	3	90912857	90912879
## 1489	377	40.69231	-3.77670045	3	90912857	90912879
## 1490	377	33.71429	-4.03084952	3	92891984	92892006
## 1491	377	34.06250	-4.06134326	3	92891984	92892006
## 1492	377	742.39409	0.37869121	3	92891984	92892006
## 1493	377	423.75000	-0.93173345	3	92891984	92892006
## 1494	377	496.81361	3.28185531	3	92891984	92892006
## 1495	377	33.00000	-4.10116674	3	92891984	92892006
## 1496	377	472.29630	-1.34549239	3	92891984	92892006
## 1497	377	31.25000	-4.56699979	3	92891984	92892006
## 1498	377	31.25000	-4.56699979	3	92891984	92892006
## 1499	377	29.43590	-3.89091397	3	92891985	92892007
## 1500	377	30.20000	-3.97931344	3	92891985	92892007
## 1501	377	40.37838	-2.88138854	3	92967305	92967327
## 1502	377	69.64306	1.47829331	3	92967305	92967327
## 1503	377	33.66667	-3.99222563	3	92967305	92967327
## 1504	377	169.26431	2.56053347	3	55439	55461
## 1505	377	23.86364	-3.46723933	3	55439	55461
## 1506	377	118.24340	1.90301079	3	552031	552053
## 1507	377	104.07055	1.59211710	3	552585	552607
## 1508	377	34.35714	-4.01202407	3	724507	724529
## 1509	377	615.27926	4.73470965	3	1314273	1314295
## 1510	377	41.66667	-4.49987724	3	1314273	1314295
## 1511	377	23.57692	-3.89139250	3	2936312	2936334
## 1512	377	26.12903	-3.87888695	3	3025687	3025709
## 1513	377	127.37151	2.17194634	3	3025688	3025710
## 1514	377	36.81818	-4.03219659	3	3025692	3025714
## 1515	377	34.10177	-0.33259933	3	3140669	3140691
## 1516	377	72.25000	-4.09217998	3	3140669	3140691
## 1517	377	21.37037	-3.98104404	3	3674445	3674467
## 1518	377	179.49176	2.82251602	3	3676143	3676165
## 1519	377	53.00000	-4.61391746	3	8646087	8646109
## 1520	377	45.58394	-2.05641865	3	8646088	8646110
## 1521	377	61.00000	-3.88745508	3	8646088	8646110
## 1522	377	42.33333	-4.46788100	3	8646088	8646110

## 1523	377	22.33333	-4.63719992	3	9107318	9107340
## 1524	377	22.33333	-4.63719992	3	9107318	9107340
## 1525	377	78.42857	-4.48504992	3	11677604	11677626
## 1526	377	35.57143	-4.22908449	3	24003280	24003302
## 1527	377	49.00000	-4.32733480	3	28210497	28210519
## 1528	377	38.09091	-4.05917801	3	28904502	28904524
## 1529	377	73.71429	-4.50431631	3	29668317	29668339
## 1530	377	53.70000	-4.29586554	3	29669066	29669088
## 1531	377	40.29885	-2.84776497	3	29810408	29810430
## 1532	377	40.06977	-2.94043428	3	29810408	29810430
## 1533	377	18.00000	-4.63972368	3	31131053	31131075
## 1534	377	26.14440	0.02189031	3	50035397	50035419
## 1535	377	25.75000	-4.51894234	3	50106220	50106242
## 1536	377	66.68328	1.53925400	3	50227819	50227841
## 1537	377	80.25070	1.94427173	3	53314803	53314825
## 1538	377	263.76882	3.87641280	3	58532393	58532415
## 1539	377	44.48780	-2.26156361	3	66565866	66565888
## 1540	377	114.52830	-1.39153980	3	66565866	66565888
## 1541	377	589.02956	0.29466794	3	66565866	66565888
## 1542	377	47.18699	-1.53601635	3	66565866	66565888
## 1543	377	87.56481	0.08358389	3	66565866	66565888
## 1544	377	385.74556	2.92389372	3	66565866	66565888
## 1545	377	45.00000	-4.44050681	3	66565866	66565888
## 1546	377	44.33333	-4.44666577	3	66565866	66565888
## 1547	377	29.12121	-3.43034492	3	69343638	69343660
## 1548	377	25.87879	-3.65305247	3	69343638	69343660
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## 1550	377	84.13803	1.90871425	3	70784836	70784858
## 1551	377	81.89444	2.08131185	3	71746690	71746712
## 1552	377	29.72340	-3.38881394	3	71746690	71746712
## 1553	377	67.44479	1.07655264	3	84180342	84180364
## 1554	377	49.50000	-4.16047107	3	84180342	84180364
## 1555	377	212.20981	3.16996884	3	85670975	85670997
## 1556	377	273.25212	3.17988006	3	88722064	88722086
## 1557	377	28.55556	-3.65161233	3	88722064	88722086
## 1558	377	27.36667	-3.56329178	3	89739551	89739573
## 1559	377	62.78134	1.51499983	3	89739551	89739573
## 1560	377	25.51613	-3.68508354	3	89770460	89770482
## 1561	377	52.27864	0.99650088	3	89803339	89803361
## 1562	377	90.75000	-3.97514848	3	89977695	89977717
## 1563	377	46.57732	0.55022528	3	2065677	2065699
## 1564	377	46.57732	0.55022528	3	2065677	2065699
## 1565	377	50.36137	0.96369168	3	4086653	4086675
## 1566	377	40.25000	-4.35650674	3	4086653	4086675
## 1567	377	398.60109	3.42561678	3	4717197	4717219
## 1568	377	28.11111	-4.24710719	3	4717197	4717219
## 1569	377	43.50000	-4.16810556	3	4717197	4717219
## 1570	377	122.61308	2.67998673	3	5394979	5395001
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## 1572	377	40.71429	-4.23826952	3	6761651	6761673
## 1573	377	52.00000	-4.62848734	3	7014370	7014392
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## 1577	377	154.50000	-4.47885501	3	7014379	7014401
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## 1579	377	102.77273	-4.25931593	3	7014479	7014501
## 1580	377	120.87500	-4.36238357	3	7014479	7014501
## 1581	377	496.62500	-2.92934682	3	7015754	7015776
## 1582	377	201.86207	0.02121331	3	7015754	7015776
## 1583	377	29.60000	-4.44564741	3	7015754	7015776
## 1584	377	28.50000	-4.47382019	3	7015754	7015776
## 1585	377	446.54545	-4.42162423	3	7015755	7015777
## 1586	377	484.90000	-4.44016186	3	7015755	7015777
## 1587	377	70.60000	-4.58854756	3	7015756	7015778
## 1588	377	70.60000	-4.58854756	3	7015756	7015778
## 1589	377	21.98529	-3.22565628	3	7226637	7226659
## 1590	377	71.84000	1.67579489	3	7226637	7226659
## 1591	377	30.00000	-3.69486747	3	7908674	7908696
## 1592	377	250.32603	3.35161747	3	7908677	7908699
## 1593	377	55.95510	-0.38440161	3	8229444	8229466
## 1594	377	31.00000	-4.37370370	3	8229444	8229466
## 1595	377	20.20000	-4.52575216	3	15704730	15704752
## 1596	377	19.80000	-4.53191113	3	15704730	15704752
## 1597	377	28.64286	-4.46808022	3	17191208	17191230
## 1598	377	308.48641	3.87784557	3	28620628	28620650
## 1599	377	39.10000	-3.61677733	3	28672737	28672759
## 1600	377	75.49412	-1.25155138	3	28673351	28673373
## 1601	377	34.16667	-3.56811892	3	28673351	28673373
## 1602	377	49.66667	-4.43764432	3	28673351	28673373
## 1603	377	34.14286	-4.33800426	3	28673351	28673373
## 1604	377	60.09524	-3.82720192	3	28673351	28673373
## 1605	377	20.00000	-4.42619695	3	28673351	28673373
## 1606	377	20.33333	-4.62849745	3	28673351	28673373
## 1607	377	36.00000	-4.62582680	3	28860613	28860635
## 1608	377	95.73900	1.60988178	3	28950244	28950266
## 1609	377	55.33333	-4.05617719	3	28950244	28950266
## 1610	377	32.33333	-4.22107018	3	28950244	28950266
## 1611	377	220.04469	3.08956558	3	29110099	29110121
## 1612	377	41.73611	-1.53055755	3	31525070	31525092
## 1613	377	44.75000	-4.37445435	3	31525070	31525092
## 1614	377	40.57143	-4.13000731	3	39253602	39253624
## 1615	377	51.33333	-4.37556313	3	39258579	39258601
## 1616	377	230.69786	3.60014920	3	41994942	41994964
## 1617	377	31.90909	-3.58150247	3	41994942	41994964
## 1618	377	101.09877	-1.43010762	3	43013457	43013479
## 1619	377	30.00000	-4.50596311	3	43013458	43013480
## 1620	377	87.79630	-1.43949448	3	43013459	43013481
## 1621	377	41.36364	-3.91762343	3	44080921	44080943
## 1622	377	28.66667	-4.60891392	3	44176640	44176662
## 1623	377	26.41667	-4.42232896	3	44176640	44176662
## 1624	377	25.88889	-4.49913027	3	44176640	44176662
## 1625	377	31.66176	-2.34929489	3	44438713	44438735
## 1626	377	34.51724	-3.76390981	3	44868477	44868499
## 1627	377	25.66667	-4.63529217	3	45149512	45149534
## 1628	377	52.13782	0.84192788	3	47819097	47819119
## 1629	377	25.38095	-3.14305657	3	47819097	47819119
## 1630	377	574.84097	4.41005856	3	48849232	48849254

## 1631	377	40.00000	-4.42140391	3	48849232	48849254
## 1632	377	26.85714	-4.36063178	3	48849232	48849254
## 1633	377	66.16423	0.35869876	3	50472408	50472430
## 1634	377	87.03492	1.12483224	3	50551949	50551971
## 1635	377	152.22286	2.18567399	3	50554231	50554253
## 1636	377	61.00000	-4.32600386	3	55756145	55756167
## 1637	377	52.20000	-4.30577801	3	55756145	55756167
## 1638	377	140.50404	2.41076952	3	55773704	55773726
## 1639	377	140.50404	2.41076952	3	55773704	55773726
## 1640	377	22.75000	-4.56034244	3	57679492	57679514
## 1641	377	26.50000	-4.59675566	3	57679492	57679514
## 1642	377	21.25000	-4.62349057	3	57679501	57679523
## 1643	377	64.00000	-4.21483835	3	58085119	58085141
## 1644	377	175.61702	-3.55725549	3	58274650	58274672
## 1645	377	32.00000	-4.56858975	3	58280443	58280465
## 1646	377	168.57692	-2.36403734	3	58280457	58280479
## 1647	377	69.28000	-3.04776367	3	58280457	58280479
## 1648	377	7834.32295	6.13830144	3	58280457	58280479
## 1649	377	200.17708	-2.46975042	3	58280457	58280479
## 1650	377	31.64444	-3.68954150	3	58280457	58280479
## 1651	377	27.25000	-3.89325785	3	62674043	62674065
## 1652	377	76.98805	0.19196111	3	62674043	62674065
## 1653	377	30.42857	-3.61411338	3	63699111	63699133
## 1654	377	506.48930	3.91031219	3	63829474	63829496
## 1655	377	68.00000	-4.30585056	3	63829474	63829496
## 1656	377	43.28571	-4.12195419	3	63835018	63835040
## 1657	377	27.10714	-4.08051458	3	68528827	68528849
## 1658	377	64.00000	-4.16432605	3	73092114	73092136
## 1659	377	46.77612	0.97638867	3	73205533	73205555
## 1660	377	31.33645	-1.59552053	3	73242876	73242898
## 1661	377	33.91635	0.07754365	3	73242876	73242898
## 1662	377	57.86364	-2.02022739	3	74777244	74777266
## 1663	377	116.33333	2.22728261	3	75131103	75131125
## 1664	377	23.53846	-3.84597540	3	75239016	75239038
## 1665	377	85.10968	1.19379151	3	75246794	75246816
## 1666	377	28.29333	-2.38706727	3	75246794	75246816
## 1667	377	76.02041	1.71566316	3	75493471	75493493
## 1668	377	28.84615	-2.89744632	3	75493471	75493493
## 1669	377	29.33333	-4.57072921	3	75589587	75589609
## 1670	377	29.33333	-4.57072921	3	75589587	75589609
## 1671	377	49.40816	-2.74628023	3	75589601	75589623
## 1672	377	60.75000	-4.22208146	3	75589601	75589623
## 1673	377	42.83333	-4.32732622	3	75590143	75590165
## 1674	377	193.36842	2.25521706	3	75592444	75592466
## 1675	377	27.90909	-3.90195199	3	75592454	75592476
## 1676	377	218.94164	3.19632222	3	75706320	75706342
## 1677	377	291.02717	3.26581135	3	75843264	75843286
## 1678	377	35.33333	-4.48491087	3	75843264	75843286
## 1679	377	24.12500	-4.50978092	3	75843264	75843286
## 1680	377	63.16667	-3.98301632	3	75843283	75843305
## 1681	377	294.54960	3.75793279	3	75848660	75848682
## 1682	377	24.20253	-3.06422085	3	76001392	76001414
## 1683	377	50.16667	-4.16528926	3	76001392	76001414
## 1684	377	269.31565	3.62885081	3	76083748	76083770

## 1685	377	226.64171	3.46316334	3	76088921	76088943
## 1686	377	43.18605	-2.46928434	3	76567550	76567572
## 1687	377	89.00000	-4.60576685	3	76737005	76737027
## 1688	377	89.00000	-4.60576685	3	76737005	76737027
## 1689	377	34.42857	-4.27473851	3	78118773	78118795
## 1690	377	26.91429	-3.70789306	3	78865218	78865240
## 1691	377	179.09418	2.91572686	3	80376281	80376303
## 1692	377	26.50000	-3.60426425	3	81670514	81670536
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## 1694	377	20.66667	-4.61337715	3	81701510	81701532
## 1695	377	53.00000	-4.61269985	3	81701514	81701536
## 1696	377	33.40000	-4.59655632	3	81701515	81701537
## 1697	377	26.25000	-3.75608482	3	81701518	81701540
## 1698	377	95.66667	-4.62299375	3	81843395	81843417
## 1699	377	62.39339	1.21375915	3	82050004	82050026
## 1700	377	62.39339	1.21375915	3	82050004	82050026
## 1701	377	99.34835	1.81373238	3	82091067	82091089
## 1702	377	97.88961	1.30318984	3	82436647	82436669
## 1703	377	31.05000	-4.05160983	3	82572239	82572261
## 1704	377	59.27338	0.60994188	3	673074	673096
## 1705	377	80.88584	-0.22874664	3	706576	706598
## 1706	377	36.63636	-3.43262735	3	706576	706598
## 1707	377	175.44595	3.09159491	3	2771513	2771535
## 1708	377	152.93011	-0.77386465	3	9221832	9221854
## 1709	377	36.30769	-4.01789001	3	9221832	9221854
## 1710	377	89.41456	1.26467028	3	9221832	9221854
## 1711	377	36.00000	-4.08568093	3	9221832	9221854
## 1712	377	40.66667	-4.29243990	3	9478282	9478304
## 1713	377	65.33333	-4.61754237	3	9512968	9512990
## 1714	377	81.97929	1.40972338	3	9512971	9512993
## 1715	377	40.53175	-2.23148376	3	9512971	9512993
## 1716	377	45.16667	-4.20523184	3	9512971	9512993
## 1717	377	70.14286	-3.78549058	3	9512971	9512993
## 1718	377	21.33333	-4.55366668	3	9957557	9957579
## 1719	377	25.31579	-4.10058011	3	9957558	9957580
## 1720	377	29.66667	-4.62867781	3	9957558	9957580
## 1721	377	26.00000	-4.62497123	3	10539740	10539762
## 1722	377	26.52778	-3.71959697	3	10539741	10539763
## 1723	377	57.94118	0.65954955	3	10539742	10539764
## 1724	377	29.54545	-3.70430207	3	10539742	10539764
## 1725	377	71.50000	-4.10028763	3	10539742	10539764
## 1726	377	34.29167	-2.12608166	3	11905951	11905973
## 1727	377	51.40000	-4.24116079	3	12315334	12315356
## 1728	377	38.75000	-4.44958469	3	12317602	12317624
## 1729	377	28.83607	-3.27889162	3	49321375	49321397
## 1730	377	36.25000	-4.42627180	3	74635520	74635542
## 1731	377	66.75000	-4.18895304	3	77065698	77065720
## 1732	377	114.75000	-3.83544328	3	80037304	80037326
## 1733	377	111.75000	-3.86782020	3	80037304	80037326
## 1734	377	136.26455	-0.77872703	3	80037310	80037332
## 1735	377	89.75078	1.18044744	3	80037310	80037332
## 1736	377	117.20000	-4.57766350	3	583256	583278
## 1737	377	43.00000	-4.62907193	3	1038214	1038236
## 1738	377	39.00000	-4.63260300	3	1038217	1038239

## 1739	377	29.40000	-4.58843134	3	1038218	1038240
## 1740	377	50.13636	-3.48316650	3	1038220	1038242
## 1741	377	81.33333	-4.44628837	3	1038564	1038586
## 1742	377	33.55556	-4.18100206	3	1075966	1075988
## 1743	377	111.50000	-4.59205955	3	1086350	1086372
## 1744	377	50.38261	-2.35326512	3	1609597	1609619
## 1745	377	330.39118	3.65380411	3	2042868	2042890
## 1746	377	29.00000	-4.39780233	3	2042868	2042890
## 1747	377	41.33333	-4.63136967	3	2226658	2226680
## 1748	377	27.83333	-4.41814375	3	2233395	2233417
## 1749	377	4452.74510	1.98136866	3	2271365	2271387
## 1750	377	55.85294	-2.57202809	3	2271365	2271387
## 1751	377	34.61538	-4.02882715	3	2271365	2271387
## 1752	377	2909.76696	5.63027028	3	2271365	2271387
## 1753	377	23.53488	-3.56615913	3	2271365	2271387
## 1754	377	23.30233	-3.59410674	3	2271365	2271387
## 1755	377	57.59375	-2.79835145	3	2271365	2271387
## 1756	377	34.30769	-4.04114507	3	2271365	2271387
## 1757	377	21.40000	-4.54226515	3	2271365	2271387
## 1758	377	21.40000	-4.54226515	3	2271365	2271387
## 1759	377	45.00000	-4.46608071	3	2271365	2271387
## 1760	377	45.00000	-4.46608071	3	2271365	2271387
## 1761	377	35.71094	-2.28343905	3	2271371	2271393
## 1762	377	37.53731	-1.61041391	3	2271371	2271393
## 1763	377	104.00000	-4.62165546	3	2271380	2271402
## 1764	377	104.00000	-4.62165546	3	2271380	2271402
## 1765	377	108.00000	-4.61887831	3	2271381	2271403
## 1766	377	108.00000	-4.61887831	3	2271381	2271403
## 1767	377	127.57143	-4.53464912	3	2271385	2271407
## 1768	377	129.16667	-4.55557417	3	2271385	2271407
## 1769	377	41.00000	-4.62154549	3	2325156	2325178
## 1770	377	41.63889	-3.37412113	3	2326199	2326221
## 1771	377	45.92442	-1.76705262	3	3533274	3533296
## 1772	377	27.55000	-2.99341673	3	3542975	3542997
## 1773	377	25.55556	-4.38094695	3	3611746	3611768
## 1774	377	118.55043	2.02287401	3	5785789	5785811
## 1775	377	32.62963	-3.71532104	3	6822201	6822223
## 1776	377	218.05914	3.31365390	3	6822201	6822223
## 1777	377	74.40000	-4.58964718	3	7646031	7646053
## 1778	377	42.16667	-4.58134696	3	8486192	8486214
## 1779	377	93.33333	-4.61531418	3	8486195	8486217
## 1780	377	77.71429	-4.55072254	3	8486200	8486222
## 1781	377	20.00000	-4.58842970	3	10653506	10653528
## 1782	377	37.00000	-4.63087088	3	11447416	11447438
## 1783	377	1130.37067	5.28389992	3	11447419	11447441
## 1784	377	32.06667	-3.93439310	3	11447419	11447441
## 1785	377	529.19415	4.39869609	3	14467545	14467567
## 1786	377	29.83333	-3.72892409	3	14764367	14764389
## 1787	377	66.66667	-4.62620291	3	16132764	16132786
## 1788	377	268.16667	-4.54282376	3	16325449	16325471
## 1789	377	275.27654	3.29834405	3	17200619	17200641
## 1790	377	36.40000	-4.36123769	3	17200619	17200641
## 1791	377	35.71429	-4.11161131	3	18869388	18869410
## 1792	377	34.71429	-4.13448471	3	18869388	18869410

## 1793	377	1181.12102	-0.32084426	3	18913044	18913066
## 1794	377	694.11765	3.01072215	3	18913044	18913066
## 1795	377	30.58824	-4.16382154	3	18913044	18913066
## 1796	377	36.50000	-4.47714253	3	18928471	18928493
## 1797	377	24.34545	-3.28198867	3	19057373	19057395
## 1798	377	57.34615	-3.98711378	3	19336111	19336133
## 1799	377	187.82967	2.97370651	3	19498423	19498445
## 1800	377	71.93007	0.79442682	3	19627282	19627304
## 1801	377	61.52747	-2.17646064	3	19627282	19627304
## 1802	377	40.66667	-4.30230777	3	19627282	19627304
## 1803	377	267.90642	3.73699697	3	30008985	30009007
## 1804	377	65.66667	-3.94125471	3	30008985	30009007
## 1805	377	149.30385	0.57441912	3	33205226	33205248
## 1806	377	40.11111	-4.13697235	3	33205226	33205248
## 1807	377	116.00000	-4.59731097	3	34392525	34392547
## 1808	377	36.68750	-3.35702009	3	35015804	35015826
## 1809	377	183.86782	2.43223004	3	35015804	35015826
## 1810	377	28.03448	-3.97607541	3	35015804	35015826
## 1811	377	51.33333	-4.37419061	3	35015804	35015826
## 1812	377	20.91667	-4.00522307	3	35015804	35015826
## 1813	377	28.84848	-4.10055923	3	35015806	35015828
## 1814	377	140.01942	-2.57637579	3	35015807	35015829
## 1815	377	34.83871	-3.97550437	3	35015807	35015829
## 1816	377	66.00000	-4.62894155	3	35169543	35169565
## 1817	377	34.58000	-2.63669076	3	35169546	35169568
## 1818	377	1845.56499	6.32701604	3	35169546	35169568
## 1819	377	49.25000	-3.43126557	3	35169546	35169568
## 1820	377	262.00000	-4.60848376	3	35169638	35169660
## 1821	377	314.75000	-4.58380383	3	35169643	35169665
## 1822	377	48.00000	-4.36211347	3	35741221	35741243
## 1823	377	104.25490	-1.58482411	3	35741221	35741243
## 1824	377	42.40000	-4.39893274	3	35741221	35741243
## 1825	377	88.85646	-0.67253038	3	35741221	35741243
## 1826	377	53.83333	-4.34792644	3	35741221	35741243
## 1827	377	42.66667	-4.40514801	3	35741221	35741243
## 1828	377	52.66667	-4.36194608	3	35741221	35741243
## 1829	377	31.05263	-3.58368298	3	35741226	35741248
## 1830	377	87.05556	-2.07795061	3	35741226	35741248
## 1831	377	76.32530	-1.36516430	3	35741226	35741248
## 1832	377	30.37838	-3.68667403	3	35741226	35741248
## 1833	377	29.16667	-4.52862393	3	35903327	35903349
## 1834	377	26.66667	-4.61552362	3	35903330	35903352
## 1835	377	1924.48229	4.84883250	3	35903331	35903353
## 1836	377	68.87640	-2.64241831	3	35903331	35903353
## 1837	377	32.75000	-4.25182097	3	35903331	35903353
## 1838	377	34.55556	-3.77648416	3	35903331	35903353
## 1839	377	36.33333	-4.29250000	3	35903331	35903353
## 1840	377	46.50000	-4.33819466	3	35903331	35903353
## 1841	377	27.21429	-4.20270817	3	35903331	35903353
## 1842	377	21.66667	-4.59280745	3	35903331	35903353
## 1843	377	39.00000	-4.62612384	3	38264760	38264782
## 1844	377	153.28495	2.79230449	3	39389013	39389035
## 1845	377	48.50000	-4.28430793	3	39389013	39389035
## 1846	377	23.66667	-4.61554742	3	41383841	41383863

## 1847	377	22.00000	-4.62915294	3	41383841	41383863
## 1848	377	50.91538	-2.11934369	3	41383843	41383865
## 1849	377	49.45890	-1.32621549	3	41383843	41383865
## 1850	377	36.84810	-2.96679915	3	41383843	41383865
## 1851	377	36.32911	-3.06543438	3	41383843	41383865
## 1852	377	31.25000	-4.05495019	3	41383843	41383865
## 1853	377	30.75000	-4.07567640	3	41383843	41383865
## 1854	377	27.01351	-3.09487856	3	41424482	41424504
## 1855	377	26.58108	-3.17301276	3	41424482	41424504
## 1856	377	73.00000	-4.62348111	3	41898019	41898041
## 1857	377	39.68750	-3.79364835	3	42485433	42485455
## 1858	377	160.57222	2.83607047	3	44990375	44990397
## 1859	377	77.75000	-4.51174406	3	45473443	45473465
## 1860	377	31.65079	-2.86103636	3	45641746	45641768
## 1861	377	96.50425	2.23193417	3	47000311	47000333
## 1862	377	18.20000	-4.56322369	3	47262486	47262508
## 1863	377	64.63566	-2.07485092	3	47679301	47679323
## 1864	377	34.27778	-3.76552846	3	47679301	47679323
## 1865	377	44.15929	-0.69256824	3	47679301	47679323
## 1866	377	33.61111	-3.80082192	3	47679301	47679323
## 1867	377	65.50000	-3.99615686	3	47679301	47679323
## 1868	377	64.83333	-4.00847478	3	47679301	47679323
## 1869	377	56.43750	-2.48293111	3	48325971	48325993
## 1870	377	58.91331	1.00914041	3	48797331	48797353
## 1871	377	90.00000	-4.62068201	3	48873309	48873331
## 1872	377	132.11111	-4.48989673	3	48873315	48873337
## 1873	377	98.33333	-4.62255011	3	48873814	48873836
## 1874	377	307.33333	-4.46095643	3	48873818	48873840
## 1875	377	111.00000	-4.47602706	3	48873972	48873994
## 1876	377	179.33333	-4.61845046	3	48875722	48875744
## 1877	377	151.40000	-4.57801862	3	48875734	48875756
## 1878	377	466.33333	-4.60714983	3	48875736	48875758
## 1879	377	54.33333	-4.62764701	3	48875736	48875758
## 1880	377	92.29795	1.03721947	3	49461864	49461886
## 1881	377	47.00000	-4.07676599	3	49461864	49461886
## 1882	377	35.16667	-4.26128993	3	49461868	49461890
## 1883	377	92.29795	1.03721947	3	49461864	49461886
## 1884	377	47.00000	-4.07676599	3	49461864	49461886
## 1885	377	35.16667	-4.26128993	3	49461868	49461890
## 1886	377	18.33333	-4.63244311	3	49856532	49856554
## 1887	377	37.00000	-4.57210635	3	50382921	50382943
## 1888	377	41.00000	-4.63073944	3	50382921	50382943
## 1889	377	151.75000	-4.60193275	3	55669590	55669612
## 1890	377	32.53333	-4.08243261	3	57803889	57803911
## 1891	377	31.50000	-4.59489151	3	58253440	58253462
## 1892	377	31.50000	-4.59489151	3	58253440	58253462
## 1893	377	369.20000	-4.40240063	3	58393338	58393360
## 1894	377	987.44444	-4.43545642	3	58393338	58393360
## 1895	377	61.64706	-1.75802398	3	58393339	58393361
## 1896	377	5286.82933	7.91404979	3	58393339	58393361
## 1897	377	21.50000	-4.06994994	3	58393339	58393361
## 1898	377	18.00000	-4.60349643	3	58563277	58563299
## 1899	377	28.61290	-3.57740275	3	1375601	1375623
## 1900	377	134.44000	-3.64940718	3	1375601	1375623



## 1901	377	29.16129	-3.53883550	3	1375601	1375623
## 1902	377	138.15278	-0.14227090	3	1375601	1375623
## 1903	377	29.40000	-3.88137679	3	1375601	1375623
## 1904	377	28.68000	-3.93838955	3	1375601	1375623
## 1905	377	83.01146	1.61536921	3	2862034	2862056
## 1906	377	71.75000	-4.15078437	3	2862034	2862056
## 1907	377	23.00000	-4.60202262	3	3870310	3870332
## 1908	377	28.36364	-4.38137383	3	6119737	6119759
## 1909	377	205.67385	3.16532521	3	18542276	18542298
## 1910	377	80.00000	-4.05886199	3	25046870	25046892
## 1911	377	43.90000	-3.92311348	3	25288008	25288030
## 1912	377	32.80000	-3.88070762	3	35126373	35126395
## 1913	377	23.80000	-3.48535137	3	35126373	35126395
## 1914	377	154.91375	2.83791278	3	35126373	35126395
## 1915	377	32.45455	-4.04997811	3	35126373	35126395
## 1916	377	23.98824	-2.82000252	3	35126373	35126395
## 1917	377	50.21429	-3.28572385	3	35126373	35126395
## 1918	377	26.64286	-3.29692060	3	35126373	35126395
## 1919	377	1028.99468	5.44509525	3	35724720	35724742
## 1920	377	22.54545	-4.43174666	3	37870505	37870527
## 1921	377	21.25000	-4.61315760	3	38057510	38057532
## 1922	377	66.66667	-3.91473630	3	38057512	38057534
## 1923	377	39.28135	0.78940819	3	38057512	38057534
## 1924	377	36.64706	-3.74080308	3	38057512	38057534
## 1925	377	52.33333	-4.35558910	3	38057512	38057534
## 1926	377	62.00000	-4.48373992	3	44197273	44197295
## 1927	377	94.47123	2.24124615	3	47262426	47262448
## 1928	377	34.98438	-3.25348948	3	47262426	47262448
## 1929	377	59.00000	-4.34571354	3	47262426	47262448
## 1930	377	43.33333	-4.46747240	3	49910570	49910592
## 1931	377	40.60000	-3.98726797	3	56404102	56404124
## 1932	377	97.59799	-0.15705694	3	57407523	57407545
## 1933	377	205.95833	2.50830274	3	57407523	57407545
## 1934	377	31.70588	-3.98196294	3	57407523	57407545
## 1935	377	33.90909	-4.12280540	3	57407523	57407545
## 1936	377	32.85000	-3.83613389	3	58662972	58662994
## 1937	377	32.20000	-3.86421818	3	58662972	58662994
## 1938	377	25.83333	-4.53608314	3	58715285	58715307
## 1939	377	25.83333	-4.53608314	3	58715285	58715307
## 1940	377	21.50000	-4.59664122	3	58715286	58715308
## 1941	377	21.50000	-4.59664122	3	58715286	58715308
## 1942	377	24.33333	-4.59515921	3	58715639	58715661
## 1943	377	23.64815	-3.61578771	3	58904211	58904233
## 1944	377	182.66667	-4.61740780	3	58910960	58910982
## 1945	377	27.34783	-3.82815004	3	60067572	60067594
## 1946	377	28.80000	-3.58731265	3	60067572	60067594
## 1947	377	77.33333	-4.23319528	3	60067572	60067594
## 1948	377	58.75000	-4.34833052	3	62710102	62710124
## 1949	377	32.26667	-3.95174430	3	62905565	62905587
## 1950	377	33.33333	-4.54714379	3	62968031	62968053
## 1951	377	31.83333	-2.68220299	3	36146056	36146078
## 1952	377	49.66667	-4.41092978	3	38496840	38496862
## 1953	377	82.80000	-3.86798846	3	39181899	39181921
## 1954	377	29.74074	-3.83815081	3	43669977	43669999

## 1955	377	29.92308	-4.12705478	3	43747096	43747118
## 1956	377	37.12903	-3.96307541	3	43760036	43760058
## 1957	377	42.22222	-4.12662753	3	44865149	44865171
## 1958	377	24.92593	-4.01507055	3	44891886	44891908
## 1959	377	131.62983	2.57857447	3	46277715	46277737
## 1960	377	44.25000	-4.45562781	3	46548382	46548404
## 1961	377	44.25000	-4.45562781	3	46548382	46548404
## 1962	377	34.73494	-3.02373240	3	46562735	46562757
## 1963	377	46.66667	-4.62828268	3	17101974	17101996
## 1964	377	24.80000	-3.86219079	3	17101975	17101997
## 1965	377	88.17647	-2.73560177	3	17101976	17101998
## 1966	377	216.56140	2.50847062	3	17101976	17101998
## 1967	377	141.18085	1.11899331	3	17105571	17105593
## 1968	377	233.02695	3.12417698	3	17739486	17739508
## 1969	377	23.28000	-3.41052371	3	17739486	17739508
## 1970	377	87.91971	-1.71394715	3	17739486	17739508
## 1971	377	36.33333	-4.49986224	3	17739486	17739508
## 1972	377	25.40000	-4.55994587	3	17739486	17739508
## 1973	377	32.10194	-0.69145196	3	17822168	17822190
## 1974	377	28.49038	-1.86314189	3	17822168	17822190
## 1975	377	38.22222	-4.16185857	3	17822168	17822190
## 1976	377	87.48348	1.47338308	3	20992194	20992216
## 1977	377	24.25000	-4.62210925	3	21622639	21622661
## 1978	377	109.08767	2.23559308	3	24548071	24548093
## 1979	377	26.51064	-3.48810886	3	24548071	24548093
## 1980	377	25.26389	-3.16237776	3	24548071	24548093
## 1981	377	20.33333	-4.60416245	3	24574634	24574656
## 1982	377	11.66667	-4.64373403	3	24574634	24574656
## 1983	377	65.95745	-3.72180394	3	25768095	25768117
## 1984	377	173.95135	2.82122873	3	29792533	29792555
## 1985	377	173.95135	2.82122873	3	29792533	29792555
## 1986	377	143.88253	2.07417454	3	37299206	37299228
## 1987	377	31.00000	-3.99275747	3	37299206	37299228
## 1988	377	47.50000	-4.60855143	3	38735720	38735742
## 1989	377	47.50000	-4.60855143	3	38735720	38735742
## 1990	377	47.50000	-4.60855143	3	38735720	38735742
## 1991	377	78.98352	-1.46289017	3	39312982	39313004
## 1992	377	67.80290	1.71532447	3	40277979	40278001
## 1993	377	12.66667	-4.63517141	3	40407171	40407193
## 1994	377	154.93169	2.71672818	3	40407181	40407203
## 1995	377	24.66667	-4.21564378	3	41144927	41144949
## 1996	377	89.00000	-4.62205807	3	43162945	43162967
## 1997	377	53.25000	-4.60984721	3	43162953	43162975
## 1998	377	249.33333	-4.61745000	3	43162961	43162983
## 1999	377	25.28205	-3.53285299	3	44198586	44198608
## 2000	377	34.09333	-3.16483858	3	44207791	44207813
## 2001	377	121.56215	2.32117280	3	46676580	46676602
## 2002	377	21.83333	-4.51155713	3	50195870	50195892
## 2003	377	41.08333	-3.90256983	3	50250589	50250611
## 2004	377	40.75000	-3.91713708	3	50250589	50250611
## 2005	377	273.90116	2.85801498	3	50286285	50286307
## 2006	377	31.75556	-3.46809530	3	50286285	50286307
## 2007	377	36.84615	-4.01048740	3	50286285	50286307
## 2008	377	34.66667	-4.49259334	3	50286285	50286307

##	2009	377	66.33333	-4.30655806	3	50304484	50304506
##	2010	377	24.57143	-3.98253260	3	50571507	50571529
##	2011	377	24.85000	-4.00732442	3	50571507	50571529
##	2012	377	53.75000	-4.30550780	3	16858847	16858869
##	2013	377	438.98930	4.42411841	3	16858847	16858869
##	2014	377	20.25000	-4.56471568	3	16858847	16858869
##	2015	377	76.00000	-4.13629120	3	23671509	23671531
##	2016	377	267.11357	3.10175777	3	23671509	23671531
##	2017	377	34.00000	-4.03171244	3	23671509	23671531
##	2018	377	76.00000	-4.13629120	3	23671509	23671531
##	2019	377	267.11357	3.10175777	3	23671509	23671531
##	2020	377	34.00000	-4.03171244	3	23671509	23671531
##	2021	377	63.33333	-4.63147783	3	48577001	48577023
##	2022	377	35.25000	-4.61882785	3	48577003	48577025
##	2023	377	28.87500	-3.86828398	3	48577004	48577026
##	2024	377	26.75000	-4.01968512	3	48577006	48577028
##	2025	377	31.72727	-3.87619631	3	48577006	48577028
##	2026	377	1855.31565	6.06001008	3	48577006	48577028
##	2027	377	24.74074	-3.88350389	3	48577006	48577028
##	2028	377	24.83333	-4.56230963	3	48577006	48577028
##	2029	377	41.33333	-4.49173292	3	48577013	48577035
##	2030	377	63.33333	-4.63147783	3	48577001	48577023
##	2031	377	35.25000	-4.61882785	3	48577003	48577025
##	2032	377	28.87500	-3.86828398	3	48577004	48577026
##	2033	377	26.75000	-4.01968512	3	48577006	48577028
##	2034	377	31.72727	-3.87619631	3	48577006	48577028
##	2035	377	1855.31565	6.06001008	3	48577006	48577028
##	2036	377	24.74074	-3.88350389	3	48577006	48577028
##	2037	377	24.83333	-4.56230963	3	48577006	48577028
##	2038	377	41.33333	-4.49173292	3	48577013	48577035
##	2039	377	43.35294	-4.38123311	3	72186438	72186460
##	2040	377	54.39098	0.12678619	3	72186441	72186463
##	2041	377	29.92593	-3.67806962	3	72186441	72186463
##	2042	377	21.20000	-4.58155617	3	130495618	130495640
##	2043	377	19.84615	-4.42624008	3	130496035	130496057
##	2044	377	274.60743	3.68422060	3	153786447	153786469
##	2045	377	24.83333	-3.18326119	3	153786447	153786469
##	2046	377	54.83333	-4.08846434	3	153786447	153786469
##	2047	377	46.25000	-4.39402775	3	153905512	153905534
##	2048	377	128.10864	2.74090283	3	153962304	153962326
##	2049	377	29.58974	-3.53970441	3	153962304	153962326
##	2050	377	386.29348	3.85626702	3	154532278	154532300
##		snp_id	snp_pos	snp_ref	snp_alt	snp_pos_in_ss	
##	1	1:1402457_A/G	1402457	A	G	1	
##	2	1:1873952_G/A	1873952	G	A	0	
##	3	1:3496604_C/T	3496604	C	T	5	
##	4	1:6098935_G/A	6098935	G	A	8	
##	5	1:6098972_A/G	6098972	A	G	8	
##	6	1:13772212_C/T	13772212	C	T	0	
##	7	1:24907257_A/G	24907257	A	G	4	
##	8	1:26280632_C/T	26280632	C	T	6	
##	9	1:40980559_T/G	40980559	T	G	0	
##	10	1:42818787_A/G	42818787	A	G	3	
##	11	1:74733530_G/A	74733530	G	A	3	

## 12	1:90027467_G/A	90027467	G	A	5
## 13	1:90027467_G/A	90027467	G	A	4
## 14	1:111183591_A/G	111183591	A	G	6
## 15	1:112699500_T/G	112699500	T	G	4
## 16	1:159010160_A/G	159010160	A	G	6
## 17	1:159010160_A/G	159010160	A	G	1
## 18	1:159010160_A/G	159010160	A	G	1
## 19	1:167640711_A/G	167640711	A	G	1
## 20	1:167640711_A/G	167640711	A	G	1
## 21	1:171557431_G/A	171557431	G	A	7
## 22	1:173865467_G/A	173865467	G	A	2
## 23	1:173865467_G/A	173865467	G	A	2
## 24	1:173865467_G/A	173865467	G	A	2
## 25	1:203307925_G/A	203307925	G	A	4
## 26	1:207337251_G/A	207337251	G	A	3
## 27	1:209777415_C/G	209777415	C	G	3
## 28	1:230281014_A/G	230281014	A	G	6
## 29	2:269352_G/A	269352	G	A	7
## 30	2:9487551_A/G	9487551	A	G	6
## 31	2:10052418_G/A	10052418	G	A	6
## 32	2:10052418_G/A	10052418	G	A	5
## 33	2:10312019_G/A	10312019	G	A	8
## 34	2:20448450_G/T	20448450	G	T	6
## 35	2:20448450_G/T	20448450	G	T	2
## 36	2:28928115_C/G	28928115	C	G	3
## 37	2:63842598_G/A	63842598	G	A	3
## 38	2:68250816_T/C	68250816	T	C	3
## 39	2:68250816_T/C	68250816	T	C	3
## 40	2:68395782_G/A	68395782	G	A	3
## 41	2:73266175_T/C	73266175	T	C	8
## 42	2:74463251_C/T	74463251	C	T	3
## 43	2:99363864_T/A	99363864	T	A	4
## 44	2:101272844_A/G	101272844	A	G	8
## 45	2:119369177_G/A	119369177	G	A	3
## 46	2:119369181_G/A	119369181	G	A	7
## 47	2:135865011_A/G	135865011	A	G	4
## 48	2:152143823_T/A	152143823	T	A	2
## 49	2:159710719_T/C	159710719	T	C	8
## 50	2:159710719_T/C	159710719	T	C	8
## 51	2:169623015_G/T	169623015	G	T	4
## 52	2:181487053_A/G	181487053	A	G	7
## 53	2:181535259_A/G	181535259	A	G	3
## 54	2:208266644_G/A	208266644	G	A	3
## 55	2:218367084_C/T	218367084	C	T	4
## 56	2:223901177_G/A	223901177	G	A	0
## 57	2:231712493_A/C	231712493	A	C	4
## 58	2:240578353_G/A	240578353	G	A	4
## 59	3:9806365_G/C	9806365	G	C	1
## 60	3:9806365_G/C	9806365	G	C	1
## 61	3:11808333_A/C	11808333	A	C	4
## 62	3:11809513_G/A	11809513	G	A	2
## 63	3:11809513_G/A	11809513	G	A	2
## 64	3:11809513_G/A	11809513	G	A	2
## 65	3:41232581_C/G	41232581	C	G	3

## 66	3:41915974_T/G	41915974	T	G	3
## 67	3:42607109_C/A	42607109	C	A	5
## 68	3:47062162_C/T	47062162	C	T	5
## 69	3:47062162_C/T	47062162	C	T	5
## 70	3:47062162_C/T	47062162	C	T	5
## 71	3:50118035_T/G	50118035	T	G	5
## 72	3:52489389_C/T	52489389	C	T	8
## 73	3:52686064_A/C	52686064	A	C	7
## 74	3:53858614_T/G	53858614	T	G	6
## 75	3:113293950_G/A	113293950	G	A	4
## 76	3:125520031_C/T	125520031	C	T	5
## 77	3:125520031_C/T	125520031	C	T	5
## 78	3:128622161_T/C	128622161	T	C	3
## 79	3:128622161_T/C	128622161	T	C	3
## 80	3:129977111_T/C	129977111	T	C	4
## 81	3:129977111_T/C	129977111	T	C	3
## 82	3:151327458_C/G	151327458	C	G	6
## 83	3:170178769_A/T	170178769	A	T	2
## 84	3:170178769_A/T	170178769	A	T	2
## 85	3:180915697_G/A	180915697	G	A	3
## 86	3:194589630_G/A	194589630	G	A	6
## 87	4:991939_A/G	991939	A	G	1
## 88	4:8205356_A/G	8205356	A	G	3
## 89	4:13578908_A/G	13578908	A	G	2
## 90	4:48170249_G/A	48170249	G	A	7
## 91	4:68039366_A/G	68039366	A	G	6
## 92	4:68039366_A/G	68039366	A	G	6
## 93	4:73113791_C/A	73113791	C	A	5
## 94	4:73113791_C/A	73113791	C	A	5
## 95	4:78923853_C/A	78923853	C	A	2
## 96	4:78923853_C/A	78923853	C	A	2
## 97	4:78923853_C/A	78923853	C	A	2
## 98	4:79984586_T/C	79984586	T	C	1
## 99	4:80203670_C/G	80203670	C	G	8
## 100	4:123028401_G/A	123028401	G	A	8
## 101	4:138179218_C/T	138179218	C	T	7
## 102	4:145774504_A/C	145774504	A	C	4
## 103	4:184734017_C/T	184734017	C	T	7
## 104	5:475231_A/T	475231	A	T	7
## 105	5:6611644_A/T	6611644	A	T	6
## 106	5:10404781_G/A	10404781	G	A	2
## 107	5:37696680_T/C	37696680	T	C	8
## 108	5:56894704_G/A	56894704	G	A	3
## 109	5:62402032_C/T	62402032	C	T	2
## 110	5:127551877_G/A	127551877	G	A	3
## 111	5:127551877_G/A	127551877	G	A	3
## 112	5:160009192_T/C	160009192	T	C	1
## 113	5:170435831_G/A	170435831	G	A	2
## 114	5:170435837_T/C	170435837	T	C	8
## 115	5:176529270_A/C	176529270	A	C	2
## 116	6:2841322_C/T	2841322	C	T	6
## 117	6:36720229_A/C	36720229	A	C	7
## 118	6:36720229_A/C	36720229	A	C	4
## 119	6:42079688_A/G	42079688	A	G	7

## 120	6:44313075_C/T	44313075	C	T	0
## 121	6:111574657_T/C	111574657	T	C	1
## 122	6:116251808_C/G	116251808	C	G	5
## 123	6:116277630_G/A	116277630	G	A	3
## 124	6:119348462_C/T	119348462	C	T	5
## 125	6:119348462_C/T	119348462	C	T	5
## 126	6:119348462_C/T	119348462	C	T	5
## 127	6:119348462_C/T	119348462	C	T	5
## 128	6:119348462_C/T	119348462	C	T	5
## 129	6:119348462_C/T	119348462	C	T	5
## 130	6:119348462_C/T	119348462	C	T	5
## 131	6:153282682_G/C	153282682	G	C	8
## 132	6:153282682_G/C	153282682	G	C	3
## 133	6:153282682_G/C	153282682	G	C	3
## 134	6:159775311_A/G	159775311	A	G	3
## 135	6:159775311_A/G	159775311	A	G	0
## 136	7:12354348_A/C	12354348	A	C	4
## 137	7:21904104_T/C	21904104	T	C	0
## 138	7:21904104_T/C	21904104	T	C	0
## 139	7:21904104_T/C	21904104	T	C	0
## 140	7:30572998_A/G	30572998	A	G	4
## 141	7:30572998_A/G	30572998	A	G	4
## 142	7:88208827_A/G	88208827	A	G	8
## 143	7:127392545_A/C	127392545	A	C	3
## 144	7:135594730_G/A	135594730	G	A	3
## 145	7:135594730_G/A	135594730	G	A	3
## 146	7:152121937_G/T	152121937	G	T	0
## 147	8:19844490_G/C	19844490	G	C	7
## 148	8:19844490_G/C	19844490	G	C	7
## 149	8:20210652_T/G	20210652	T	G	8
## 150	8:23246995_G/T	23246995	G	T	3
## 151	8:23246995_G/T	23246995	G	T	3
## 152	8:23246996_T/C	23246996	T	C	4
## 153	8:23246996_T/C	23246996	T	C	4
## 154	8:47933959_T/C	47933959	T	C	0
## 155	8:47933959_T/C	47933959	T	C	0
## 156	8:94491576_A/T	94491576	A	T	4
## 157	8:98043209_T/C	98043209	T	C	3
## 158	8:103161054_C/T	103161054	C	T	0
## 159	8:130060577_A/C	130060577	A	C	4
## 160	8:130060577_A/C	130060577	A	C	4
## 161	8:133507196_T/C	133507196	T	C	3
## 162	8:141185745_A/G	141185745	A	G	6
## 163	8:142275403_T/C	142275403	T	C	0
## 164	8:144511903_G/A	144511903	G	A	7
## 165	9:420585_T/G	420585	T	G	4
## 166	9:420585_T/G	420585	T	G	4
## 167	9:420585_T/G	420585	T	G	4
## 168	9:433978_A/G	433978	A	G	5
## 169	9:35660993_A/G	35660993	A	G	3
## 170	9:35712006_G/A	35712006	G	A	7
## 171	9:35757196_T/C	35757196	T	C	1
## 172	9:78317808_A/T	78317808	A	T	6
## 173	9:78317808_A/T	78317808	A	T	6

## 174	9:94293901_A/C	94293901	A	C	8
## 175	9:129632867_T/A	129632867	T	A	4
## 176	9:131496845_C/T	131496845	C	T	5
## 177	9:133101589_C/T	133101589	C	T	6
## 178	10:3126239_A/C	3126239	A	C	6
## 179	10:5897471_G/T	5897471	G	T	3
## 180	10:7753948_A/G	7753948	A	G	2
## 181	10:7753948_A/G	7753948	A	G	2
## 182	10:18675911_A/G	18675911	A	G	0
## 183	10:21713952_T/C	21713952	T	C	8
## 184	10:21713952_T/C	21713952	T	C	4
## 185	10:21713952_T/C	21713952	T	C	4
## 186	10:48453298_A/G	48453298	A	G	0
## 187	10:48453298_A/G	48453298	A	G	0
## 188	10:48453298_A/G	48453298	A	G	0
## 189	10:48453298_A/G	48453298	A	G	0
## 190	10:71819460_C/T	71819460	C	T	1
## 191	10:71819460_C/T	71819460	C	T	1
## 192	10:71819460_C/T	71819460	C	T	1
## 193	10:71819460_C/T	71819460	C	T	1
## 194	10:78034315_C/A	78034315	C	A	3
## 195	10:79126842_G/C	79126842	G	C	5
## 196	10:89635671_T/C	89635671	T	C	1
## 197	10:99528590_C/A	99528590	C	A	6
## 198	10:100986746_C/T	100986746	C	T	3
## 199	10:100986746_C/T	100986746	C	T	3
## 200	10:100986746_C/T	100986746	C	T	3
## 201	10:102628792_C/T	102628792	C	T	0
## 202	10:109886247_C/T	109886247	C	T	7
## 203	10:109886247_C/T	109886247	C	T	7
## 204	10:109886247_C/T	109886247	C	T	5
## 205	10:129792036_T/A	129792036	T	A	4
## 206	10:133269306_C/T	133269306	C	T	5
## 207	10:133394957_G/A	133394957	G	A	3
## 208	10:133394957_G/A	133394957	G	A	3
## 209	10:133394959_A/G	133394959	A	G	5
## 210	10:133394959_A/G	133394959	A	G	5
## 211	11:824789_T/C	824789	T	C	8
## 212	11:874776_G/A	874776	G	A	7
## 213	11:10806814_C/A	10806814	C	A	0
## 214	11:10806814_C/A	10806814	C	A	0
## 215	11:10806814_C/A	10806814	C	A	0
## 216	11:10806814_C/A	10806814	C	A	0
## 217	11:10806814_C/A	10806814	C	A	0
## 218	11:34960522_T/C	34960522	T	C	6
## 219	11:62665330_C/A	62665330	C	A	0
## 220	11:64318313_A/G	64318313	A	G	3
## 221	11:65422908_G/T	65422908	G	T	6
## 222	11:65422908_G/T	65422908	G	T	5
## 223	11:65422908_G/T	65422908	G	T	3
## 224	11:65504361_C/T	65504361	C	T	5
## 225	11:65857091_A/C	65857091	A	C	4
## 226	11:66626916_C/T	66626916	C	T	5
## 227	11:66626916_C/T	66626916	C	T	5

## 228	11:67200126_T/A	67200126	T	A	5
## 229	11:67282821_G/A	67282821	G	A	5
## 230	11:67484706_G/T	67484706	G	T	5
## 231	11:69648142_G/A	69648142	G	A	2
## 232	11:95175494_G/T	95175494	G	T	2
## 233	11:117293049_C/A	117293049	C	A	1
## 234	11:117993398_G/A	117993398	G	A	8
## 235	11:122782972_C/G	122782972	C	G	7
## 236	11:125582418_A/G	125582418	A	G	0
## 237	12:6873241_C/T	6873241	C	T	1
## 238	12:6873241_C/T	6873241	C	T	1
## 239	12:6944199_A/G	6944199	A	G	8
## 240	12:6944199_A/G	6944199	A	G	7
## 241	12:10506971_A/G	10506971	A	G	8
## 242	12:10507177_C/T	10507177	C	T	5
## 243	12:27059458_C/G	27059458	C	G	0
## 244	12:27059458_C/G	27059458	C	G	0
## 245	12:53039702_C/T	53039702	C	T	3
## 246	12:53039702_C/T	53039702	C	T	2
## 247	12:57476865_A/G	57476865	A	G	0
## 248	12:57476865_A/G	57476865	A	G	0
## 249	12:57809594_T/A	57809594	T	A	3
## 250	12:76067365_C/T	76067365	C	T	0
## 251	12:76067365_C/T	76067365	C	T	0
## 252	12:76067365_C/T	76067365	C	T	0
## 253	12:76067365_C/T	76067365	C	T	0
## 254	12:76067365_C/T	76067365	C	T	0
## 255	12:76067365_C/T	76067365	C	T	0
## 256	12:101761122_A/G	101761122	A	G	1
## 257	12:101761122_A/G	101761122	A	G	1
## 258	12:103794745_A/G	103794745	A	G	7
## 259	12:104987967_A/G	104987967	A	G	1
## 260	12:120737135_C/T	120737135	C	T	2
## 261	12:121778130_A/G	121778130	A	G	5
## 262	12:121801702_A/G	121801702	A	G	1
## 263	12:121801702_A/G	121801702	A	G	1
## 264	12:121801702_A/G	121801702	A	G	1
## 265	12:121801702_A/G	121801702	A	G	1
## 266	12:123154383_G/A	123154383	G	A	7
## 267	12:123154383_G/A	123154383	G	A	7
## 268	13:40949804_A/T	40949804	A	T	4
## 269	13:40949804_A/T	40949804	A	T	4
## 270	13:40949804_A/T	40949804	A	T	4
## 271	13:40949804_A/T	40949804	A	T	4
## 272	13:40949804_A/T	40949804	A	T	4
## 273	13:43970436_C/T	43970436	C	T	4
## 274	13:43970436_C/T	43970436	C	T	4
## 275	13:43970436_C/T	43970436	C	T	4
## 276	13:52680161_A/G	52680161	A	G	8
## 277	14:24441004_C/A	24441004	C	A	1
## 278	14:24441670_G/A	24441670	G	A	2
## 279	14:24441767_T/G	24441767	T	G	2
## 280	14:24441767_T/G	24441767	T	G	2
## 281	14:24441768_T/A	24441768	T	A	3



## 282	14:24441768_T/A	24441768	T	A	3
## 283	14:60397860_A/G	60397860	A	G	6
## 284	14:60398181_G/A	60398181	G	A	4
## 285	14:73718214_A/G	73718214	A	G	4
## 286	14:92121194_A/G	92121194	A	G	4
## 287	14:92121194_A/G	92121194	A	G	4
## 288	14:100346740_T/C	100346740	T	C	0
## 289	14:103714107_C/T	103714107	C	T	8
## 290	15:66326004_A/G	66326004	A	G	4
## 291	15:68715317_T/G	68715317	T	G	8
## 292	15:74023958_T/G	74023958	T	G	4
## 293	15:74802732_G/A	74802732	G	A	5
## 294	15:89808343_G/A	89808343	G	A	3
## 295	15:90233143_T/C	90233143	T	C	6
## 296	15:92967373_A/G	92967373	A	G	7
## 297	15:101287650_C/T	101287650	C	T	0
## 298	16:1769647_G/T	1769647	G	T	8
## 299	16:2936232_G/T	2936232	G	T	4
## 300	16:4676450_C/G	4676450	C	G	0
## 301	16:9107334_T/A	9107334	T	A	8
## 302	16:9107334_T/A	9107334	T	A	8
## 303	16:30953619_A/G	30953619	A	G	5
## 304	16:30953619_A/G	30953619	A	G	5
## 305	16:30953619_A/G	30953619	A	G	3
## 306	16:30953619_A/G	30953619	A	G	3
## 307	16:71746582_G/A	71746582	G	A	0
## 308	16:71746582_G/A	71746582	G	A	0
## 309	16:84058218_G/A	84058218	G	A	6
## 310	16:84099052_C/G	84099052	C	G	5
## 311	16:85583337_A/T	85583337	A	T	0
## 312	16:88696743_G/A	88696743	G	A	2
## 313	16:88697153_T/C	88697153	T	C	4
## 314	16:89269936_C/T	89269936	C	T	5
## 315	17:7014479_T/C	7014479	T	C	8
## 316	17:7014479_T/C	7014479	T	C	8
## 317	17:7224399_T/C	7224399	T	C	8
## 318	17:7224399_T/C	7224399	T	C	8
## 319	17:29568510_T/C	29568510	T	C	4
## 320	17:29568510_T/C	29568510	T	C	4
## 321	17:40340068_G/A	40340068	G	A	3
## 322	17:44872440_G/A	44872440	G	A	0
## 323	17:44872440_G/A	44872440	G	A	0
## 324	17:44872440_G/A	44872440	G	A	0
## 325	17:44872440_G/A	44872440	G	A	0
## 326	17:46949349_T/G	46949349	T	G	4
## 327	17:46949349_T/G	46949349	T	G	4
## 328	17:46949349_T/G	46949349	T	G	4
## 329	17:46949349_T/G	46949349	T	G	4
## 330	17:46949349_T/G	46949349	T	G	4
## 331	17:58275537_C/A	58275537	C	A	1
## 332	17:58275537_C/A	58275537	C	A	1
## 333	17:58275537_C/A	58275537	C	A	1
## 334	17:58275537_C/A	58275537	C	A	1
## 335	17:58275537_C/A	58275537	C	A	1

## 336	17:58275537_C/A	58275537	C	A	1
## 337	17:58275537_C/A	58275537	C	A	1
## 338	17:58275537_C/A	58275537	C	A	1
## 339	17:58275537_C/A	58275537	C	A	1
## 340	17:58311566_T/C	58311566	T	C	1
## 341	17:67944489_C/G	67944489	C	G	7
## 342	17:73201609_G/A	73201609	G	A	3
## 343	17:75523332_C/T	75523332	C	T	5
## 344	17:75523332_C/T	75523332	C	T	0
## 345	17:75588744_C/T	75588744	C	T	7
## 346	17:75590246_T/G	75590246	T	G	5
## 347	17:75590683_T/C	75590683	T	C	4
## 348	17:75591703_A/G	75591703	A	G	4
## 349	17:75607005_T/C	75607005	T	C	4
## 350	17:75607005_T/C	75607005	T	C	4
## 351	17:75834915_C/T	75834915	C	T	1
## 352	17:75834915_C/T	75834915	C	T	1
## 353	17:76737920_C/T	76737920	C	T	5
## 354	17:76737920_C/T	76737920	C	T	5
## 355	17:77088953_G/A	77088953	G	A	6
## 356	17:77088953_G/A	77088953	G	A	6
## 357	17:77088953_G/A	77088953	G	A	5
## 358	17:77088953_G/A	77088953	G	A	5
## 359	17:77499758_T/C	77499758	T	C	3
## 360	17:81845557_G/A	81845557	G	A	2
## 361	17:81845557_G/A	81845557	G	A	2
## 362	17:81845557_G/A	81845557	G	A	2
## 363	17:82457439_C/T	82457439	C	T	7
## 364	18:3262786_C/T	3262786	C	T	0
## 365	18:35456771_T/C	35456771	T	C	1
## 366	18:35456771_T/C	35456771	T	C	1
## 367	18:35456771_T/C	35456771	T	C	1
## 368	18:63392121_G/A	63392121	G	A	7
## 369	18:80046509_A/G	80046509	A	G	5
## 370	19:1076064_T/C	1076064	T	C	0
## 371	19:1258288_C/T	1258288	C	T	5
## 372	19:7645717_C/G	7645717	C	G	5
## 373	19:7682559_G/A	7682559	G	A	4
## 374	19:7682559_G/A	7682559	G	A	4
## 375	19:8486210_T/C	8486210	T	C	5
## 376	19:9380138_C/T	9380138	C	T	1
## 377	19:9380138_C/T	9380138	C	T	1
## 378	19:9380138_C/T	9380138	C	T	1
## 379	19:9380138_C/T	9380138	C	T	1
## 380	19:12943967_G/T	12943967	G	T	4
## 381	19:14469516_A/G	14469516	A	G	1
## 382	19:14469516_A/G	14469516	A	G	1
## 383	19:14469516_A/G	14469516	A	G	1
## 384	19:16325451_T/C	16325451	T	C	6
## 385	19:17942531_T/C	17942531	T	C	4
## 386	19:18568569_C/G	18568569	C	G	4
## 387	19:23658023_G/A	23658023	G	A	0
## 388	19:35164248_T/C	35164248	T	C	5
## 389	19:35169643_T/C	35169643	T	C	7

## 390	19:36149867_T/C	36149867	T	C	7
## 391	19:36149867_T/C	36149867	T	C	4
## 392	19:36489468_T/C	36489468	T	C	0
## 393	19:39408027_C/T	39408027	C	T	8
## 394	19:39433489_T/C	39433489	T	C	1
## 395	19:41353016_G/A	41353016	G	A	8
## 396	19:45473460_T/C	45473460	T	C	8
## 397	19:45641767_G/T	45641767	G	T	3
## 398	19:45641767_G/T	45641767	G	T	3
## 399	19:46787394_G/T	46787394	G	T	0
## 400	19:46787394_G/T	46787394	G	T	0
## 401	19:47271315_C/T	47271315	C	T	5
## 402	19:49103423_G/A	49103423	G	A	7
## 403	19:49103423_G/A	49103423	G	A	7
## 404	19:49850954_C/T	49850954	C	T	1
## 405	20:1118651_T/C	1118651	T	C	4
## 406	20:1480295_G/A	1480295	G	A	7
## 407	20:4815057_T/C	4815057	T	C	1
## 408	20:35954443_C/G	35954443	C	G	1
## 409	20:45895143_C/T	45895143	C	T	7
## 410	20:49278705_A/G	49278705	A	G	0
## 411	20:62307832_A/G	62307832	A	G	6
## 412	20:63736025_A/G	63736025	A	G	3
## 413	20:63736025_A/G	63736025	A	G	3
## 414	21:43760051_T/G	43760051	T	G	6
## 415	21:46664716_A/G	46664716	A	G	5
## 416	22:35410383_T/C	35410383	T	C	4
## 417	22:37296970_G/A	37296970	G	A	0
## 418	22:45184278_G/C	45184278	G	C	8
## 419	22:46275422_G/C	46275422	G	C	3
## 420	X:13716420_T/C	13716420	T	C	7
## 421	X:80688070_T/C	80688070	T	C	7
## 422	1:948245_A/G	948245	A	G	15
## 423	1:1310624_A/G	1310624	A	G	10
## 424	1:2405838_C/T	2405838	C	T	6
## 425	1:3501396_G/A	3501396	G	A	13
## 426	1:6098935_G/A	6098935	G	A	18
## 427	1:6098972_A/G	6098972	A	G	19
## 428	1:6100503_A/G	6100503	A	G	12
## 429	1:6100810_G/A	6100810	G	A	12
## 430	1:6100810_G/A	6100810	G	A	1
## 431	1:6100816_A/G	6100816	A	G	18
## 432	1:6100816_A/G	6100816	A	G	7
## 433	1:6100898_A/G	6100898	A	G	7
## 434	1:6100898_A/G	6100898	A	G	2
## 435	1:6197766_T/C	6197766	T	C	12
## 436	1:6197766_T/C	6197766	T	C	12
## 437	1:6197766_T/C	6197766	T	C	12
## 438	1:6197766_T/C	6197766	T	C	12
## 439	1:6197766_T/C	6197766	T	C	12
## 440	1:6197766_T/C	6197766	T	C	12
## 441	1:6197766_T/C	6197766	T	C	12
## 442	1:6197766_T/C	6197766	T	C	12
## 443	1:6526010_C/T	6526010	C	T	9

## 444	1:6526010_C/T	6526010	C	T	9
## 445	1:7780866_G/C	7780866	G	C	21
## 446	1:15583400_A/G	15583400	A	G	7
## 447	1:19161162_T/C	19161162	T	C	17
## 448	1:19222849_G/C	19222849	G	C	17
## 449	1:19238156_C/G	19238156	C	G	19
## 450	1:19238156_C/G	19238156	C	G	19
## 451	1:20853688_C/T	20853688	C	T	13
## 452	1:21848107_A/G	21848107	A	G	16
## 453	1:22030724_G/T	22030724	G	T	17
## 454	1:26285551_A/G	26285551	A	G	12
## 455	1:32217361_C/A	32217361	C	A	12
## 456	1:32217361_C/A	32217361	C	A	12
## 457	1:36137342_C/T	36137342	C	T	22
## 458	1:36137342_C/T	36137342	C	T	22
## 459	1:36178084_C/A	36178084	C	A	16
## 460	1:37540758_A/G	37540758	A	G	5
## 461	1:37540758_A/G	37540758	A	G	5
## 462	1:37540758_A/G	37540758	A	G	5
## 463	1:37583951_C/G	37583951	C	G	20
## 464	1:39349471_T/A	39349471	T	A	13
## 465	1:39349471_T/A	39349471	T	A	13
## 466	1:39570014_C/T	39570014	C	T	14
## 467	1:39570014_C/T	39570014	C	T	14
## 468	1:39570014_C/T	39570014	C	T	14
## 469	1:40091984_G/A	40091984	G	A	5
## 470	1:40722675_G/A	40722675	G	A	19
## 471	1:41038523_G/T	41038523	G	T	19
## 472	1:52648431_C/T	52648431	C	T	0
## 473	1:53313756_C/G	53313756	C	G	15
## 474	1:53313756_C/G	53313756	C	G	15
## 475	1:54218183_C/G	54218183	C	G	19
## 476	1:58665639_G/T	58665639	G	T	10
## 477	1:58685269_G/A	58685269	G	A	20
## 478	1:81502478_C/G	81502478	C	G	19
## 479	1:81502478_C/G	81502478	C	G	19
## 480	1:89574728_G/A	89574728	G	A	1
## 481	1:90022904_C/T	90022904	C	T	9
## 482	1:92333388_C/T	92333388	C	T	17
## 483	1:92333388_C/T	92333388	C	T	17
## 484	1:92333388_C/T	92333388	C	T	17
## 485	1:93115467_T/C	93115467	T	C	17
## 486	1:93136668_A/G	93136668	A	G	18
## 487	1:93136668_A/G	93136668	A	G	18
## 488	1:99851033_A/G	99851033	A	G	18
## 489	1:110899207_C/T	110899207	C	T	20
## 490	1:110899207_C/T	110899207	C	T	16
## 491	1:111137593_C/T	111137593	C	T	9
## 492	1:111137593_C/T	111137593	C	T	9
## 493	1:111137593_C/T	111137593	C	T	9
## 494	1:111137593_C/T	111137593	C	T	9
## 495	1:111137593_C/T	111137593	C	T	9
## 496	1:111137593_C/T	111137593	C	T	9
## 497	1:111139685_G/C	111139685	G	C	21

## 498	1:113900413_C/G	113900413	C	G	15
## 499	1:113900413_C/G	113900413	C	G	15
## 500	1:113900413_C/G	113900413	C	G	15
## 501	1:113900413_C/G	113900413	C	G	15
## 502	1:117943395_G/A	117943395	G	A	19
## 503	1:150972065_A/G	150972065	A	G	10
## 504	1:151001835_G/A	151001835	G	A	8
## 505	1:151054339_C/T	151054339	C	T	20
## 506	1:151054339_C/T	151054339	C	T	20
## 507	1:151054339_C/T	151054339	C	T	20
## 508	1:151054339_C/T	151054339	C	T	20
## 509	1:151054339_C/T	151054339	C	T	20
## 510	1:151054339_C/T	151054339	C	T	20
## 511	1:154237014_T/C	154237014	T	C	10
## 512	1:154251182_C/T	154251182	C	T	11
## 513	1:155061096_A/G	155061096	A	G	2
## 514	1:156199819_A/G	156199819	A	G	4
## 515	1:156199819_A/G	156199819	A	G	4
## 516	1:156199819_A/G	156199819	A	G	4
## 517	1:159032511_T/C	159032511	T	C	7
## 518	1:159032511_T/C	159032511	T	C	7
## 519	1:159032511_T/C	159032511	T	C	1
## 520	1:165632229_G/A	165632229	G	A	19
## 521	1:171557431_G/A	171557431	G	A	12
## 522	1:171557431_G/A	171557431	G	A	9
## 523	1:171557431_G/A	171557431	G	A	5
## 524	1:171557431_G/A	171557431	G	A	3
## 525	1:179889309_G/A	179889309	G	A	19
## 526	1:179889309_G/A	179889309	G	A	19
## 527	1:179889309_G/A	179889309	G	A	16
## 528	1:179889309_G/A	179889309	G	A	16
## 529	1:181089482_C/G	181089482	C	G	19
## 530	1:202951176_T/C	202951176	T	C	14
## 531	1:202951176_T/C	202951176	T	C	14
## 532	1:202951176_T/C	202951176	T	C	14
## 533	1:202951176_T/C	202951176	T	C	14
## 534	1:203307870_C/G	203307870	C	G	21
## 535	1:203307870_C/G	203307870	C	G	19
## 536	1:203701633_A/G	203701633	A	G	18
## 537	1:206731119_C/T	206731119	C	T	1
## 538	1:206731119_C/T	206731119	C	T	1
## 539	1:206731119_C/T	206731119	C	T	1
## 540	1:207881244_A/C	207881244	A	C	22
## 541	1:209777336_T/C	209777336	T	C	10
## 542	1:209777336_T/C	209777336	T	C	4
## 543	1:209777336_T/C	209777336	T	C	4
## 544	1:209777336_T/C	209777336	T	C	1
## 545	1:222722878_T/C	222722878	T	C	12
## 546	1:223764139_T/C	223764139	T	C	9
## 547	1:224616085_C/T	224616085	C	T	6
## 548	1:224616098_T/C	224616098	T	C	19
## 549	1:230281086_T/A	230281086	T	A	0
## 550	1:236234322_T/C	236234322	T	C	22
## 551	1:236547997_A/T	236547997	A	T	12

## 552	1:236547997_A/T	236547997	A	T	5
## 553	1:236547997_A/T	236547997	A	T	5
## 554	1:244970812_A/C	244970812	A	C	18
## 555	1:247202128_A/G	247202128	A	G	17
## 556	2:9587528_C/T	9587528	C	T	21
## 557	2:9587528_C/T	9587528	C	T	21
## 558	2:11193868_T/G	11193868	T	G	13
## 559	2:15597356_C/A	15597356	C	A	1
## 560	2:19901602_G/A	19901602	G	A	12
## 561	2:24077870_C/G	24077870	C	G	14
## 562	2:26034380_C/G	26034380	C	G	12
## 563	2:26034381_G/C	26034381	G	C	13
## 564	2:27635125_T/A	27635125	T	A	5
## 565	2:27635125_T/A	27635125	T	A	5
## 566	2:28139135_C/A	28139135	C	A	7
## 567	2:28139147_G/A	28139147	G	A	19
## 568	2:28415491_G/C	28415491	G	C	2
## 569	2:30911073_G/C	30911073	G	C	16
## 570	2:30911073_G/C	30911073	G	C	16
## 571	2:32418369_C/G	32418369	C	G	19
## 572	2:36578878_G/A	36578878	G	A	15
## 573	2:37253106_A/G	37253106	A	G	7
## 574	2:39755424_A/T	39755424	A	T	17
## 575	2:47073890_A/G	47073890	A	G	13
## 576	2:53782182_C/T	53782182	C	T	15
## 577	2:53782182_C/T	53782182	C	T	15
## 578	2:55235399_T/G	55235399	T	G	9
## 579	2:55235399_T/G	55235399	T	G	6
## 580	2:55298081_T/A	55298081	T	A	21
## 581	2:55572855_C/G	55572855	C	G	19
## 582	2:65205930_C/T	65205930	C	T	17
## 583	2:65205930_C/T	65205930	C	T	1
## 584	2:68395820_G/C	68395820	G	C	0
## 585	2:74878671_A/G	74878671	A	G	3
## 586	2:85581614_A/G	85581614	A	G	12
## 587	2:85581614_A/G	85581614	A	G	5
## 588	2:85581748_C/T	85581748	C	T	22
## 589	2:85581748_C/T	85581748	C	T	14
## 590	2:85581748_C/T	85581748	C	T	14
## 591	2:85581748_C/T	85581748	C	T	14
## 592	2:85581748_C/T	85581748	C	T	14
## 593	2:85581748_C/T	85581748	C	T	14
## 594	2:85581859_T/C	85581859	T	C	20
## 595	2:85581859_T/C	85581859	T	C	16
## 596	2:85581859_T/C	85581859	T	C	7
## 597	2:112655221_A/G	112655221	A	G	5
## 598	2:113185326_A/C	113185326	A	C	15
## 599	2:113185332_G/C	113185332	G	C	21
## 600	2:117946902_T/G	117946902	T	G	22
## 601	2:117973997_G/A	117973997	G	A	5
## 602	2:126663355_A/G	126663355	A	G	19
## 603	2:126696088_A/C	126696088	A	C	16
## 604	2:126696088_A/C	126696088	A	C	13
## 605	2:126696088_A/C	126696088	A	C	12

## 606	2:126696088_A/C	126696088	A	C	9
## 607	2:127942176_G/C	127942176	G	C	14
## 608	2:128193533_A/G	128193533	A	G	12
## 609	2:143649840_C/T	143649840	C	T	18
## 610	2:148691616_G/A	148691616	G	A	15
## 611	2:151468275_G/C	151468275	G	C	5
## 612	2:152664268_A/G	152664268	A	G	18
## 613	2:159136188_C/T	159136188	C	T	14
## 614	2:159854534_G/C	159854534	G	C	1
## 615	2:159854534_G/C	159854534	G	C	1
## 616	2:170966066_C/T	170966066	C	T	2
## 617	2:179982016_G/T	179982016	G	T	21
## 618	2:181482345_T/C	181482345	T	C	5
## 619	2:181482345_T/C	181482345	T	C	5
## 620	2:181484139_G/C	181484139	G	C	4
## 621	2:181484139_G/C	181484139	G	C	3
## 622	2:190489765_T/C	190489765	T	C	17
## 623	2:197501064_C/T	197501064	C	T	10
## 624	2:197501064_C/T	197501064	C	T	10
## 625	2:197501064_C/T	197501064	C	T	10
## 626	2:197501064_C/T	197501064	C	T	10
## 627	2:197501064_C/T	197501064	C	T	6
## 628	2:197501064_C/T	197501064	C	T	6
## 629	2:201279205_T/C	201279205	T	C	9
## 630	2:201279205_T/C	201279205	T	C	9
## 631	2:201286440_A/G	201286440	A	G	1
## 632	2:208345103_G/A	208345103	G	A	12
## 633	2:208345103_G/A	208345103	G	A	12
## 634	2:215326810_C/T	215326810	C	T	8
## 635	2:215326810_C/T	215326810	C	T	8
## 636	2:216499816_C/T	216499816	C	T	4
## 637	2:218224893_C/G	218224893	C	G	6
## 638	2:219562673_G/A	219562673	G	A	1
## 639	2:231712493_A/C	231712493	A	C	15
## 640	2:231712493_A/C	231712493	A	C	12
## 641	2:239156792_C/G	239156792	C	G	21
## 642	2:239156792_C/G	239156792	C	G	21
## 643	2:239156792_C/G	239156792	C	G	21
## 644	2:241320199_G/A	241320199	G	A	16
## 645	2:241493289_G/C	241493289	G	C	16
## 646	3:3174270_A/G	3174270	A	G	11
## 647	3:3174270_A/G	3174270	A	G	11
## 648	3:9782967_C/T	9782967	C	T	6
## 649	3:9815687_T/A	9815687	T	A	12
## 650	3:9815687_T/A	9815687	T	A	12
## 651	3:14667411_A/G	14667411	A	G	7
## 652	3:15686316_A/G	15686316	A	G	9
## 653	3:15686316_A/G	15686316	A	G	9
## 654	3:15686316_A/G	15686316	A	G	9
## 655	3:30671634_T/A	30671634	T	A	19
## 656	3:30671634_T/A	30671634	T	A	16
## 657	3:30671634_T/A	30671634	T	A	16
## 658	3:30671634_T/A	30671634	T	A	16
## 659	3:30671634_T/A	30671634	T	A	16

## 660	3:30671634_T/A	30671634	T	A	16
## 661	3:33836016_T/A	33836016	T	A	15
## 662	3:33836016_T/A	33836016	T	A	12
## 663	3:33836016_T/A	33836016	T	A	9
## 664	3:33836134_G/A	33836134	G	A	13
## 665	3:37121548_G/A	37121548	G	A	14
## 666	3:37121548_G/A	37121548	G	A	14
## 667	3:39143757_A/G	39143757	A	G	7
## 668	3:39411281_A/G	39411281	A	G	5
## 669	3:39411566_C/T	39411566	C	T	16
## 670	3:39411669_G/A	39411669	G	A	22
## 671	3:39411669_G/A	39411669	G	A	19
## 672	3:39411669_G/A	39411669	G	A	18
## 673	3:39411669_G/A	39411669	G	A	17
## 674	3:39411669_G/A	39411669	G	A	17
## 675	3:39411669_G/A	39411669	G	A	14
## 676	3:39411669_G/A	39411669	G	A	3
## 677	3:46680029_A/G	46680029	A	G	5
## 678	3:48641538_T/G	48641538	T	G	16
## 679	3:48694528_A/G	48694528	A	G	5
## 680	3:49015352_T/A	49015352	T	A	2
## 681	3:49279905_T/C	49279905	T	C	16
## 682	3:49702074_G/C	49702074	G	C	11
## 683	3:49715570_T/G	49715570	T	G	15
## 684	3:50118035_T/G	50118035	T	G	11
## 685	3:52291743_A/G	52291743	A	G	16
## 686	3:52524888_A/T	52524888	A	T	9
## 687	3:52697582_T/C	52697582	T	C	15
## 688	3:53231565_C/T	53231565	C	T	17
## 689	3:53231565_C/T	53231565	C	T	17
## 690	3:53231565_C/T	53231565	C	T	17
## 691	3:53876091_A/G	53876091	A	G	13
## 692	3:53876091_A/G	53876091	A	G	13
## 693	3:53876091_A/G	53876091	A	G	13
## 694	3:56661032_T/A	56661032	T	A	17
## 695	3:56661032_T/A	56661032	T	A	17
## 696	3:56727687_G/A	56727687	G	A	1
## 697	3:57596651_A/G	57596651	A	G	21
## 698	3:58159536_G/A	58159536	G	A	2
## 699	3:58159536_G/A	58159536	G	A	2
## 700	3:67609616_G/A	67609616	G	A	22
## 701	3:67609616_G/A	67609616	G	A	22
## 702	3:67609616_G/A	67609616	G	A	22
## 703	3:98588852_T/G	98588852	T	G	0
## 704	3:98588852_T/G	98588852	T	G	0
## 705	3:101335951_T/C	101335951	T	C	21
## 706	3:108086943_C/T	108086943	C	T	11
## 707	3:111637236_G/C	111637236	G	C	15
## 708	3:111987657_A/G	111987657	A	G	5
## 709	3:112570525_G/A	112570525	G	A	5
## 710	3:121637521_A/C	121637521	A	C	19
## 711	3:121923201_A/T	121923201	A	T	15
## 712	3:123579768_T/C	123579768	T	C	1
## 713	3:124737895_G/C	124737895	G	C	0



## 714	3:126462228_A/C	126462228	A	C	10
## 715	3:126462228_A/C	126462228	A	C	10
## 716	3:126462228_A/C	126462228	A	C	10
## 717	3:128908178_A/G	128908178	A	G	13
## 718	3:129976695_C/T	129976695	C	T	17
## 719	3:129976695_C/T	129976695	C	T	17
## 720	3:129976695_C/T	129976695	C	T	16
## 721	3:129976695_C/T	129976695	C	T	16
## 722	3:129976695_C/T	129976695	C	T	8
## 723	3:132718123_A/G	132718123	A	G	8
## 724	3:132718123_A/G	132718123	A	G	8
## 725	3:132718123_A/G	132718123	A	G	8
## 726	3:132718123_A/G	132718123	A	G	8
## 727	3:146541195_C/T	146541195	C	T	17
## 728	3:152839183_T/C	152839183	T	C	9
## 729	3:172184244_G/C	172184244	G	C	19
## 730	3:179375201_C/T	179375201	C	T	1
## 731	3:180609616_A/G	180609616	A	G	6
## 732	3:183636220_G/A	183636220	G	A	19
## 733	3:183636220_G/A	183636220	G	A	19
## 734	3:183643468_T/C	183643468	T	C	10
## 735	3:183643468_T/C	183643468	T	C	8
## 736	3:183643468_T/C	183643468	T	C	8
## 737	3:183643468_T/C	183643468	T	C	8
## 738	3:183643468_T/C	183643468	T	C	8
## 739	3:183643468_T/C	183643468	T	C	8
## 740	3:183643468_T/C	183643468	T	C	8
## 741	3:184171549_A/T	184171549	A	T	2
## 742	3:184178853_T/C	184178853	T	C	16
## 743	3:184178853_T/C	184178853	T	C	16
## 744	3:184178853_T/C	184178853	T	C	16
## 745	3:193659935_A/C	193659935	A	C	19
## 746	3:194497918_A/T	194497918	A	T	0
## 747	3:196233053_T/C	196233053	T	C	10
## 748	3:197830764_C/T	197830764	C	T	14
## 749	4:1744089_A/C	1744089	A	C	17
## 750	4:1744502_G/T	1744502	G	T	4
## 751	4:3520212_T/A	3520212	T	A	21
## 752	4:5016975_G/A	5016975	G	A	13
## 753	4:5745189_C/T	5745189	C	T	5
## 754	4:5745189_C/T	5745189	C	T	5
## 755	4:5828687_T/C	5828687	T	C	21
## 756	4:8219331_G/A	8219331	G	A	16
## 757	4:11372710_A/C	11372710	A	C	12
## 758	4:15715698_G/A	15715698	G	A	11
## 759	4:15715698_G/A	15715698	G	A	11
## 760	4:15715698_G/A	15715698	G	A	10
## 761	4:15715698_G/A	15715698	G	A	0
## 762	4:17623586_G/C	17623586	G	C	5
## 763	4:17623586_G/C	17623586	G	C	5
## 764	4:37635128_T/G	37635128	T	G	7
## 765	4:37635128_T/G	37635128	T	G	7
## 766	4:37635128_T/G	37635128	T	G	7
## 767	4:37635128_T/G	37635128	T	G	7

## 768	4:38060612_T/A	38060612	T	A	12
## 769	4:39062542_A/C	39062542	A	C	3
## 770	4:48145595_T/G	48145595	T	G	18
## 771	4:52863262_G/A	52863262	G	A	14
## 772	4:55396197_C/A	55396197	C	A	0
## 773	4:55396207_A/G	55396207	A	G	10
## 774	4:55396207_A/G	55396207	A	G	7
## 775	4:56384342_C/T	56384342	C	T	3
## 776	4:56985273_G/T	56985273	G	T	13
## 777	4:80203670_C/G	80203670	C	G	17
## 778	4:82428906_C/A	82428906	C	A	22
## 779	4:88597950_A/C	88597950	A	C	20
## 780	4:99062161_T/C	99062161	T	C	11
## 781	4:103120336_A/C	103120336	A	C	5
## 782	4:103120338_T/G	103120338	T	G	7
## 783	4:103120339_A/T	103120339	A	T	8
## 784	4:105422441_C/T	105422441	C	T	10
## 785	4:120062104_T/C	120062104	T	C	11
## 786	4:120062104_T/C	120062104	T	C	11
## 787	4:143215040_T/G	143215040	T	G	3
## 788	4:145124986_T/C	145124986	T	C	19
## 789	4:145124986_T/C	145124986	T	C	17
## 790	4:145124986_T/C	145124986	T	C	16
## 791	4:145124986_T/C	145124986	T	C	15
## 792	4:184389064_C/T	184389064	C	T	0
## 793	4:184648647_G/T	184648647	G	T	18
## 794	4:184648647_G/T	184648647	G	T	18
## 795	5:475231_A/T	475231	A	T	6
## 796	5:6605419_C/A	6605419	C	A	13
## 797	5:7897206_G/A	7897206	G	A	12
## 798	5:14290696_G/A	14290696	G	A	0
## 799	5:32087122_C/T	32087122	C	T	12
## 800	5:32087122_C/T	32087122	C	T	11
## 801	5:32788078_C/T	32788078	C	T	1
## 802	5:37696680_T/C	37696680	T	C	11
## 803	5:39372707_G/C	39372707	G	C	1
## 804	5:39372707_G/C	39372707	G	C	1
## 805	5:56883514_G/A	56883514	G	A	7
## 806	5:56937714_G/A	56937714	G	A	18
## 807	5:56937714_G/A	56937714	G	A	18
## 808	5:56937714_G/A	56937714	G	A	18
## 809	5:62373676_T/C	62373676	T	C	9
## 810	5:62373676_T/C	62373676	T	C	9
## 811	5:73502899_T/G	73502899	T	G	6
## 812	5:73502899_T/G	73502899	T	G	3
## 813	5:73502899_T/G	73502899	T	G	3
## 814	5:73502899_T/G	73502899	T	G	2
## 815	5:73502899_T/G	73502899	T	G	0
## 816	5:79447157_G/A	79447157	G	A	14
## 817	5:79685727_G/T	79685727	G	T	0
## 818	5:82276027_G/A	82276027	G	A	17
## 819	5:94870497_C/T	94870497	C	T	8
## 820	5:94870497_C/T	94870497	C	T	8
## 821	5:96786556_T/G	96786556	T	G	9

## 822	5:96786556_T/G	96786556	T	G	9
## 823	5:103263877_G/A	103263877	G	A	1
## 824	5:111737094_C/A	111737094	C	A	7
## 825	5:127554294_A/G	127554294	A	G	1
## 826	5:134161142_A/G	134161142	A	G	14
## 827	5:134161142_A/G	134161142	A	G	14
## 828	5:140561733_A/G	140561733	A	G	13
## 829	5:146485701_C/T	146485701	C	T	8
## 830	5:146485701_C/T	146485701	C	T	8
## 831	5:148423994_G/T	148423994	G	T	16
## 832	5:150444660_T/C	150444660	T	C	21
## 833	5:150446963_C/T	150446963	C	T	2
## 834	5:150446963_C/T	150446963	C	T	2
## 835	5:150446963_C/T	150446963	C	T	2
## 836	5:150446963_C/T	150446963	C	T	2
## 837	5:150446963_C/T	150446963	C	T	2
## 838	5:150446963_C/T	150446963	C	T	2
## 839	5:150521240_G/T	150521240	G	T	9
## 840	5:150757967_A/T	150757967	A	T	21
## 841	5:150757967_A/T	150757967	A	T	21
## 842	5:151027895_T/C	151027895	T	C	6
## 843	5:151155701_C/T	151155701	C	T	2
## 844	5:170034395_G/A	170034395	G	A	16
## 845	5:176527621_G/A	176527621	G	A	7
## 846	5:176531647_C/T	176531647	C	T	19
## 847	5:176531647_C/T	176531647	C	T	19
## 848	5:176912208_A/C	176912208	A	C	15
## 849	5:176912208_A/C	176912208	A	C	15
## 850	5:177509589_T/C	177509589	T	C	16
## 851	5:177509589_T/C	177509589	T	C	16
## 852	5:177509589_T/C	177509589	T	C	16
## 853	5:177509589_T/C	177509589	T	C	7
## 854	5:178231882_C/A	178231882	C	A	18
## 855	5:180569111_C/T	180569111	C	T	21
## 856	5:180569111_C/T	180569111	C	T	21
## 857	5:181233683_C/T	181233683	C	T	4
## 858	6:2768671_A/G	2768671	A	G	0
## 859	6:2834031_C/T	2834031	C	T	21
## 860	6:2834031_C/T	2834031	C	T	21
## 861	6:2834031_C/T	2834031	C	T	21
## 862	6:2837812_A/G	2837812	A	G	11
## 863	6:2838014_G/A	2838014	G	A	17
## 864	6:2838014_G/A	2838014	G	A	17
## 865	6:2838014_G/A	2838014	G	A	17
## 866	6:2838014_G/A	2838014	G	A	17
## 867	6:2838014_G/A	2838014	G	A	17
## 868	6:2838014_G/A	2838014	G	A	17
## 869	6:2838014_G/A	2838014	G	A	17
## 870	6:7888855_A/G	7888855	A	G	9
## 871	6:7888855_A/G	7888855	A	G	9
## 872	6:7888855_A/G	7888855	A	G	9
## 873	6:7888855_A/G	7888855	A	G	9
## 874	6:7888855_A/G	7888855	A	G	9
## 875	6:7888855_A/G	7888855	A	G	9

## 876	6:27467928_G/A	27467928	G	A	10
## 877	6:28129415_G/A	28129415	G	A	5
## 878	6:35835506_C/T	35835506	C	T	20
## 879	6:36718495_C/T	36718495	C	T	22
## 880	6:36718495_C/T	36718495	C	T	22
## 881	6:42208382_G/T	42208382	G	T	12
## 882	6:42214222_A/C	42214222	A	C	6
## 883	6:47576998_C/A	47576998	C	A	9
## 884	6:47576998_C/A	47576998	C	A	9
## 885	6:73518283_A/G	73518283	A	G	21
## 886	6:73518283_A/G	73518283	A	G	21
## 887	6:73519535_G/T	73519535	G	T	21
## 888	6:73519535_G/T	73519535	G	T	21
## 889	6:73519535_G/T	73519535	G	T	21
## 890	6:73519535_G/T	73519535	G	T	21
## 891	6:75259004_G/A	75259004	G	A	20
## 892	6:79208592_G/A	79208592	G	A	18
## 893	6:79208592_G/A	79208592	G	A	18
## 894	6:87230246_A/G	87230246	A	G	18
## 895	6:110962389_C/T	110962389	C	T	17
## 896	6:116277630_G/A	116277630	G	A	16
## 897	6:116277630_G/A	116277630	G	A	14
## 898	6:116277630_G/A	116277630	G	A	12
## 899	6:116278502_T/C	116278502	T	C	16
## 900	6:127285204_C/T	127285204	C	T	16
## 901	6:132459629_G/A	132459629	G	A	2
## 902	6:132814890_T/C	132814890	T	C	7
## 903	6:132817194_G/A	132817194	G	A	20
## 904	6:137869547_A/C	137869547	A	C	8
## 905	6:147310065_A/G	147310065	A	G	1
## 906	6:147310065_A/G	147310065	A	G	1
## 907	6:147310065_A/G	147310065	A	G	1
## 908	6:147345928_T/C	147345928	T	C	4
## 909	6:149410768_C/T	149410768	C	T	18
## 910	6:153282682_G/C	153282682	G	C	18
## 911	6:153282682_G/C	153282682	G	C	17
## 912	6:153282682_G/C	153282682	G	C	14
## 913	6:153282682_G/C	153282682	G	C	14
## 914	6:153282682_G/C	153282682	G	C	13
## 915	6:153282682_G/C	153282682	G	C	11
## 916	6:153282682_G/C	153282682	G	C	10
## 917	6:153282682_G/C	153282682	G	C	6
## 918	6:153282682_G/C	153282682	G	C	3
## 919	6:153282682_G/C	153282682	G	C	2
## 920	6:153282682_G/C	153282682	G	C	2
## 921	6:153282682_G/C	153282682	G	C	1
## 922	6:158627157_C/T	158627157	C	T	1
## 923	6:159778655_T/C	159778655	T	C	16
## 924	6:159786017_T/C	159786017	T	C	22
## 925	6:167000051_T/C	167000051	T	C	11
## 926	6:167000051_T/C	167000051	T	C	11
## 927	6:169663710_T/C	169663710	T	C	6
## 928	6:169718935_A/T	169718935	A	T	19
## 929	6:170583760_A/G	170583760	A	G	15

## 930	7:869713_T/C	869713	T	C	8
## 931	7:1535598_T/C	1535598	T	C	1
## 932	7:6388110_A/G	6388110	A	G	16
## 933	7:22822359_G/A	22822359	G	A	6
## 934	7:23698176_T/C	23698176	T	C	4
## 935	7:23698176_T/C	23698176	T	C	4
## 936	7:30562142_A/G	30562142	A	G	16
## 937	7:30562142_A/G	30562142	A	G	16
## 938	7:30633729_C/T	30633729	C	T	14
## 939	7:32558912_G/A	32558912	G	A	3
## 940	7:32575941_C/T	32575941	C	T	6
## 941	7:32575941_C/T	32575941	C	T	6
## 942	7:32888115_A/G	32888115	A	G	22
## 943	7:32888115_A/G	32888115	A	G	22
## 944	7:33097371_G/A	33097371	G	A	11
## 945	7:33097371_G/A	33097371	G	A	11
## 946	7:43619583_G/A	43619583	G	A	6
## 947	7:44122210_A/G	44122210	A	G	17
## 948	7:44801265_G/A	44801265	G	A	0
## 949	7:44801265_G/A	44801265	G	A	0
## 950	7:75984764_C/G	75984764	C	G	7
## 951	7:76048186_C/T	76048186	C	T	21
## 952	7:76048186_C/T	76048186	C	T	6
## 953	7:77696032_T/C	77696032	T	C	16
## 954	7:100153394_A/G	100153394	A	G	14
## 955	7:100153394_A/G	100153394	A	G	14
## 956	7:100153394_A/G	100153394	A	G	14
## 957	7:100153394_A/G	100153394	A	G	14
## 958	7:100153394_A/G	100153394	A	G	14
## 959	7:100888467_C/T	100888467	C	T	15
## 960	7:100888467_C/T	100888467	C	T	15
## 961	7:100888467_C/T	100888467	C	T	13
## 962	7:100888467_C/T	100888467	C	T	13
## 963	7:100888467_C/T	100888467	C	T	13
## 964	7:100888467_C/T	100888467	C	T	13
## 965	7:102467705_C/T	102467705	C	T	6
## 966	7:102467705_C/T	102467705	C	T	6
## 967	7:107905354_T/C	107905354	T	C	13
## 968	7:107924094_G/A	107924094	G	A	9
## 969	7:107924097_G/T	107924097	G	T	12
## 970	7:127377337_A/C	127377337	A	C	10
## 971	7:127377337_A/C	127377337	A	C	10
## 972	7:127377337_A/C	127377337	A	C	10
## 973	7:128092216_G/A	128092216	G	A	19
## 974	7:128092216_G/A	128092216	G	A	17
## 975	7:128092216_G/A	128092216	G	A	10
## 976	7:135207209_G/A	135207209	G	A	9
## 977	7:148790303_T/C	148790303	T	C	13
## 978	7:150442551_G/A	150442551	G	A	22
## 979	7:150442551_G/A	150442551	G	A	22
## 980	7:151064510_C/T	151064510	C	T	4
## 981	7:152145312_C/T	152145312	C	T	19
## 982	7:152145312_C/T	152145312	C	T	19
## 983	7:158737198_T/G	158737198	T	G	21

## 984	7:158737198_T/G	158737198	T	G	21
## 985	7:158737198_T/G	158737198	T	G	21
## 986	8:17935575_A/G	17935575	A	G	6
## 987	8:17935575_A/G	17935575	A	G	6
## 988	8:17935575_A/G	17935575	A	G	6
## 989	8:22102127_A/G	22102127	A	G	2
## 990	8:22102128_C/T	22102128	C	T	3
## 991	8:38138809_G/A	38138809	G	A	13
## 992	8:38138809_G/A	38138809	G	A	13
## 993	8:73292418_A/T	73292418	A	T	15
## 994	8:73292418_A/T	73292418	A	T	15
## 995	8:89946302_T/C	89946302	T	C	9
## 996	8:89946302_T/C	89946302	T	C	9
## 997	8:89980442_G/C	89980442	G	C	16
## 998	8:91078345_G/C	91078345	G	C	9
## 999	8:91078345_G/C	91078345	G	C	9
## 1000	8:98043683_T/C	98043683	T	C	15
## 1001	8:98043683_T/C	98043683	T	C	15
## 1002	8:98043686_T/C	98043686	T	C	18
## 1003	8:98043686_T/C	98043686	T	C	18
## 1004	8:102295782_T/C	102295782	T	C	2
## 1005	8:103219839_A/C	103219839	A	C	21
## 1006	8:103440125_G/A	103440125	G	A	9
## 1007	8:125433302_C/A	125433302	C	A	7
## 1008	8:125433302_C/A	125433302	C	A	6
## 1009	8:125433302_C/A	125433302	C	A	5
## 1010	8:125433302_C/A	125433302	C	A	5
## 1011	8:125433302_C/A	125433302	C	A	5
## 1012	8:130118679_A/T	130118679	A	T	6
## 1013	8:132845764_C/T	132845764	C	T	3
## 1014	8:133247931_G/A	133247931	G	A	7
## 1015	8:141185135_T/C	141185135	T	C	17
## 1016	8:141185135_T/C	141185135	T	C	16
## 1017	8:141185135_T/C	141185135	T	C	16
## 1018	8:141185135_T/C	141185135	T	C	16
## 1019	8:141185135_T/C	141185135	T	C	14
## 1020	8:141185136_T/C	141185136	T	C	18
## 1021	8:141185136_T/C	141185136	T	C	17
## 1022	8:141185136_T/C	141185136	T	C	17
## 1023	8:141185136_T/C	141185136	T	C	17
## 1024	8:141185136_T/C	141185136	T	C	15
## 1025	8:142273602_T/C	142273602	T	C	17
## 1026	8:142312721_A/T	142312721	A	T	19
## 1027	8:143309558_A/G	143309558	A	G	17
## 1028	8:143839107_G/A	143839107	G	A	9
## 1029	8:143936028_A/T	143936028	A	T	16
## 1030	8:144168288_G/A	144168288	G	A	13
## 1031	8:144514540_G/A	144514540	G	A	17
## 1032	9:4844507_G/T	4844507	G	T	2
## 1033	9:5720172_C/G	5720172	C	G	10
## 1034	9:5929167_T/C	5929167	T	C	10
## 1035	9:5929167_T/C	5929167	T	C	10
## 1036	9:5929167_T/C	5929167	T	C	10
## 1037	9:5929167_T/C	5929167	T	C	10

## 1038	9:5929167_T/C	5929167	T	C	10
## 1039	9:33047400_T/C	33047400	T	C	11
## 1040	9:35559216_C/T	35559216	C	T	10
## 1041	9:37426527_C/T	37426527	C	T	9
## 1042	9:72360220_T/C	72360220	T	C	1
## 1043	9:72360795_T/C	72360795	T	C	13
## 1044	9:72360795_T/C	72360795	T	C	10
## 1045	9:72360795_T/C	72360795	T	C	10
## 1046	9:72360795_T/C	72360795	T	C	10
## 1047	9:72360795_T/C	72360795	T	C	10
## 1048	9:72360795_T/C	72360795	T	C	10
## 1049	9:72360795_T/C	72360795	T	C	10
## 1050	9:89319872_A/G	89319872	A	G	15
## 1051	9:90877207_A/G	90877207	A	G	19
## 1052	9:94298303_G/A	94298303	G	A	0
## 1053	9:95476865_A/G	95476865	A	G	10
## 1054	9:95476865_A/G	95476865	A	G	10
## 1055	9:122998584_T/C	122998584	T	C	7
## 1056	9:128226337_C/T	128226337	C	T	11
## 1057	9:128332833_A/C	128332833	A	C	3
## 1058	9:128332833_A/C	128332833	A	C	3
## 1059	9:128485347_T/A	128485347	T	A	2
## 1060	9:128691841_C/T	128691841	C	T	6
## 1061	9:128691841_C/T	128691841	C	T	5
## 1062	9:128691841_C/T	128691841	C	T	3
## 1063	9:128691841_C/T	128691841	C	T	3
## 1064	9:128693624_C/T	128693624	C	T	6
## 1065	9:128720188_T/C	128720188	T	C	5
## 1066	9:128908640_T/C	128908640	T	C	10
## 1067	9:129148856_G/C	129148856	G	C	4
## 1068	9:129893248_C/T	129893248	C	T	12
## 1069	9:131496845_C/T	131496845	C	T	11
## 1070	9:131496845_C/T	131496845	C	T	8
## 1071	9:135504405_A/G	135504405	A	G	1
## 1072	9:135504405_A/G	135504405	A	G	0
## 1073	9:136218808_C/T	136218808	C	T	2
## 1074	9:136218808_C/T	136218808	C	T	2
## 1075	9:136356325_C/T	136356325	C	T	3
## 1076	9:136405221_G/C	136405221	G	C	21
## 1077	9:136474501_G/A	136474501	G	A	17
## 1078	9:136474501_G/A	136474501	G	A	17
## 1079	9:136664675_A/G	136664675	A	G	3
## 1080	9:136664675_A/G	136664675	A	G	3
## 1081	9:136664675_A/G	136664675	A	G	3
## 1082	9:136664675_A/G	136664675	A	G	3
## 1083	9:136664675_A/G	136664675	A	G	3
## 1084	9:136664675_A/G	136664675	A	G	3
## 1085	9:136664675_A/G	136664675	A	G	3
## 1086	9:136664675_A/G	136664675	A	G	0
## 1087	9:136664675_A/G	136664675	A	G	0
## 1088	9:136664675_A/G	136664675	A	G	0
## 1089	9:136664675_A/G	136664675	A	G	0
## 1090	9:136664675_A/G	136664675	A	G	0
## 1091	9:136672371_A/G	136672371	A	G	9

## 1092	10:1548061_T/C	1548061	T	C	0
## 1093	10:3129803_G/T	3129803	G	T	4
## 1094	10:3129803_G/T	3129803	G	T	4
## 1095	10:3129803_G/T	3129803	G	T	4
## 1096	10:3129803_G/T	3129803	G	T	4
## 1097	10:3129803_G/T	3129803	G	T	4
## 1098	10:3129803_G/T	3129803	G	T	4
## 1099	10:3129803_G/T	3129803	G	T	4
## 1100	10:3143606_T/C	3143606	T	C	19
## 1101	10:3143606_T/C	3143606	T	C	19
## 1102	10:3148073_A/G	3148073	A	G	12
## 1103	10:3148073_A/G	3148073	A	G	12
## 1104	10:3159948_C/T	3159948	C	T	14
## 1105	10:5639385_T/C	5639385	T	C	16
## 1106	10:5723674_C/T	5723674	C	T	17
## 1107	10:6233260_G/A	6233260	G	A	7
## 1108	10:12250455_A/G	12250455	A	G	19
## 1109	10:13638690_G/C	13638690	G	C	9
## 1110	10:13638690_G/C	13638690	G	C	9
## 1111	10:15112975_A/G	15112975	A	G	14
## 1112	10:21728616_A/G	21728616	A	G	4
## 1113	10:26550927_A/G	26550927	A	G	21
## 1114	10:29730973_G/A	29730973	G	A	13
## 1115	10:30442562_T/C	30442562	T	C	11
## 1116	10:31820501_A/G	31820501	A	G	15
## 1117	10:50266280_A/G	50266280	A	G	10
## 1118	10:68749117_T/C	68749117	T	C	1
## 1119	10:71755346_G/T	71755346	G	T	10
## 1120	10:73130691_T/A	73130691	T	A	8
## 1121	10:73240940_T/C	73240940	T	C	14
## 1122	10:73837531_T/A	73837531	T	A	22
## 1123	10:73837531_T/A	73837531	T	A	22
## 1124	10:80510092_C/G	80510092	C	G	6
## 1125	10:86970617_C/T	86970617	C	T	12
## 1126	10:91817867_A/G	91817867	A	G	3
## 1127	10:96527504_G/C	96527504	G	C	10
## 1128	10:96559746_A/T	96559746	A	T	12
## 1129	10:96559746_A/T	96559746	A	T	12
## 1130	10:97738477_G/A	97738477	G	A	20
## 1131	10:97738477_G/A	97738477	G	A	20
## 1132	10:97750311_G/T	97750311	G	T	0
## 1133	10:97750311_G/T	97750311	G	T	0
## 1134	10:98157454_C/T	98157454	C	T	11
## 1135	10:98159219_A/G	98159219	A	G	22
## 1136	10:100989630_C/T	100989630	C	T	6
## 1137	10:100989630_C/T	100989630	C	T	6
## 1138	10:100989630_C/T	100989630	C	T	6
## 1139	10:100990864_C/T	100990864	C	T	16
## 1140	10:100990864_C/T	100990864	C	T	15
## 1141	10:100990864_C/T	100990864	C	T	15
## 1142	10:100990866_T/C	100990866	T	C	18
## 1143	10:100990866_T/C	100990866	T	C	17
## 1144	10:100990866_T/C	100990866	T	C	17
## 1145	10:102369197_T/A	102369197	T	A	6



## 1146	10:102369197_T/A	102369197	T	A	6
## 1147	10:102369197_T/A	102369197	T	A	6
## 1148	10:102397970_C/T	102397970	C	T	9
## 1149	10:102484382_G/T	102484382	G	T	8
## 1150	10:102484382_G/T	102484382	G	T	8
## 1151	10:102812324_C/T	102812324	C	T	10
## 1152	10:104031597_C/T	104031597	C	T	6
## 1153	10:104031597_C/T	104031597	C	T	6
## 1154	10:110870443_G/A	110870443	G	A	7
## 1155	10:114833230_T/C	114833230	T	C	17
## 1156	10:119157933_G/A	119157933	G	A	8
## 1157	10:119169426_C/T	119169426	C	T	0
## 1158	10:120858636_G/C	120858636	G	C	13
## 1159	10:120858636_G/C	120858636	G	C	13
## 1160	10:120858636_G/C	120858636	G	C	13
## 1161	10:128056105_T/C	128056105	T	C	2
## 1162	10:128056105_T/C	128056105	T	C	2
## 1163	10:128084376_A/G	128084376	A	G	11
## 1164	10:128084435_A/G	128084435	A	G	4
## 1165	11:314207_C/G	314207	C	G	18
## 1166	11:802902_T/G	802902	T	G	13
## 1167	11:838542_C/T	838542	C	T	11
## 1168	11:838542_C/T	838542	C	T	9
## 1169	11:838542_C/T	838542	C	T	4
## 1170	11:865503_G/A	865503	G	A	10
## 1171	11:6604842_C/A	6604842	C	A	9
## 1172	11:8687342_A/G	8687342	A	G	13
## 1173	11:8687342_A/G	8687342	A	G	3
## 1174	11:8687347_G/C	8687347	G	C	18
## 1175	11:8687347_G/C	8687347	G	C	8
## 1176	11:9790689_G/A	9790689	G	A	8
## 1177	11:9790689_G/A	9790689	G	A	8
## 1178	11:9790689_G/A	9790689	G	A	8
## 1179	11:11332846_A/G	11332846	A	G	17
## 1180	11:11352736_T/G	11352736	T	G	2
## 1181	11:14494457_T/A	14494457	T	A	20
## 1182	11:14494457_T/A	14494457	T	A	20
## 1183	11:14494457_T/A	14494457	T	A	20
## 1184	11:14494457_T/A	14494457	T	A	20
## 1185	11:14494457_T/A	14494457	T	A	20
## 1186	11:14494457_T/A	14494457	T	A	20
## 1187	11:14494458_T/A	14494458	T	A	21
## 1188	11:14494458_T/A	14494458	T	A	21
## 1189	11:14494458_T/A	14494458	T	A	21
## 1190	11:14494458_T/A	14494458	T	A	21
## 1191	11:14494458_T/A	14494458	T	A	21
## 1192	11:14494458_T/A	14494458	T	A	21
## 1193	11:17317580_T/C	17317580	T	C	16
## 1194	11:17317580_T/C	17317580	T	C	16
## 1195	11:20407908_T/C	20407908	T	C	17
## 1196	11:20407908_T/C	20407908	T	C	17
## 1197	11:20407908_T/C	20407908	T	C	15
## 1198	11:33033248_T/G	33033248	T	G	6
## 1199	11:35176573_A/C	35176573	A	C	18

## 1200	11:35176573_A/C	35176573	A	C	18
## 1201	11:35176573_A/C	35176573	A	C	18
## 1202	11:35176573_A/C	35176573	A	C	18
## 1203	11:36272502_A/G	36272502	A	G	12
## 1204	11:44067611_G/A	44067611	G	A	3
## 1205	11:44067611_G/A	44067611	G	A	3
## 1206	11:44067611_G/A	44067611	G	A	3
## 1207	11:44938373_G/A	44938373	G	A	9
## 1208	11:44938373_G/A	44938373	G	A	9
## 1209	11:44938373_G/A	44938373	G	A	9
## 1210	11:44938373_G/A	44938373	G	A	9
## 1211	11:44938373_G/A	44938373	G	A	9
## 1212	11:45914484_G/A	45914484	G	A	18
## 1213	11:46662532_T/C	46662532	T	C	4
## 1214	11:47171816_T/G	47171816	T	G	18
## 1215	11:57426322_C/G	57426322	C	G	8
## 1216	11:57426322_C/G	57426322	C	G	8
## 1217	11:58624028_G/A	58624028	G	A	20
## 1218	11:58624028_G/A	58624028	G	A	18
## 1219	11:58624028_G/A	58624028	G	A	18
## 1220	11:58624028_G/A	58624028	G	A	14
## 1221	11:58624028_G/A	58624028	G	A	14
## 1222	11:60385090_T/A	60385090	T	A	22
## 1223	11:60385090_T/A	60385090	T	A	22
## 1224	11:60385090_T/A	60385090	T	A	22
## 1225	11:60898644_G/T	60898644	G	T	20
## 1226	11:61803311_T/C	61803311	T	C	18
## 1227	11:64243969_T/C	64243969	T	C	21
## 1228	11:64371448_C/A	64371448	C	A	11
## 1229	11:65181084_A/G	65181084	A	G	14
## 1230	11:65422908_G/T	65422908	G	T	0
## 1231	11:65504361_C/T	65504361	C	T	0
## 1232	11:65551794_T/C	65551794	T	C	13
## 1233	11:65613445_G/A	65613445	G	A	21
## 1234	11:65713320_A/G	65713320	A	G	19
## 1235	11:65856554_T/C	65856554	T	C	19
## 1236	11:66363265_A/G	66363265	A	G	16
## 1237	11:66367889_G/A	66367889	G	A	22
## 1238	11:67611367_C/G	67611367	C	G	3
## 1239	11:68556906_G/A	68556906	G	A	19
## 1240	11:68556906_G/A	68556906	G	A	16
## 1241	11:72023165_T/C	72023165	T	C	20
## 1242	11:72068622_A/G	72068622	A	G	7
## 1243	11:72696839_C/T	72696839	C	T	13
## 1244	11:72821663_C/T	72821663	C	T	19
## 1245	11:72821663_C/T	72821663	C	T	15
## 1246	11:74965749_G/C	74965749	G	C	7
## 1247	11:74965749_G/C	74965749	G	C	6
## 1248	11:85984563_A/G	85984563	A	G	18
## 1249	11:94416183_C/T	94416183	C	T	11
## 1250	11:94416183_C/T	94416183	C	T	11
## 1251	11:112227651_G/C	112227651	G	C	0
## 1252	11:117169081_G/A	117169081	G	A	4
## 1253	11:117396038_A/C	117396038	A	C	4

## 1254	11:117396038_A/C	117396038	A	C	1
## 1255	11:117998955_A/G	117998955	A	G	2
## 1256	11:119092106_C/A	119092106	C	A	2
## 1257	11:119092106_C/A	119092106	C	A	1
## 1258	11:119092106_C/A	119092106	C	A	1
## 1259	11:123738926_G/A	123738926	G	A	18
## 1260	11:123738926_G/A	123738926	G	A	18
## 1261	11:130120692_A/G	130120692	A	G	6
## 1262	11:130120692_A/G	130120692	A	G	6
## 1263	11:130120692_A/G	130120692	A	G	6
## 1264	11:130120692_A/G	130120692	A	G	6
## 1265	11:134160082_A/G	134160082	A	G	10
## 1266	12:564688_A/G	564688	A	G	9
## 1267	12:564688_A/G	564688	A	G	9
## 1268	12:6872998_C/T	6872998	C	T	14
## 1269	12:6872998_C/T	6872998	C	T	3
## 1270	12:6873013_C/T	6873013	C	T	18
## 1271	12:8941952_A/G	8941952	A	G	14
## 1272	12:10703620_C/T	10703620	C	T	3
## 1273	12:11893495_A/G	11893495	A	G	14
## 1274	12:14460492_T/C	14460492	T	C	17
## 1275	12:14460492_T/C	14460492	T	C	17
## 1276	12:16348883_C/G	16348883	C	G	9
## 1277	12:20552027_C/T	20552027	C	T	8
## 1278	12:20552027_C/T	20552027	C	T	8
## 1279	12:20552294_C/T	20552294	C	T	6
## 1280	12:20552294_C/T	20552294	C	T	6
## 1281	12:24815216_A/C	24815216	A	C	1
## 1282	12:26632063_G/C	26632063	G	C	6
## 1283	12:26632063_G/C	26632063	G	C	6
## 1284	12:26680722_T/C	26680722	T	C	1
## 1285	12:26701241_A/T	26701241	A	T	12
## 1286	12:26990646_C/T	26990646	C	T	21
## 1287	12:26990646_C/T	26990646	C	T	21
## 1288	12:26998958_C/T	26998958	C	T	13
## 1289	12:40536907_G/C	40536907	G	C	4
## 1290	12:42084611_G/T	42084611	G	T	20
## 1291	12:46364711_A/G	46364711	A	G	11
## 1292	12:46364711_A/G	46364711	A	G	11
## 1293	12:46364711_A/G	46364711	A	G	11
## 1294	12:46367344_G/A	46367344	G	A	6
## 1295	12:46367344_G/A	46367344	G	A	6
## 1296	12:49804097_G/A	49804097	G	A	19
## 1297	12:49804097_G/A	49804097	G	A	19
## 1298	12:50430492_C/G	50430492	C	G	17
## 1299	12:50430492_C/G	50430492	C	G	14
## 1300	12:54372607_G/A	54372607	G	A	18
## 1301	12:54411981_C/T	54411981	C	T	19
## 1302	12:54411981_C/T	54411981	C	T	19
## 1303	12:56421497_T/C	56421497	T	C	6
## 1304	12:57091124_G/A	57091124	G	A	19
## 1305	12:66129133_A/C	66129133	A	C	22
## 1306	12:66129133_A/C	66129133	A	C	22
## 1307	12:66129133_A/C	66129133	A	C	22

## 1308	12:68714668_A/G	68714668	A	G	7
## 1309	12:69585737_C/T	69585737	C	T	6
## 1310	12:74540854_G/A	74540854	G	A	7
## 1311	12:74540857_T/C	74540857	T	C	10
## 1312	12:75481796_C/T	75481796	C	T	4
## 1313	12:75506922_G/A	75506922	G	A	8
## 1314	12:76059522_T/C	76059522	T	C	10
## 1315	12:89351700_C/A	89351700	C	A	9
## 1316	12:89351700_C/A	89351700	C	A	7
## 1317	12:89351700_C/A	89351700	C	A	7
## 1318	12:96259723_C/T	96259723	C	T	12
## 1319	12:98549300_A/G	98549300	A	G	16
## 1320	12:103979822_G/A	103979822	G	A	13
## 1321	12:103979822_G/A	103979822	G	A	11
## 1322	12:103979822_G/A	103979822	G	A	11
## 1323	12:105052941_G/T	105052941	G	T	12
## 1324	12:105188467_A/G	105188467	A	G	22
## 1325	12:106971095_C/T	106971095	C	T	12
## 1326	12:106971095_C/T	106971095	C	T	10
## 1327	12:106971095_C/T	106971095	C	T	10
## 1328	12:106971095_C/T	106971095	C	T	10
## 1329	12:111890426_C/A	111890426	C	A	6
## 1330	12:111893513_G/A	111893513	G	A	19
## 1331	12:112022343_T/G	112022343	T	G	7
## 1332	12:120198746_C/A	120198746	C	A	21
## 1333	12:120198746_C/A	120198746	C	A	9
## 1334	12:120198746_C/A	120198746	C	A	9
## 1335	12:120198746_C/A	120198746	C	A	9
## 1336	12:120694088_C/T	120694088	C	T	17
## 1337	12:120694088_C/T	120694088	C	T	17
## 1338	12:123467484_T/C	123467484	T	C	19
## 1339	12:123467484_T/C	123467484	T	C	17
## 1340	12:123467484_T/C	123467484	T	C	17
## 1341	12:123618581_G/A	123618581	G	A	4
## 1342	12:130804562_C/G	130804562	C	G	21
## 1343	12:132582064_C/T	132582064	C	T	22
## 1344	12:132582064_C/T	132582064	C	T	22
## 1345	12:132632025_A/G	132632025	A	G	20
## 1346	12:132773307_A/G	132773307	A	G	15
## 1347	12:133038856_A/G	133038856	A	G	1
## 1348	13:19782801_T/A	19782801	T	A	12
## 1349	13:21148051_C/G	21148051	C	G	15
## 1350	13:21148051_C/G	21148051	C	G	14
## 1351	13:27441250_C/G	27441250	C	G	10
## 1352	13:27441250_C/G	27441250	C	G	3
## 1353	13:41331766_A/G	41331766	A	G	12
## 1354	13:41331766_A/G	41331766	A	G	11
## 1355	13:41463950_C/A	41463950	C	A	14
## 1356	13:43969090_G/A	43969090	G	A	11
## 1357	13:43969090_G/A	43969090	G	A	11
## 1358	13:43969090_G/A	43969090	G	A	11
## 1359	13:43969090_G/A	43969090	G	A	8
## 1360	13:43969090_G/A	43969090	G	A	8
## 1361	13:43969090_G/A	43969090	G	A	8

## 1362	13:43970046_C/G	43970046	C	G	7
## 1363	13:43970046_C/G	43970046	C	G	7
## 1364	13:43970046_C/G	43970046	C	G	7
## 1365	13:43970046_C/G	43970046	C	G	5
## 1366	13:43970046_C/G	43970046	C	G	5
## 1367	13:43970046_C/G	43970046	C	G	5
## 1368	13:43970373_A/T	43970373	A	T	18
## 1369	13:43970373_A/T	43970373	A	T	18
## 1370	13:43970614_A/G	43970614	A	G	8
## 1371	13:45503246_G/A	45503246	G	A	22
## 1372	13:46788343_C/T	46788343	C	T	10
## 1373	13:49178779_A/G	49178779	A	G	18
## 1374	13:49480210_G/T	49480210	G	T	11
## 1375	13:49480210_G/T	49480210	G	T	11
## 1376	13:49480210_G/T	49480210	G	T	11
## 1377	13:49533837_G/C	49533837	G	C	20
## 1378	13:49550485_G/A	49550485	G	A	0
## 1379	13:51771501_G/C	51771501	G	C	8
## 1380	13:75310154_G/A	75310154	G	A	5
## 1381	13:75310154_G/A	75310154	G	A	5
## 1382	13:99546970_C/T	99546970	C	T	5
## 1383	13:100668813_T/C	100668813	T	C	21
## 1384	13:100668813_T/C	100668813	T	C	21
## 1385	13:100668813_T/C	100668813	T	C	21
## 1386	13:102655010_G/A	102655010	G	A	5
## 1387	13:102655010_G/A	102655010	G	A	3
## 1388	13:112858141_C/T	112858141	C	T	16
## 1389	13:112881818_T/C	112881818	T	C	22
## 1390	13:112881818_T/C	112881818	T	C	22
## 1391	13:112881818_T/C	112881818	T	C	22
## 1392	13:112881818_T/C	112881818	T	C	22
## 1393	13:113233887_T/C	113233887	T	C	10
## 1394	13:113239415_G/A	113239415	G	A	2
## 1395	14:20892057_C/G	20892057	C	G	17
## 1396	14:21362953_G/A	21362953	G	A	8
## 1397	14:24434078_A/G	24434078	A	G	0
## 1398	14:24573862_T/G	24573862	T	G	14
## 1399	14:24573862_T/G	24573862	T	G	8
## 1400	14:35096650_A/T	35096650	A	T	19
## 1401	14:39181030_A/T	39181030	A	T	5
## 1402	14:39181030_A/T	39181030	A	T	5
## 1403	14:39181030_A/T	39181030	A	T	3
## 1404	14:43300468_G/A	43300468	G	A	10
## 1405	14:50512651_G/A	50512651	G	A	21
## 1406	14:51249470_T/G	51249470	T	G	22
## 1407	14:60097946_G/A	60097946	G	A	1
## 1408	14:60398012_T/G	60398012	T	G	15
## 1409	14:60398065_C/T	60398065	C	T	3
## 1410	14:60398075_A/G	60398075	A	G	13
## 1411	14:60398181_G/A	60398181	G	A	7
## 1412	14:60398192_A/G	60398192	A	G	18
## 1413	14:64952575_A/G	64952575	A	G	6
## 1414	14:64952575_A/G	64952575	A	G	6
## 1415	14:65054576_T/G	65054576	T	G	21

## 1416	14:65054576_T/G	65054576	T	G	21
## 1417	14:67650704_T/C	67650704	T	C	9
## 1418	14:72942975_C/G	72942975	C	G	1
## 1419	14:72958607_C/T	72958607	C	T	15
## 1420	14:74809376_C/G	74809376	C	G	16
## 1421	14:74898359_A/G	74898359	A	G	10
## 1422	14:74898359_A/G	74898359	A	G	10
## 1423	14:75766055_T/C	75766055	T	C	13
## 1424	14:76807503_C/A	76807503	C	A	3
## 1425	14:76807505_G/C	76807505	G	C	5
## 1426	14:76807506_G/A	76807506	G	A	6
## 1427	14:91225010_T/C	91225010	T	C	13
## 1428	14:100292165_G/A	100292165	G	A	4
## 1429	14:100374259_G/C	100374259	G	C	17
## 1430	14:100374259_G/C	100374259	G	C	17
## 1431	14:102086436_A/G	102086436	A	G	20
## 1432	14:102086438_T/G	102086438	T	G	22
## 1433	14:102930718_G/C	102930718	G	C	16
## 1434	14:103657542_T/A	103657542	T	A	16
## 1435	14:103657542_T/A	103657542	T	A	16
## 1436	14:103699590_T/C	103699590	T	C	16
## 1437	14:103712930_T/C	103712930	T	C	1
## 1438	14:103712930_T/C	103712930	T	C	1
## 1439	14:103712930_T/C	103712930	T	C	1
## 1440	14:103712930_T/C	103712930	T	C	1
## 1441	14:103714107_C/T	103714107	C	T	19
## 1442	14:104714369_A/C	104714369	A	C	9
## 1443	14:104719329_G/T	104719329	G	T	5
## 1444	14:105020421_C/T	105020421	C	T	3
## 1445	15:40412960_T/C	40412960	T	C	13
## 1446	15:41305482_C/A	41305482	C	A	22
## 1447	15:41305482_C/A	41305482	C	A	15
## 1448	15:42638693_A/T	42638693	A	T	13
## 1449	15:50359595_C/T	50359595	C	T	19
## 1450	15:50361941_G/A	50361941	G	A	12
## 1451	15:50361941_G/A	50361941	G	A	12
## 1452	15:50361941_G/A	50361941	G	A	12
## 1453	15:50361941_G/A	50361941	G	A	12
## 1454	15:55289150_T/C	55289150	T	C	6
## 1455	15:55289150_T/C	55289150	T	C	6
## 1456	15:57272275_A/G	57272275	A	G	21
## 1457	15:59678099_C/A	59678099	C	A	14
## 1458	15:59678099_C/A	59678099	C	A	14
## 1459	15:59678099_C/A	59678099	C	A	14
## 1460	15:59678099_C/A	59678099	C	A	14
## 1461	15:59678099_C/A	59678099	C	A	14
## 1462	15:59678099_C/A	59678099	C	A	14
## 1463	15:59689043_C/T	59689043	C	T	0
## 1464	15:60478651_C/A	60478651	C	A	16
## 1465	15:65534338_G/T	65534338	G	T	9
## 1466	15:66501142_C/T	66501142	C	T	10
## 1467	15:66655859_A/G	66655859	A	G	3
## 1468	15:66655866_G/C	66655866	G	C	10
## 1469	15:72345787_T/C	72345787	T	C	13

## 1470	15:72345787_T/C	72345787	T	C	13
## 1471	15:74846939_C/G	74846939	C	G	18
## 1472	15:74902149_C/T	74902149	C	T	22
## 1473	15:80158047_G/A	80158047	G	A	7
## 1474	15:80158047_G/A	80158047	G	A	7
## 1475	15:80158047_G/A	80158047	G	A	7
## 1476	15:80725003_T/C	80725003	T	C	1
## 1477	15:85746829_T/C	85746829	T	C	11
## 1478	15:85746829_T/C	85746829	T	C	9
## 1479	15:85746829_T/C	85746829	T	C	9
## 1480	15:89631724_C/T	89631724	C	T	16
## 1481	15:89793142_T/C	89793142	T	C	18
## 1482	15:89793142_T/C	89793142	T	C	18
## 1483	15:89793142_T/C	89793142	T	C	18
## 1484	15:90090184_A/G	90090184	A	G	19
## 1485	15:90885406_G/A	90885406	G	A	14
## 1486	15:90907294_G/A	90907294	G	A	5
## 1487	15:90907294_G/A	90907294	G	A	5
## 1488	15:90912872_T/C	90912872	T	C	15
## 1489	15:90912872_T/C	90912872	T	C	15
## 1490	15:92891995_C/T	92891995	C	T	11
## 1491	15:92891995_C/T	92891995	C	T	11
## 1492	15:92891995_C/T	92891995	C	T	11
## 1493	15:92891995_C/T	92891995	C	T	11
## 1494	15:92891995_C/T	92891995	C	T	11
## 1495	15:92891995_C/T	92891995	C	T	11
## 1496	15:92891995_C/T	92891995	C	T	11
## 1497	15:92891995_C/T	92891995	C	T	11
## 1498	15:92891995_C/T	92891995	C	T	11
## 1499	15:92891995_C/T	92891995	C	T	10
## 1500	15:92891995_C/T	92891995	C	T	10
## 1501	15:92967324_G/A	92967324	G	A	19
## 1502	15:92967324_G/A	92967324	G	A	19
## 1503	15:92967324_G/A	92967324	G	A	19
## 1504	16:55444_C/T	55444	C	T	5
## 1505	16:55444_C/T	55444	C	T	5
## 1506	16:552046_T/C	552046	T	C	15
## 1507	16:552595_G/C	552595	G	C	10
## 1508	16:724520_C/T	724520	C	T	13
## 1509	16:1314280_T/C	1314280	T	C	7
## 1510	16:1314280_T/C	1314280	T	C	7
## 1511	16:2936322_T/C	2936322	T	C	10
## 1512	16:3025700_C/T	3025700	C	T	13
## 1513	16:3025700_C/T	3025700	C	T	12
## 1514	16:3025700_C/T	3025700	C	T	8
## 1515	16:3140684_T/C	3140684	T	C	15
## 1516	16:3140684_T/C	3140684	T	C	15
## 1517	16:3674464_G/C	3674464	G	C	19
## 1518	16:3676159_A/G	3676159	A	G	16
## 1519	16:8646097_G/A	8646097	G	A	10
## 1520	16:8646097_G/A	8646097	G	A	9
## 1521	16:8646097_G/A	8646097	G	A	9
## 1522	16:8646097_G/A	8646097	G	A	9
## 1523	16:9107334_T/A	9107334	T	A	16

## 1524	16:9107334_T/A	9107334	T	A	16
## 1525	16:11677615_T/C	11677615	T	C	11
## 1526	16:24003290_C/T	24003290	C	T	10
## 1527	16:28210503_T/C	28210503	T	C	6
## 1528	16:28904503_C/T	28904503	C	T	1
## 1529	16:29668318_A/G	29668318	A	G	1
## 1530	16:29669068_A/C	29669068	A	C	2
## 1531	16:29810423_G/A	29810423	G	A	15
## 1532	16:29810423_G/A	29810423	G	A	15
## 1533	16:31131060_A/G	31131060	A	G	7
## 1534	16:50035401_C/G	50035401	C	G	4
## 1535	16:50106224_C/G	50106224	C	G	4
## 1536	16:50227824_C/T	50227824	C	T	5
## 1537	16:53314822_G/T	53314822	G	T	19
## 1538	16:58532400_G/A	58532400	G	A	7
## 1539	16:66565870_T/G	66565870	T	G	4
## 1540	16:66565870_T/G	66565870	T	G	4
## 1541	16:66565870_T/G	66565870	T	G	4
## 1542	16:66565870_T/G	66565870	T	G	4
## 1543	16:66565870_T/G	66565870	T	G	4
## 1544	16:66565870_T/G	66565870	T	G	4
## 1545	16:66565870_T/G	66565870	T	G	4
## 1546	16:66565870_T/G	66565870	T	G	4
## 1547	16:69343650_A/G	69343650	A	G	12
## 1548	16:69343650_A/G	69343650	A	G	12
## 1549	16:69343650_A/G	69343650	A	G	12
## 1550	16:70784856_A/G	70784856	A	G	20
## 1551	16:71746696_T/C	71746696	T	C	6
## 1552	16:71746696_T/C	71746696	T	C	6
## 1553	16:84180359_G/A	84180359	G	A	17
## 1554	16:84180359_G/A	84180359	G	A	17
## 1555	16:85670978_A/G	85670978	A	G	3
## 1556	16:88722069_A/G	88722069	A	G	5
## 1557	16:88722069_A/G	88722069	A	G	5
## 1558	16:89739569_G/A	89739569	G	A	18
## 1559	16:89739569_G/A	89739569	G	A	18
## 1560	16:89770464_T/C	89770464	T	C	4
## 1561	16:89803353_T/C	89803353	T	C	14
## 1562	16:89977705_C/G	89977705	C	G	10
## 1563	17:2065689_T/C	2065689	T	C	12
## 1564	17:2065692_A/G	2065692	A	G	15
## 1565	17:4086674_C/T	4086674	C	T	21
## 1566	17:4086674_C/T	4086674	C	T	21
## 1567	17:4717202_C/T	4717202	C	T	5
## 1568	17:4717202_C/T	4717202	C	T	5
## 1569	17:4717202_C/T	4717202	C	T	5
## 1570	17:5395000_C/T	5395000	C	T	21
## 1571	17:5395000_C/T	5395000	C	T	21
## 1572	17:6761653_A/G	6761653	A	G	2
## 1573	17:7014384_C/T	7014384	C	T	14
## 1574	17:7014384_C/T	7014384	C	T	14
## 1575	17:7014384_C/T	7014384	C	T	14
## 1576	17:7014384_C/T	7014384	C	T	14
## 1577	17:7014384_C/T	7014384	C	T	5



## 1578	17:7014384_C/T	7014384	C	T	5
## 1579	17:7014479_T/C	7014479	T	C	0
## 1580	17:7014479_T/C	7014479	T	C	0
## 1581	17:7015774_T/C	7015774	T	C	20
## 1582	17:7015774_T/C	7015774	T	C	20
## 1583	17:7015774_T/C	7015774	T	C	20
## 1584	17:7015774_T/C	7015774	T	C	20
## 1585	17:7015774_T/C	7015774	T	C	19
## 1586	17:7015774_T/C	7015774	T	C	19
## 1587	17:7015774_T/C	7015774	T	C	18
## 1588	17:7015774_T/C	7015774	T	C	18
## 1589	17:7226655_A/G	7226655	A	G	18
## 1590	17:7226655_A/G	7226655	A	G	18
## 1591	17:7908680_T/C	7908680	T	C	6
## 1592	17:7908680_T/C	7908680	T	C	3
## 1593	17:8229445_T/C	8229445	T	C	1
## 1594	17:8229445_T/C	8229445	T	C	1
## 1595	17:15704748_T/C	15704748	T	C	18
## 1596	17:15704748_T/C	15704748	T	C	18
## 1597	17:17191225_T/G	17191225	T	G	17
## 1598	17:28620634_G/A	28620634	G	A	6
## 1599	17:28672744_A/G	28672744	A	G	7
## 1600	17:28673373_A/G	28673373	A	G	22
## 1601	17:28673373_A/G	28673373	A	G	22
## 1602	17:28673373_A/G	28673373	A	G	22
## 1603	17:28673373_A/G	28673373	A	G	22
## 1604	17:28673373_A/G	28673373	A	G	22
## 1605	17:28673373_A/G	28673373	A	G	22
## 1606	17:28673373_A/G	28673373	A	G	22
## 1607	17:28860618_G/T	28860618	G	T	5
## 1608	17:28950265_G/A	28950265	G	A	21
## 1609	17:28950265_G/A	28950265	G	A	21
## 1610	17:28950265_G/A	28950265	G	A	21
## 1611	17:29110116_A/G	29110116	A	G	17
## 1612	17:31525074_A/G	31525074	A	G	4
## 1613	17:31525074_A/G	31525074	A	G	4
## 1614	17:39253612_G/A	39253612	G	A	10
## 1615	17:39258589_C/T	39258589	C	T	10
## 1616	17:41994952_G/A	41994952	G	A	10
## 1617	17:41994952_G/A	41994952	G	A	10
## 1618	17:43013476_A/G	43013476	A	G	19
## 1619	17:43013476_A/G	43013476	A	G	18
## 1620	17:43013476_A/G	43013476	A	G	17
## 1621	17:44080942_T/G	44080942	T	G	21
## 1622	17:44176643_C/G	44176643	C	G	3
## 1623	17:44176643_C/G	44176643	C	G	3
## 1624	17:44176643_C/G	44176643	C	G	3
## 1625	17:44438730_T/C	44438730	T	C	17
## 1626	17:44868499_A/G	44868499	A	G	22
## 1627	17:45149520_A/G	45149520	A	G	8
## 1628	17:47819112_T/C	47819112	T	C	15
## 1629	17:47819112_T/C	47819112	T	C	15
## 1630	17:48849253_G/A	48849253	G	A	21
## 1631	17:48849253_G/A	48849253	G	A	21

## 1632	17:48849253_G/A	48849253	G	A	21
## 1633	17:50472430_C/G	50472430	C	G	22
## 1634	17:50551951_G/C	50551951	G	C	2
## 1635	17:50554246_T/C	50554246	T	C	15
## 1636	17:55756162_T/C	55756162	T	C	17
## 1637	17:55756162_T/C	55756162	T	C	17
## 1638	17:55773710_A/G	55773710	A	G	6
## 1639	17:55773717_T/C	55773717	T	C	13
## 1640	17:57679505_T/C	57679505	T	C	13
## 1641	17:57679505_T/C	57679505	T	C	13
## 1642	17:57679505_T/C	57679505	T	C	4
## 1643	17:58085135_C/A	58085135	C	A	16
## 1644	17:58274663_T/C	58274663	T	C	13
## 1645	17:58280457_C/A	58280457	C	A	14
## 1646	17:58280457_C/A	58280457	C	A	0
## 1647	17:58280457_C/A	58280457	C	A	0
## 1648	17:58280457_C/A	58280457	C	A	0
## 1649	17:58280457_C/A	58280457	C	A	0
## 1650	17:58280457_C/A	58280457	C	A	0
## 1651	17:62674057_C/T	62674057	C	T	14
## 1652	17:62674057_C/T	62674057	C	T	14
## 1653	17:63699119_T/C	63699119	T	C	8
## 1654	17:63829486_T/C	63829486	T	C	12
## 1655	17:63829486_T/C	63829486	T	C	12
## 1656	17:63835032_C/T	63835032	C	T	14
## 1657	17:68528846_G/A	68528846	G	A	19
## 1658	17:73092126_A/G	73092126	A	G	12
## 1659	17:73205536_T/C	73205536	T	C	3
## 1660	17:73242877_C/T	73242877	C	T	1
## 1661	17:73242877_C/T	73242877	C	T	1
## 1662	17:74777248_G/A	74777248	G	A	4
## 1663	17:75131122_G/C	75131122	G	C	19
## 1664	17:75239018_C/T	75239018	C	T	2
## 1665	17:75246814_A/G	75246814	A	G	20
## 1666	17:75246814_A/G	75246814	A	G	20
## 1667	17:75493486_C/G	75493486	C	G	15
## 1668	17:75493486_C/G	75493486	C	G	15
## 1669	17:75589597_T/C	75589597	T	C	10
## 1670	17:75589605_T/C	75589605	T	C	18
## 1671	17:75589605_T/C	75589605	T	C	4
## 1672	17:75589605_T/C	75589605	T	C	4
## 1673	17:75590152_C/G	75590152	C	G	9
## 1674	17:75592461_A/G	75592461	A	G	17
## 1675	17:75592461_A/G	75592461	A	G	7
## 1676	17:75706322_T/C	75706322	T	C	2
## 1677	17:75843285_C/T	75843285	C	T	21
## 1678	17:75843285_C/T	75843285	C	T	21
## 1679	17:75843285_C/T	75843285	C	T	21
## 1680	17:75843285_C/T	75843285	C	T	2
## 1681	17:75848667_A/G	75848667	A	G	7
## 1682	17:76001393_G/A	76001393	G	A	1
## 1683	17:76001393_G/A	76001393	G	A	1
## 1684	17:76083757_A/G	76083757	A	G	9
## 1685	17:76088931_G/A	76088931	G	A	10

## 1686	17:76567571_A/G	76567571	A	G	21
## 1687	17:76737017_G/A	76737017	G	A	12
## 1688	17:76737017_G/A	76737017	G	A	12
## 1689	17:78118773_A/G	78118773	A	G	0
## 1690	17:78865230_C/G	78865230	C	G	12
## 1691	17:80376288_T/C	80376288	T	C	7
## 1692	17:81670522_G/A	81670522	G	A	8
## 1693	17:81670535_T/G	81670535	T	G	21
## 1694	17:81701522_C/T	81701522	C	T	12
## 1695	17:81701522_C/T	81701522	C	T	8
## 1696	17:81701522_C/T	81701522	C	T	7
## 1697	17:81701522_C/T	81701522	C	T	4
## 1698	17:81843412_C/A	81843412	C	A	17
## 1699	17:82050011_A/G	82050011	A	G	7
## 1700	17:82050021_G/T	82050021	G	T	17
## 1701	17:82091085_C/T	82091085	C	T	18
## 1702	17:82436654_G/T	82436654	G	T	7
## 1703	17:82572258_A/G	82572258	A	G	19
## 1704	18:673086_A/G	673086	A	G	12
## 1705	18:706589_A/G	706589	A	G	13
## 1706	18:706589_A/G	706589	A	G	13
## 1707	18:2771518_G/T	2771518	G	T	5
## 1708	18:9221842_A/G	9221842	A	G	10
## 1709	18:9221842_A/G	9221842	A	G	10
## 1710	18:9221842_A/G	9221842	A	G	10
## 1711	18:9221842_A/G	9221842	A	G	10
## 1712	18:9478295_T/G	9478295	T	G	13
## 1713	18:9512987_G/A	9512987	G	A	19
## 1714	18:9512987_G/A	9512987	G	A	16
## 1715	18:9512987_G/A	9512987	G	A	16
## 1716	18:9512987_G/A	9512987	G	A	16
## 1717	18:9512987_G/A	9512987	G	A	16
## 1718	18:9957576_C/A	9957576	C	A	19
## 1719	18:9957576_C/A	9957576	C	A	18
## 1720	18:9957576_C/A	9957576	C	A	18
## 1721	18:10539742_A/G	10539742	A	G	2
## 1722	18:10539742_A/G	10539742	A	G	1
## 1723	18:10539742_A/G	10539742	A	G	0
## 1724	18:10539742_A/G	10539742	A	G	0
## 1725	18:10539742_A/G	10539742	A	G	0
## 1726	18:11905954_C/T	11905954	C	T	3
## 1727	18:12315340_C/G	12315340	C	G	6
## 1728	18:12317618_C/A	12317618	C	A	16
## 1729	18:49321379_T/G	49321379	T	G	4
## 1730	18:74635526_T/C	74635526	T	C	6
## 1731	18:77065715_G/T	77065715	G	T	17
## 1732	18:80037321_C/T	80037321	C	T	17
## 1733	18:80037321_C/T	80037321	C	T	17
## 1734	18:80037321_C/T	80037321	C	T	11
## 1735	18:80037321_C/T	80037321	C	T	11
## 1736	19:583268_G/A	583268	G	A	12
## 1737	19:1038223_C/G	1038223	C	G	9
## 1738	19:1038223_C/G	1038223	C	G	6
## 1739	19:1038223_C/G	1038223	C	G	5

## 1740	19:1038223_C/G	1038223	C	G	3
## 1741	19:1038572_C/T	1038572	C	T	8
## 1742	19:1075980_A/G	1075980	A	G	14
## 1743	19:1086353_C/A	1086353	C	A	3
## 1744	19:1609617_A/T	1609617	A	T	20
## 1745	19:2042887_A/G	2042887	A	G	19
## 1746	19:2042887_A/G	2042887	A	G	19
## 1747	19:2226677_G/A	2226677	G	A	19
## 1748	19:2233411_C/T	2233411	C	T	16
## 1749	19:2271387_C/T	2271387	C	T	22
## 1750	19:2271387_C/T	2271387	C	T	22
## 1751	19:2271387_C/T	2271387	C	T	22
## 1752	19:2271387_C/T	2271387	C	T	22
## 1753	19:2271387_C/T	2271387	C	T	22
## 1754	19:2271387_C/T	2271387	C	T	22
## 1755	19:2271387_C/T	2271387	C	T	22
## 1756	19:2271387_C/T	2271387	C	T	22
## 1757	19:2271387_C/T	2271387	C	T	22
## 1758	19:2271387_C/T	2271387	C	T	22
## 1759	19:2271387_C/T	2271387	C	T	22
## 1760	19:2271387_C/T	2271387	C	T	22
## 1761	19:2271387_C/T	2271387	C	T	16
## 1762	19:2271387_C/T	2271387	C	T	16
## 1763	19:2271387_C/T	2271387	C	T	7
## 1764	19:2271387_C/T	2271387	C	T	7
## 1765	19:2271387_C/T	2271387	C	T	6
## 1766	19:2271387_C/T	2271387	C	T	6
## 1767	19:2271387_C/T	2271387	C	T	2
## 1768	19:2271387_C/T	2271387	C	T	2
## 1769	19:2325173_A/C	2325173	A	C	17
## 1770	19:2326216_C/T	2326216	C	T	17
## 1771	19:3533276_G/A	3533276	G	A	2
## 1772	19:3542985_C/T	3542985	C	T	10
## 1773	19:3611767_A/G	3611767	A	G	21
## 1774	19:5785800_C/T	5785800	C	T	11
## 1775	19:6822208_T/C	6822208	T	C	7
## 1776	19:6822208_T/C	6822208	T	C	7
## 1777	19:7646034_G/A	7646034	G	A	3
## 1778	19:8486210_T/C	8486210	T	C	18
## 1779	19:8486210_T/C	8486210	T	C	15
## 1780	19:8486210_T/C	8486210	T	C	10
## 1781	19:10653527_G/T	10653527	G	T	21
## 1782	19:11447425_T/C	11447425	T	C	9
## 1783	19:11447425_T/C	11447425	T	C	6
## 1784	19:11447425_T/C	11447425	T	C	6
## 1785	19:14467557_C/T	14467557	C	T	12
## 1786	19:14764389_G/T	14764389	G	T	22
## 1787	19:16132780_A/C	16132780	A	C	16
## 1788	19:16325451_T/C	16325451	T	C	2
## 1789	19:17200633_C/G	17200633	C	G	14
## 1790	19:17200633_C/G	17200633	C	G	14
## 1791	19:18869404_A/G	18869404	A	G	16
## 1792	19:18869404_A/G	18869404	A	G	16
## 1793	19:18913044_T/C	18913044	T	C	0

## 1794	19:18913044_T/C	18913044	T	C	0
## 1795	19:18913044_T/C	18913044	T	C	0
## 1796	19:18928489_T/C	18928489	T	C	18
## 1797	19:19057374_C/T	19057374	C	T	1
## 1798	19:19336127_G/A	19336127	G	A	16
## 1799	19:19498440_A/C	19498440	A	C	17
## 1800	19:19627288_G/A	19627288	G	A	6
## 1801	19:19627288_G/A	19627288	G	A	6
## 1802	19:19627288_G/A	19627288	G	A	6
## 1803	19:30009001_C/A	30009001	C	A	16
## 1804	19:30009001_C/A	30009001	C	A	16
## 1805	19:33205230_C/T	33205230	C	T	4
## 1806	19:33205230_C/T	33205230	C	T	4
## 1807	19:34392540_G/A	34392540	G	A	15
## 1808	19:35015825_G/A	35015825	G	A	21
## 1809	19:35015825_G/A	35015825	G	A	21
## 1810	19:35015825_G/A	35015825	G	A	21
## 1811	19:35015825_G/A	35015825	G	A	21
## 1812	19:35015825_G/A	35015825	G	A	21
## 1813	19:35015825_G/A	35015825	G	A	19
## 1814	19:35015825_G/A	35015825	G	A	18
## 1815	19:35015825_G/A	35015825	G	A	18
## 1816	19:35169547_T/C	35169547	T	C	4
## 1817	19:35169547_T/C	35169547	T	C	1
## 1818	19:35169547_T/C	35169547	T	C	1
## 1819	19:35169547_T/C	35169547	T	C	1
## 1820	19:35169643_T/C	35169643	T	C	5
## 1821	19:35169643_T/C	35169643	T	C	0
## 1822	19:35741235_G/A	35741235	G	A	14
## 1823	19:35741235_G/A	35741235	G	A	14
## 1824	19:35741235_G/A	35741235	G	A	14
## 1825	19:35741235_G/A	35741235	G	A	14
## 1826	19:35741235_G/A	35741235	G	A	14
## 1827	19:35741235_G/A	35741235	G	A	14
## 1828	19:35741235_G/A	35741235	G	A	14
## 1829	19:35741235_G/A	35741235	G	A	9
## 1830	19:35741235_G/A	35741235	G	A	9
## 1831	19:35741235_G/A	35741235	G	A	9
## 1832	19:35741235_G/A	35741235	G	A	9
## 1833	19:35903343_T/C	35903343	T	C	16
## 1834	19:35903343_T/C	35903343	T	C	13
## 1835	19:35903343_T/C	35903343	T	C	12
## 1836	19:35903343_T/C	35903343	T	C	12
## 1837	19:35903343_T/C	35903343	T	C	12
## 1838	19:35903343_T/C	35903343	T	C	12
## 1839	19:35903343_T/C	35903343	T	C	12
## 1840	19:35903343_T/C	35903343	T	C	12
## 1841	19:35903343_T/C	35903343	T	C	12
## 1842	19:35903343_T/C	35903343	T	C	12
## 1843	19:38264766_C/G	38264766	C	G	6
## 1844	19:39389023_A/G	39389023	A	G	10
## 1845	19:39389023_A/G	39389023	A	G	10
## 1846	19:41383843_T/C	41383843	T	C	2
## 1847	19:41383843_T/C	41383843	T	C	2

## 1848	19:41383843_T/C	41383843	T	C	0
## 1849	19:41383843_T/C	41383843	T	C	0
## 1850	19:41383843_T/C	41383843	T	C	0
## 1851	19:41383843_T/C	41383843	T	C	0
## 1852	19:41383843_T/C	41383843	T	C	0
## 1853	19:41383843_T/C	41383843	T	C	0
## 1854	19:41424491_A/G	41424491	A	G	9
## 1855	19:41424491_A/G	41424491	A	G	9
## 1856	19:41898021_G/T	41898021	G	T	2
## 1857	19:42485440_G/A	42485440	G	A	7
## 1858	19:44990377_C/G	44990377	C	G	2
## 1859	19:45473460_T/C	45473460	T	C	17
## 1860	19:45641767_G/T	45641767	G	T	21
## 1861	19:47000330_G/A	47000330	G	A	19
## 1862	19:47262490_G/T	47262490	G	T	4
## 1863	19:47679311_C/T	47679311	C	T	10
## 1864	19:47679311_C/T	47679311	C	T	10
## 1865	19:47679311_C/T	47679311	C	T	10
## 1866	19:47679311_C/T	47679311	C	T	10
## 1867	19:47679311_C/T	47679311	C	T	10
## 1868	19:47679311_C/T	47679311	C	T	10
## 1869	19:48325971_T/C	48325971	T	C	0
## 1870	19:48797348_T/C	48797348	T	C	17
## 1871	19:48873325_G/A	48873325	G	A	16
## 1872	19:48873325_G/A	48873325	G	A	10
## 1873	19:48873829_T/C	48873829	T	C	15
## 1874	19:48873829_T/C	48873829	T	C	11
## 1875	19:48873985_G/C	48873985	G	C	13
## 1876	19:48875737_A/G	48875737	A	G	15
## 1877	19:48875737_A/G	48875737	A	G	3
## 1878	19:48875737_A/G	48875737	A	G	1
## 1879	19:48875737_A/G	48875737	A	G	1
## 1880	19:49461874_G/A	49461874	G	A	10
## 1881	19:49461874_G/A	49461874	G	A	10
## 1882	19:49461874_G/A	49461874	G	A	6
## 1883	19:49461875_G/C	49461875	G	C	11
## 1884	19:49461875_G/C	49461875	G	C	11
## 1885	19:49461875_G/C	49461875	G	C	7
## 1886	19:49856551_C/T	49856551	C	T	19
## 1887	19:50382924_C/G	50382924	C	G	3
## 1888	19:50382924_C/G	50382924	C	G	3
## 1889	19:55669602_C/T	55669602	C	T	12
## 1890	19:57803905_G/A	57803905	G	A	16
## 1891	19:58253462_A/G	58253462	A	G	22
## 1892	19:58253462_A/G	58253462	A	G	22
## 1893	19:58393348_C/T	58393348	C	T	10
## 1894	19:58393348_C/T	58393348	C	T	10
## 1895	19:58393348_C/T	58393348	C	T	9
## 1896	19:58393348_C/T	58393348	C	T	9
## 1897	19:58393348_C/T	58393348	C	T	9
## 1898	19:58563286_T/C	58563286	T	C	9
## 1899	20:1375617_G/C	1375617	G	C	16
## 1900	20:1375617_G/C	1375617	G	C	16
## 1901	20:1375617_G/C	1375617	G	C	16

## 1902	20:1375617_G/C	1375617	G	C	16
## 1903	20:1375617_G/C	1375617	G	C	16
## 1904	20:1375617_G/C	1375617	G	C	16
## 1905	20:2862039_A/C	2862039	A	C	5
## 1906	20:2862039_A/C	2862039	A	C	5
## 1907	20:3870321_T/C	3870321	T	C	11
## 1908	20:6119744_G/A	6119744	G	A	7
## 1909	20:18542289_C/T	18542289	C	T	13
## 1910	20:25046890_G/A	25046890	G	A	20
## 1911	20:25288025_C/T	25288025	C	T	17
## 1912	20:35126384_G/A	35126384	G	A	11
## 1913	20:35126384_G/A	35126384	G	A	11
## 1914	20:35126384_G/A	35126384	G	A	11
## 1915	20:35126384_G/A	35126384	G	A	11
## 1916	20:35126384_G/A	35126384	G	A	11
## 1917	20:35126384_G/A	35126384	G	A	11
## 1918	20:35126384_G/A	35126384	G	A	11
## 1919	20:35724736_A/G	35724736	A	G	16
## 1920	20:37870525_G/A	37870525	G	A	20
## 1921	20:38057513_T/C	38057513	T	C	3
## 1922	20:38057513_T/C	38057513	T	C	1
## 1923	20:38057513_T/C	38057513	T	C	1
## 1924	20:38057513_T/C	38057513	T	C	1
## 1925	20:38057513_T/C	38057513	T	C	1
## 1926	20:44197289_C/T	44197289	C	T	16
## 1927	20:47262445_T/C	47262445	T	C	19
## 1928	20:47262445_T/C	47262445	T	C	19
## 1929	20:47262445_T/C	47262445	T	C	19
## 1930	20:49910570_T/A	49910570	T	A	0
## 1931	20:56404115_C/T	56404115	C	T	13
## 1932	20:57407523_T/C	57407523	T	C	0
## 1933	20:57407523_T/C	57407523	T	C	0
## 1934	20:57407523_T/C	57407523	T	C	0
## 1935	20:57407523_T/C	57407523	T	C	0
## 1936	20:58662982_A/G	58662982	A	G	10
## 1937	20:58662982_A/G	58662982	A	G	10
## 1938	20:58715291_C/G	58715291	C	G	6
## 1939	20:58715291_C/G	58715291	C	G	6
## 1940	20:58715291_C/G	58715291	C	G	5
## 1941	20:58715291_C/G	58715291	C	G	5
## 1942	20:58715649_T/C	58715649	T	C	10
## 1943	20:58904221_C/T	58904221	C	T	10
## 1944	20:58910965_G/A	58910965	G	A	5
## 1945	20:60067580_A/G	60067580	A	G	8
## 1946	20:60067580_A/G	60067580	A	G	8
## 1947	20:60067580_A/G	60067580	A	G	8
## 1948	20:62710110_C/T	62710110	C	T	8
## 1949	20:62905586_G/A	62905586	G	A	21
## 1950	20:62968036_C/T	62968036	C	T	5
## 1951	21:36146064_A/G	36146064	A	G	8
## 1952	21:38496857_A/G	38496857	A	G	17
## 1953	21:39181919_T/C	39181919	T	C	20
## 1954	21:43669996_G/A	43669996	G	A	19
## 1955	21:43747098_G/A	43747098	G	A	2

## 1956	21:43760051_T/G	43760051	T	G	15
## 1957	21:44865159_G/A	44865159	G	A	10
## 1958	21:44891898_A/G	44891898	A	G	12
## 1959	21:46277736_A/G	46277736	A	G	21
## 1960	21:46548391_T/G	46548391	T	G	9
## 1961	21:46548394_G/A	46548394	G	A	12
## 1962	21:46562739_G/A	46562739	G	A	4
## 1963	22:17101987_G/T	17101987	G	T	13
## 1964	22:17101987_G/T	17101987	G	T	12
## 1965	22:17101987_G/T	17101987	G	T	11
## 1966	22:17101987_G/T	17101987	G	T	11
## 1967	22:17105581_C/T	17105581	C	T	10
## 1968	22:17739497_A/G	17739497	A	G	11
## 1969	22:17739497_A/G	17739497	A	G	11
## 1970	22:17739497_A/G	17739497	A	G	11
## 1971	22:17739497_A/G	17739497	A	G	11
## 1972	22:17739497_A/G	17739497	A	G	11
## 1973	22:17822179_G/A	17822179	G	A	11
## 1974	22:17822179_G/A	17822179	G	A	11
## 1975	22:17822179_G/A	17822179	G	A	11
## 1976	22:20992196_T/C	20992196	T	C	2
## 1977	22:21622645_T/C	21622645	T	C	6
## 1978	22:24548085_C/T	24548085	C	T	14
## 1979	22:24548085_C/T	24548085	C	T	14
## 1980	22:24548085_C/T	24548085	C	T	14
## 1981	22:24574641_A/G	24574641	A	G	7
## 1982	22:24574641_A/G	24574641	A	G	7
## 1983	22:25768112_C/T	25768112	C	T	17
## 1984	22:29792539_A/C	29792539	A	C	6
## 1985	22:29792542_G/C	29792542	G	C	9
## 1986	22:37299215_T/C	37299215	T	C	9
## 1987	22:37299215_T/C	37299215	T	C	9
## 1988	22:38735722_T/G	38735722	T	G	2
## 1989	22:38735722_T/G	38735722	T	G	2
## 1990	22:38735722_T/G	38735722	T	G	2
## 1991	22:39313004_G/A	39313004	G	A	22
## 1992	22:40277995_C/T	40277995	C	T	16
## 1993	22:40407182_G/T	40407182	G	T	11
## 1994	22:40407182_G/T	40407182	G	T	1
## 1995	22:41144930_C/G	41144930	C	G	3
## 1996	22:43162966_G/A	43162966	G	A	21
## 1997	22:43162966_G/A	43162966	G	A	13
## 1998	22:43162966_G/A	43162966	G	A	5
## 1999	22:44198596_T/C	44198596	T	C	10
## 2000	22:44207804_T/C	44207804	T	C	13
## 2001	22:46676580_G/A	46676580	G	A	0
## 2002	22:50195878_C/T	50195878	C	T	8
## 2003	22:50250601_A/G	50250601	A	G	12
## 2004	22:50250601_A/G	50250601	A	G	12
## 2005	22:50286304_G/T	50286304	G	T	19
## 2006	22:50286304_G/T	50286304	G	T	19
## 2007	22:50286304_G/T	50286304	G	T	19
## 2008	22:50286304_G/T	50286304	G	T	19
## 2009	22:50304506_A/G	50304506	A	G	22



##	2010	22:50571524_C/T	50571524	C	T	17
##	2011	22:50571524_C/T	50571524	C	T	17
##	2012	X:16858857_G/A	16858857	G	A	10
##	2013	X:16858857_G/A	16858857	G	A	10
##	2014	X:16858857_G/A	16858857	G	A	10
##	2015	X:23671519_A/T	23671519	A	T	10
##	2016	X:23671519_A/T	23671519	A	T	10
##	2017	X:23671519_A/T	23671519	A	T	10
##	2018	X:23671520_T/C	23671520	T	C	11
##	2019	X:23671520_T/C	23671520	T	C	11
##	2020	X:23671520_T/C	23671520	T	C	11
##	2021	X:48577014_T/C	48577014	T	C	13
##	2022	X:48577014_T/C	48577014	T	C	11
##	2023	X:48577014_T/C	48577014	T	C	10
##	2024	X:48577014_T/C	48577014	T	C	8
##	2025	X:48577014_T/C	48577014	T	C	8
##	2026	X:48577014_T/C	48577014	T	C	8
##	2027	X:48577014_T/C	48577014	T	C	8
##	2028	X:48577014_T/C	48577014	T	C	8
##	2029	X:48577014_T/C	48577014	T	C	1
##	2030	X:48577017_C/T	48577017	C	T	16
##	2031	X:48577017_C/T	48577017	C	T	14
##	2032	X:48577017_C/T	48577017	C	T	13
##	2033	X:48577017_C/T	48577017	C	T	11
##	2034	X:48577017_C/T	48577017	C	T	11
##	2035	X:48577017_C/T	48577017	C	T	11
##	2036	X:48577017_C/T	48577017	C	T	11
##	2037	X:48577017_C/T	48577017	C	T	11
##	2038	X:48577017_C/T	48577017	C	T	4
##	2039	X:72186451_T/C	72186451	T	C	13
##	2040	X:72186451_T/C	72186451	T	C	10
##	2041	X:72186451_T/C	72186451	T	C	10
##	2042	X:130495622_C/T	130495622	C	T	4
##	2043	X:130496046_G/C	130496046	G	C	11
##	2044	X:153786452_G/A	153786452	G	A	5
##	2045	X:153786452_G/A	153786452	G	A	5
##	2046	X:153786452_G/A	153786452	G	A	5
##	2047	X:153905526_T/G	153905526	T	G	14
##	2048	X:153962319_G/A	153962319	G	A	15
##	2049	X:153962319_G/A	153962319	G	A	15
##	2050	X:154532293_G/A	154532293	G	A	15
##		refseq		altseq	ref_score	alt_score
##	1	CAGGTGCTT		CAGGTGCCT	4.83	5.40
##	2	CAGGTATGC		CAGGTATGT	9.37	9.80
##	3	AGGGTAGGG		AGGATAGGG	5.76	-2.42
##	4	AAGGCCAGG		AAGGCCAGA	-1.53	-0.95
##	5	GCAGGGCCA		GCAGGGCCG	-19.33	-17.20
##	6	CTGGTAATT		TTGGTAATT	5.99	5.73
##	7	AAGGTACGG		AAGGCACGG	10.26	2.50
##	8	AGAGGCCAG		AGAGGCTAG	-30.31	-29.10
##	9	TAGGTGAGA		GAGGTGAGA	6.95	7.66
##	10	TACAGTAAA		TACGGTAAA	-35.25	-27.07
##	11	GAGGGGTGG		GAGAGGTGG	-3.17	-11.35
##	12	GATGAGGAA		GATGAAGAA	-21.40	-15.17

## 13	ATGAGGAAG	ATGAAGAAG	-14.14	-14.67
## 14	CTGGTAAGT	CTGGTAGGT	10.65	8.37
## 15	TTCATGTTT	TTCAGGTTT	-18.76	-26.40
## 16	CCAGTGAGG	CCAGTGGGG	4.09	-2.16
## 17	GAGGTGAGT	GGGGTGAGT	10.03	7.93
## 18	GAGGTGAGT	GGGGTGAGT	10.03	7.93
## 19	CAGGTAATG	CGGGTAATG	9.43	6.86
## 20	CAGGTAATG	CGGGTAATG	9.43	6.86
## 21	CACTTCCGG	CACTTCCAG	-11.23	-24.40
## 22	AAGGTACAT	AAGGTATAT	7.87	7.84
## 23	AAGGTACAT	AAGGTATAT	7.87	7.84
## 24	AAGGTACAT	AAGGTATAT	7.87	7.84
## 25	CCTGGACTT	CCTGAACTT	-12.10	-12.64
## 26	CACGTAAGT	CACATAAGT	10.16	1.97
## 27	CAGCAACTG	CAGGAACTG	-7.41	0.86
## 28	ATGCTCAGT	ATGCTCGGT	-1.71	-4.95
## 29	AAAGTACGT	AAAGTACAT	7.99	1.57
## 30	ATGGTGAGT	ATGGTGGGT	10.13	6.18
## 31	ATCCCAGGC	ATCCCAAGC	-14.51	-9.95
## 32	TCCCAGGCT	TCCCAAGCT	-25.38	-20.67
## 33	CTGTTATCG	CTGTTATCA	-5.14	-6.91
## 34	ATGTTCGCC	ATGTTCTCC	-15.94	-15.14
## 35	TCGCCCTTC	TCTCCCTTC	-22.25	-38.66
## 36	TGCGTAAGT	TGCGTAAGT	1.46	9.73
## 37	GCCGGGTGG	GCCAGGTGG	-10.99	-19.17
## 38	CAGGTAAGT	CAGGTGAGT	10.86	10.67
## 39	CAGGTAAGT	CAGGTGAGT	10.86	10.67
## 40	TCAGAGCCA	TCAAAGCCA	-20.63	-28.82
## 41	AGGGTATTG	GGGGTATTG	3.84	2.65
## 42	TTGGTGAAT	TTGGTAACT	1.23	4.27
## 43	GAGGTATGT	GAGGAATGT	9.81	1.63
## 44	TAGGTGATT	CAGGTGATT	4.02	5.95
## 45	AAGGTGAGT	AAGATGAGT	10.47	2.29
## 46	AAGGTGAGT	AAGGTGAAT	10.47	6.38
## 47	ATGGTAAGA	ATGGCAAGA	9.48	1.72
## 48	CAGGTAAGT	CAGGTATGT	10.86	9.80
## 49	AAAGTGAGT	GAAGTGAGT	8.40	7.97
## 50	AAAGTGAGT	GAAGTGAGT	8.40	7.97
## 51	TTGGGGAGT	TTGGTGAGT	1.63	9.27
## 52	AACGTAAAA	AACGTAAAGA	-2.68	7.69
## 53	CCCAGTATG	CCCAGTATG	-33.78	-25.59
## 54	GCCGGGTGG	GCCAGGTGG	-10.99	-19.17
## 55	TGCCATCT	TGCCTATCT	-19.10	-11.34
## 56	GCAGTATCC	GCAGTATCT	-5.12	-2.67
## 57	GGGCAAGCG	GGGCCAGCG	-17.33	-16.90
## 58	CCCTAGGGT	CCCTAGGGT	-13.52	-14.06
## 59	AGCTGGGCA	ACCTGGGCA	-29.88	-27.52
## 60	AGCTGGGCA	ACCTGGGCA	-29.88	-27.52
## 61	GAGGTGAGT	GAGGGGAGT	10.03	2.39
## 62	TAGGTACGT	TAGGTATGT	8.17	7.76
## 63	TAGGTACGT	TAGGTATGT	8.17	7.76
## 64	TAGGTACGT	TAGGTATGT	8.17	7.76
## 65	CTACTATGT	CTAGTATGT	-3.58	4.69
## 66	AAGGTAGGG	AAGGTCGGG	8.76	3.63

## 67	GTTGTAAGT	GTTTTAAGT	8.30	-0.21
## 68	CAGGTAAGT	CAGATAAGT	10.86	2.68
## 69	CAGGTAAGT	CAGATAAGT	10.86	2.68
## 70	CAGGTAAGT	CAGATAAGT	10.86	2.68
## 71	TACCATAACC	TACCAGACC	-33.30	-18.25
## 72	GGCCCCAGC	GGCCCCAGT	-20.43	-15.16
## 73	CAGGTTGAT	CAGGTTGCT	3.82	-0.98
## 74	GAGGTATGG	GAGGTAGGG	8.98	7.81
## 75	AATGCAGGT	AATGTAGGT	-2.63	5.12
## 76	ACGGTGAGG	ACGATGAGG	9.20	1.01
## 77	ACGGTGAGG	ACGATGAGG	9.20	1.01
## 78	AGAGTAAGT	AGAGTGAGT	9.35	7.36
## 79	AGAGTAAGT	AGAGTGAGT	9.35	7.36
## 80	GCCTTCTGC	GCCTCCTGC	-16.14	-23.90
## 81	CCTTCTGCT	CCTCCTGCT	-37.28	-37.05
## 82	TGGGTAAAG	TGCGTAAAG	4.20	-7.40
## 83	CAGGTATTT	CAGGTAATT	7.51	8.55
## 84	CAGGTATTT	CAGGTAATT	7.51	8.55
## 85	GCCGTAAGT	GCCATAAGT	10.11	1.92
## 86	CAGGTGGGT	CAGGTGAGT	8.56	10.67
## 87	GAGGTGAGA	GGGGTGAGA	7.66	4.74
## 88	GCCAGTGAG	GCCGGTGAG	-44.94	-36.76
## 89	AATGTATGT	AATGTACGT	5.87	6.58
## 90	GCAGTAAGT	GTAGTAAGT	9.07	8.01
## 91	TCCTCAAAA	TCCTCAGAA	-23.08	-29.82
## 92	TCCTCAAAA	TCCTCAGAA	-23.08	-29.82
## 93	AAGGTAACA	AAGTTAACA	8.92	0.42
## 94	AAGGTAACA	AAGTTAACA	8.92	0.42
## 95	CAGGTAGGT	CAGGTATGT	10.28	9.80
## 96	CAGGTAGGT	CAGGTATGT	10.28	9.80
## 97	CAGGTAGGT	CAGGTATGT	10.28	9.80
## 98	ATAGTACAT	ATAGTACGT	-2.87	6.05
## 99	CCCCCGGCC	CCCCCGCG	-33.57	-34.60
## 100	AAGGTAGGG	AAGGTAGGA	8.76	9.45
## 101	CGGGTAAGA	CAGGTAAGA	9.84	10.77
## 102	CAGGTGACC	CAGGGGACC	6.54	-1.11
## 103	GGGGTAAGT	GAGGTAAGT	9.65	11.08
## 104	GAAAGTTAG	GAAAGTTTG	-27.42	-28.48
## 105	CGTGTGAGT	CGAGTGAGT	7.42	8.49
## 106	ACGGTATAA	ACAGTATAA	4.59	-5.23
## 107	CACGCGCGT	CACGCGCGC	-0.37	-3.61
## 108	GTAGTAACA	GTAATAACA	-4.82	-13.00
## 109	AAGGTAGAA	AAGGTAAAA	6.33	8.38
## 110	AGCGGGCAT	AGCAGGCAT	-18.00	-26.18
## 111	AGCGGGCAT	AGCAGGCAT	-18.00	-26.18
## 112	GTTGTGAGT	GCTGTGAGT	6.59	7.39
## 113	CAGGTACCT	CAAGTACCT	8.16	2.50
## 114	CAGGTACCT	CAGGTACCC	8.16	8.63
## 115	CAGGTCTGC	CAGGTCGGC	5.61	6.32
## 116	ACGGTTCTT	ACAGTTCTT	0.15	-10.58
## 117	GCCCACCAC	GCCCACCCC	-40.06	-32.91
## 118	CACCACTAC	CACCCCTAC	-31.72	-31.29
## 119	TGGGATTAC	TGGGATTGC	-17.00	-10.43
## 120	CAGGTGAGG	CAGGTGAGA	10.07	9.22

## 121	ATGGTGAGA	ACGGTGAGA	7.23	8.94
## 122	AATGTGAGC	AATCTGAGC	5.20	-3.08
## 123	AATGTTTCT	AATATTTCT	-12.35	-20.53
## 124	GAGGTGAGT	GAGATGAGT	10.03	1.85
## 125	GAGGTGAGT	GAGATGAGT	10.03	1.85
## 126	GAGGTGAGT	GAGATGAGT	10.03	1.85
## 127	GAGGTGAGT	GAGATGAGT	10.03	1.85
## 128	GAGGTGAGT	GAGATGAGT	10.03	1.85
## 129	GAGGTGAGT	GAGATGAGT	10.03	1.85
## 130	GAGGTGAGT	GAGATGAGT	10.03	1.85
## 131	GCCGTGGCG	GCCGTGGCC	-12.90	-11.54
## 132	GGCGGTGGC	GGCCGTGGC	-23.24	-31.51
## 133	GGCGGTGGC	GGCCGTGGC	-23.24	-31.51
## 134	GAAAAGGTG	GAAGAGGTG	-28.39	-20.21
## 135	AAGGTGAGT	GAGGTGAGT	10.47	10.03
## 136	ATGGTAAAA	ATGGGAAAA	4.79	-2.85
## 137	CCGGTAGGA	CCGGTAGGG	8.18	7.63
## 138	CCGGTAGGA	CCGGTAGGG	8.18	7.63
## 139	CCGGTAGGA	CCGGTAGGG	8.18	7.63
## 140	AGGGTGAGA	AGGGCGAGA	6.65	-1.11
## 141	AGGGTGAGA	AGGGCGAGA	6.65	-1.11
## 142	TGGGTAAGG	CGGGTAAGG	9.08	10.17
## 143	AAGGTGGGG	AAGGTGGGG	4.94	5.87
## 144	CAGGTAGGG	CAGATAGGG	9.46	1.28
## 145	CAGGTAGGG	CAGATAGGG	9.46	1.28
## 146	GTTTGAGCT	TTTTGAGCT	-21.29	-23.42
## 147	AAGGTACGC	AAGGTACCC	10.40	9.16
## 148	AAGGTACGC	AAGGTACCC	10.40	9.16
## 149	TGGGTAGGT	TGGGTAGGG	6.86	4.66
## 150	GCGGTGAGG	GCGTTGAGG	7.93	-0.58
## 151	GCGGTGAGG	GCGTTGAGG	7.93	-0.58
## 152	GCGGTGAGG	GCGGCGAGG	7.93	0.17
## 153	GCGGTGAGG	GCGGCGAGG	7.93	0.17
## 154	ATGGTAACA	ATGGTAACG	4.87	6.05
## 155	ATGGTAACA	ATGGTAACG	4.87	6.05
## 156	AAGGTAACT	AAGGAAACT	9.01	0.83
## 157	AACTCCAC	AACCTCCAC	-24.02	-23.78
## 158	CAGGTAGGT	TAGGTAGGT	10.28	7.92
## 159	ACGGTGGGT	ACGGGGGGT	8.27	0.62
## 160	ACGGTGGGT	ACGGGGGGT	8.27	0.62
## 161	ATGGTAGCA	ATGGTGGCA	0.53	-5.09
## 162	TCGCTGAGC	TCGCTGGGC	0.83	-2.81
## 163	CAGGTACCA	CAGGTACCG	7.88	10.05
## 164	GCAGTAAGG	GTAAGTAAGG	4.69	3.38
## 165	AAGGTAAGT	AAGGGAAGT	11.00	3.35
## 166	AAGGTAAGT	AAGGGAAGT	11.00	3.35
## 167	AAGGTAAGT	AAGGGAAGT	11.00	3.35
## 168	CAGGTAAGC	CAGGTGAGC	9.88	9.60
## 169	GAGATTGGT	GAGGTTGGT	-1.82	6.36
## 170	TCGGTAGGA	TTGGTAGGA	7.45	5.00
## 171	CTGGTGAGT	CCGGTGAGT	10.10	10.90
## 172	CGTGTAAAGT	CGTGTATGT	8.58	5.08
## 173	CGTGTAAAGT	CGTGTATGT	8.58	5.08
## 174	CAGGTAATA	CAGGTAATC	8.55	6.99

## 175	AGGGTAGGC	AGGGAAGGC	7.26	-0.92
## 176	CATACCACA	CATACTACA	-24.00	-31.08
## 177	CAGGTGGGC	CAAGTGGGC	8.07	2.69
## 178	CCTGTGAGT	CCTGTGCGT	7.21	4.27
## 179	CAGGTTAGT	CAGTTTAGT	8.02	-0.48
## 180	CAGGTATGG	CAGGTACGG	9.99	10.88
## 181	CAGGTATGG	CAGGTACGG	9.99	10.88
## 182	AAGGTAAAA	GAGGTAAAA	8.38	7.30
## 183	AACTCAGGT	AACTCAGGC	-8.96	-11.77
## 184	CAGGTAAGT	CAGGCAAGT	10.86	3.10
## 185	CAGGTAAGT	CAGGCAAGT	10.86	3.10
## 186	AAGGTAAGT	AAGGTAAGC	11.00	10.22
## 187	AAGGTAAGT	AAGGTAAGC	11.00	10.22
## 188	AAGGTAAGT	AAGGTAAGC	11.00	10.22
## 189	AAGGTAAGT	AAGGTAAGC	11.00	10.22
## 190	CAGGTACGC	CAGGTACAC	10.12	7.29
## 191	CAGGTACGC	CAGGTACAC	10.12	7.29
## 192	CAGGTACGC	CAGGTACAC	10.12	7.29
## 193	CAGGTACGC	CAGGTACAC	10.12	7.29
## 194	TTGCGGCAA	TTGAGGCAA	-21.63	-21.54
## 195	TGAGGGAAG	TGAGGCAAG	-16.17	-26.78
## 196	TGTGTACAT	TGTGTACGT	-7.14	3.32
## 197	AAGGTAAAT	AATGTAAAT	8.88	2.37
## 198	CAGGTGCAA	CAGGTACAA	2.83	7.09
## 199	CAGGTGCAA	CAGGTACAA	2.83	7.09
## 200	CAGGTGCAA	CAGGTACAA	2.83	7.09
## 201	CGAGGCAGG	TGAGGCAGG	-12.30	-15.56
## 202	CGTGTGAGT	CATGTGAGT	7.42	7.83
## 203	CGTGTGAGT	CATGTGAGT	7.42	7.83
## 204	TGCGTGTGA	TGCATGTGA	-5.28	-13.46
## 205	CAGGTAAGT	CAGGAAAGT	10.86	2.67
## 206	CAGGTATAG	CAGATATAG	8.73	0.54
## 207	TTCGGATAA	TTCAGATAA	-21.18	-29.37
## 208	TTCGGATAA	TTCAGATAA	-21.18	-29.37
## 209	TTCGGATAA	TTCGGGTAA	-21.18	-29.02
## 210	TTCGGATAA	TTCGGGTAA	-21.18	-29.02
## 211	GCACCAGCT	GCACCAGCC	-21.01	-23.44
## 212	CCGGTGGGT	CTGGTGGGT	7.85	6.29
## 213	CAGGTGTGG	CAGGTGTGT	6.34	6.99
## 214	CAGGTGTGG	CAGGTGTGT	6.34	6.99
## 215	CAGGTGTGG	CAGGTGTGT	6.34	6.99
## 216	CAGGTGTGG	CAGGTGTGT	6.34	6.99
## 217	CAGGTGTGG	CAGGTGTGT	6.34	6.99
## 218	AGAGTATGT	AGAGTACGT	5.66	6.58
## 219	CTAGTAAGT	ATAGTAAGT	8.78	8.65
## 220	GGTACAGTG	GGTGCAGTG	-28.18	-20.00
## 221	TGAGACGAG	TGAGACTAG	-35.68	-32.62
## 222	GAGACGAGG	GAGACTAGG	-7.53	-11.57
## 223	GACGAGGGG	GACTAGGGG	-10.23	-18.74
## 224	CAGGTCTGT	CAGGTTTGT	6.84	7.44
## 225	TTGGTGAGG	TTGGGGAGG	6.90	-0.75
## 226	CCTCCGTC	CCTCCTGTC	-39.53	-44.49
## 227	CCTCCGTC	CCTCCTGTC	-39.53	-44.49
## 228	AAGGTCCT	AAGGTACCT	0.89	8.49

## 229	ATGGTGGGT	ATGGTAGGT	6.18	8.60
## 230	TCAGGGGAA	TCAGGTGAA	-23.24	-28.66
## 231	CCGGTAAGT	CCAGTAAGT	10.91	9.09
## 232	AAAGTACGT	AAAGTAAGT	7.99	9.72
## 233	GAGGTAAGA	GAGGTAATA	10.06	7.96
## 234	AAGGTGCCG	AAGGTGCCA	5.74	3.41
## 235	AGGGTACCT	AGGGTACGT	4.24	9.15
## 236	ATAGTAAGT	GTAGTAAGT	8.65	8.01
## 237	GAGGTTCGG	GAGGTTCAG	3.64	-0.37
## 238	GAGGTTCGG	GAGGTTCAG	3.64	-0.37
## 239	CAAGGCATA	CAAGGCATG	-17.14	-17.05
## 240	AAGGCATAG	AAGGCATGG	0.23	1.51
## 241	TGGGGCAAA	TGGGGCAAG	-14.16	-13.76
## 242	TTGGGCAAA	TTGGGTAAA	-14.05	-13.29
## 243	CGGGTATGA	GGGGTATGA	7.63	5.41
## 244	CGGGTATGA	GGGGTATGA	7.63	5.41
## 245	TTCCGTAAG	TTCTGTAAG	-39.42	-39.65
## 246	TCCGTAAGT	TCTGTAAGT	10.27	7.96
## 247	CATGTGAAT	CATGTGAAC	-0.39	-3.15
## 248	CATGTGAAT	CATGTGAAC	-0.39	-3.15
## 249	CTGGTAGGA	CTGGTTGGA	6.77	1.08
## 250	AAGGTACAG	AAGGTACAA	8.04	6.82
## 251	AAGGTACAG	AAGGTACAA	8.04	6.82
## 252	AAGGTACAG	AAGGTACAA	8.04	6.82
## 253	AAGGTACAG	AAGGTACAA	8.04	6.82
## 254	AAGGTACAG	AAGGTACAA	8.04	6.82
## 255	AAGGTACAG	AAGGTACAA	8.04	6.82
## 256	CAGGTGTTG	CAGGTGTCG	2.29	3.70
## 257	CAGGTGTTG	CAGGTGTCG	2.29	3.70
## 258	CTTGTAAGC	CCTGTAAGC	4.33	3.69
## 259	GATGTAAGA	GGTGTAAAG	5.46	3.60
## 260	AACGTGAGC	AATGTGAGC	6.06	5.20
## 261	CTGGTAGGC	CTGGTGGGC	6.99	4.81
## 262	AAGGTAATA	AAGGTAACA	8.49	8.92
## 263	AAGGTAATA	AAGGTAACA	8.49	8.92
## 264	AAGGTAATA	AAGGTAACA	8.49	8.92
## 265	AAGGTAATA	AAGGTAACA	8.49	8.92
## 266	TCGGTAATG	TTGGTAATG	6.42	4.83
## 267	TCGGTAATG	TTGGTAATG	6.42	4.83
## 268	AAGGTAGGT	AAGGAAGGT	10.29	2.10
## 269	AAGGTAGGT	AAGGAAGGT	10.29	2.10
## 270	AAGGTAGGT	AAGGAAGGT	10.29	2.10
## 271	AAGGTAGGT	AAGGAAGGT	10.29	2.10
## 272	AAGGTAGGT	AAGGAAGGT	10.29	2.10
## 273	CCTCCGTGC	CCTCTGTGC	-18.09	-10.33
## 274	CCTCCGTGC	CCTCTGTGC	-18.09	-10.33
## 275	CCTCCGTGC	CCTCTGTGC	-18.09	-10.33
## 276	TTTGTAAAG	TTTGTAAAG	3.14	3.89
## 277	AAGGTGAGG	AAGGTGATG	9.16	5.22
## 278	TAGGTACGC	TAGGTATGC	7.84	7.53
## 279	GAGGTAATC	GAGGTACTC	7.05	6.43
## 280	GAGGTAATC	GAGGTACTC	7.05	6.43
## 281	GAGGTAATC	GAGGTTATC	7.05	-1.25
## 282	GAGGTAATC	GAGGTTATC	7.05	-1.25

## 283	AGAAACAGA	AGAAACGGA	-22.09	-27.85
## 284	GGACGGCCC	GGACAGCCC	-26.62	-27.16
## 285	CAGGTACTC	CAGGCACTC	7.04	-0.71
## 286	GATGTGCTT	GATGCGCTT	-5.39	-13.15
## 287	GATGTGCTT	GATGCGCTT	-5.39	-13.15
## 288	TTGGTAAGA	TTGGTAAGG	8.85	8.92
## 289	GAGGTGAGT	AAGGTGAGT	10.03	10.47
## 290	TTGGATGAG	TTGGGTGAG	-17.79	-17.25
## 291	TAGGTAAGT	TAGGTAAGG	9.66	9.31
## 292	GAGGTAAGG	GAGGGAAGG	10.28	2.64
## 293	GCCACGGAG	GCCACAGAG	-35.56	-29.67
## 294	CAGGTCTGT	CAGGTTTGT	6.84	7.44
## 295	TGAGTAAGT	TGGGTAAGT	8.82	10.24
## 296	GGAGAGAAA	GGAGAGAGA	-18.49	-7.70
## 297	AAGGTATGG	AAGGTATGA	9.26	9.11
## 298	GCTGCCAGG	GCTGCCAGT	-14.08	-8.41
## 299	ATCCGTGTG	ATCCTTGTG	-39.73	-32.08
## 300	CAGGTGTGT	GAGGTGTGT	6.99	6.14
## 301	GGATTGGT	GGATTGGA	-14.46	-21.06
## 302	GGATTGGT	GGATTGGA	-14.46	-21.06
## 303	TCCCAAGCT	TCCCAGGCT	-20.67	-25.38
## 304	TCCCAAGCT	TCCCAGGCT	-20.67	-25.38
## 305	CCAAGCTGA	CCAGGCTGA	-24.76	-16.57
## 306	CCAAGCTGA	CCAGGCTGA	-24.76	-16.57
## 307	GAGGTGAGC	GAGGTGAGT	8.70	10.03
## 308	GAGGTGAGC	GAGGTGAGT	8.70	10.03
## 309	ACCGTATGT	ACTGTATGT	6.73	5.19
## 310	AATGTGAGT	AATCTGAGT	7.80	-0.47
## 311	AAGGTGAGT	AAGGTGAGA	10.47	8.68
## 312	CCGCCTCTG	CCACCTCTG	-19.30	-32.18
## 313	GAAGTGGGG	GAAGCGGGG	-2.46	-10.21
## 314	CCTGTAAGA	CCTATAAGA	4.07	-4.11
## 315	TGTTCCGTT	TGTTCCGTC	-38.42	-42.37
## 316	TGTTCCGTT	TGTTCCGTC	-38.42	-42.37
## 317	CTGGTAAGT	CTGGTAAGC	10.65	8.69
## 318	CTGGTAAGT	CTGGTAAGC	10.65	8.69
## 319	CCGGTTCCT	CCGGCTCCT	-4.26	-12.01
## 320	CCGGTTCCT	CCGGCTCCT	-4.26	-12.01
## 321	TGCGTAAGT	TGCATAAGT	9.73	1.55
## 322	TTGGTAAGC	TTGGTAAGT	8.72	10.47
## 323	TTGGTAAGC	TTGGTAAGT	8.72	10.47
## 324	TTGGTAAGC	TTGGTAAGT	8.72	10.47
## 325	TTGGTAAGC	TTGGTAAGT	8.72	10.47
## 326	AGAGTGAGT	AGAGGGAGT	7.36	-0.29
## 327	AGAGTGAGT	AGAGGGAGT	7.36	-0.29
## 328	AGAGTGAGT	AGAGGGAGT	7.36	-0.29
## 329	AGAGTGAGT	AGAGGGAGT	7.36	-0.29
## 330	AGAGTGAGT	AGAGGGAGT	7.36	-0.29
## 331	CAGGTAGGC	CAGGTAGTC	9.88	5.30
## 332	CAGGTAGGC	CAGGTAGTC	9.88	5.30
## 333	CAGGTAGGC	CAGGTAGTC	9.88	5.30
## 334	CAGGTAGGC	CAGGTAGTC	9.88	5.30
## 335	CAGGTAGGC	CAGGTAGTC	9.88	5.30
## 336	CAGGTAGGC	CAGGTAGTC	9.88	5.30

## 337	CAGGTAGGC	CAGGTAGTC	9.88	5.30
## 338	CAGGTAGGC	CAGGTAGTC	9.88	5.30
## 339	CAGGTAGGC	CAGGTAGTC	9.88	5.30
## 340	AAGGTATAG	AAGGTATGG	7.98	9.26
## 341	CCAGTGACC	CCAGTGAGC	-4.32	4.44
## 342	AGAGGTGT	AGAAGGTGT	-6.61	-14.79
## 343	AGGTGCCCG	AGGTGTCCG	-23.66	-24.10
## 344	CCCGGTAAG	TCCGGTAAG	-28.64	-30.32
## 345	CGGGGCCCC	CGGGGCCCTC	-14.02	-13.51
## 346	GCGGTAGC	GCGGTGAGC	0.94	8.02
## 347	GCCGTATCT	GCCGCATCT	-0.51	-8.26
## 348	ACCGAGAGT	ACCGGGAGT	1.22	1.75
## 349	CTGGTGACA	CTGGCGACA	0.84	-6.91
## 350	CTGGTGACA	CTGGCGACA	0.84	-6.91
## 351	GAGGTGCGG	GAGGTGCAG	6.79	2.03
## 352	GAGGTGCGG	GAGGTGCAG	6.79	2.03
## 353	CCAGGCCAC	CCAGGTCAC	-26.73	-23.13
## 354	CCAGGCCAC	CCAGGTCAC	-26.73	-23.13
## 355	CAAGTAGGG	CAAGTAAGG	3.87	7.66
## 356	CAAGTAGGG	CAAGTAAGG	3.87	7.66
## 357	AAGTAGGGC	AAGTAAGGC	-8.76	-6.61
## 358	AAGTAGGGC	AAGTAAGGC	-8.76	-6.61
## 359	CCCTTCCTG	CCCCTCCTG	-24.79	-24.56
## 360	ACGGTGCGC	ACGGTGTGC	8.67	5.49
## 361	ACGGTGCGC	ACGGTGTGC	8.67	5.49
## 362	ACGGTGCGC	ACGGTGTGC	8.67	5.49
## 363	TGTGTATGT	TATGTATGT	3.30	3.25
## 364	CCGGTAACC	TCGGTAACC	5.28	5.34
## 365	AATGTTTAT	AATGTTTGT	-11.42	-4.10
## 366	AATGTTTAT	AATGTTTGT	-11.42	-4.10
## 367	AATGTTTAT	AATGTTTGT	-11.42	-4.10
## 368	ACGGTACAT	ATGGTACAT	6.53	4.52
## 369	GGGGTAAGA	GGGGTGAGA	7.83	4.74
## 370	TGAGTAGGT	CGAGTAGGT	3.27	5.76
## 371	GGGGGCCCC	GGGGGTCCC	-17.59	-19.76
## 372	TGGGTGAGC	TGGGTGAGC	2.48	7.23
## 373	AGGCGGACA	AGGCAGACA	-15.42	-15.96
## 374	AGGCGGACA	AGGCAGACA	-15.42	-15.96
## 375	GGCCCTGCC	GGCCCCGCC	-44.42	-37.28
## 376	ACGGTAAGA	ATGGTAAGA	10.65	9.48
## 377	ACGGTAAGA	ATGGTAAGA	10.65	9.48
## 378	ACGGTAAGA	ATGGTAAGA	10.65	9.48
## 379	ACGGTAAGA	ATGGTAAGA	10.65	9.48
## 380	AGCTGGCCG	AGCTTGCCG	-23.10	-15.45
## 381	CATGTGAGC	CGTGTGAGC	5.03	4.00
## 382	CATGTGAGC	CGTGTGAGC	5.03	4.00
## 383	CATGTGAGC	CGTGTGAGC	5.03	4.00
## 384	CGCCGCTGG	CGCCGCCGG	-23.39	-23.00
## 385	CTGGTATGT	CTGGCATGT	8.14	0.38
## 386	CCAGCCTGG	CCAGGCTGG	-17.16	-17.05
## 387	TGAGTAAAC	TGAGTAAAT	-3.28	-0.28
## 388	CTGGTATGT	CTGGTCAGT	6.32	6.60
## 389	GACAACCTG	GACAACCCG	-28.91	-27.69
## 390	CCCTCACTG	CCCTCACCG	-19.87	-17.34



## 391	TCACTGCCT	TCACCGCCT	-15.55	-23.31
## 392	GAGGTGAGA	GAGGTGAGG	7.66	8.41
## 393	CCCTCGCGC	CCCTCGCGT	-14.36	-9.98
## 394	GAGGTAGAT	GAGGTAGGT	6.04	9.65
## 395	GCAGCAGCG	GCAGCAGCA	-16.49	-16.91
## 396	CCACTCCCT	CCACTCCCC	-23.63	-26.74
## 397	CAGGTGGGG	CAGTTGGGG	6.92	-1.59
## 398	CAGGTGGGG	CAGTTGGGG	6.92	-1.59
## 399	GAGGTCAGC	GAGGTCAGA	5.66	5.24
## 400	GAGGTCAGC	GAGGTCAGA	5.66	5.24
## 401	GAAGACGAG	GAAGATGAG	-27.32	-22.47
## 402	TGACCCCGT	TGACCCCAT	-24.46	-37.12
## 403	TGACCCCGT	TGACCCCAT	-24.46	-37.12
## 404	TCGGTAGGG	TTGGTAGGG	6.76	4.44
## 405	CAGGTGTGG	CAGGCGTGG	6.34	-1.41
## 406	ACGGTGAGC	ATGGTGAGC	9.44	8.27
## 407	TTGGTAAAA	TTGGTAAGA	3.23	8.85
## 408	CAGGTAAGC	CAGGTAACC	9.88	8.66
## 409	GAGGTTCCG	GAGGTTCTG	-2.56	-0.32
## 410	ATTGTCCTG	GTTGTCCTG	-22.28	-24.55
## 411	AAGGTAACG	AAGGTAGCG	10.19	6.91
## 412	TGCAGACAC	TGCGGACAC	-27.64	-19.46
## 413	TGCAGACAC	TGCGGACAC	-27.64	-19.46
## 414	GGAGGATAC	GGAGGAGAC	-14.31	-16.87
## 415	CTCCTATGT	CTCCTGTGT	-2.98	-6.83
## 416	ACAGTGAGC	ACAGCGAGC	4.69	-3.06
## 417	GAGGTGCTT	AAGGTGCTT	3.62	4.72
## 418	GGGCAAGTG	GGGCAAGTC	-17.40	-17.29
## 419	CAGGTATGT	CAGCTATGT	9.80	1.53
## 420	AATGTAAGT	AGTGTAAGT	8.62	8.46
## 421	AAGGTGAGT	AGGGTGAGT	10.47	9.25
## 422	CCCTCTCTCCTGCTCTTCAGGAC	CCCTCTCCCCTGCTCTTCAGGAC	11.22	10.66
## 423	ACAGGTACGTATTTTCCAGGAA	ACAGGTACGTGTTTTCCAGGAA	5.19	6.54
## 424	CCCCTTTCTCCTCTCCGAGGCG	CCCCTTTCTCCTCTCCACAGGCG	13.68	13.46
## 425	CTCCTCGGCCGTGGCTCCAGGGG	CTCCTCGGCTGTGGCTCCAGGGG	5.05	5.85
## 426	TCCCAAAGTCAAGGCCAGGCCAA	TCCCAAAGTCAAGGCCAGACCAA	-36.85	-28.89
## 427	CCTTGGGGCGGGCAGGGCCAGCC	CCTTGGGGCGGGCAGGGCCGGCC	-21.56	-12.81
## 428	CCCACCCTCGCCATCAGGGAGGG	CCCACCCTCGCCGTCAGGGAGGG	-30.75	-30.46
## 429	GTCCCCCTCTCGGGAGGAGGTA	GTCCCCCTCTCAGGAGGAGGTA	-10.19	-15.94
## 430	CGGGAGGAGGTATTGGGTAGGAC	CAGGAGGAGGTATTGGGTAGGAC	-7.87	-8.68
## 431	GTCCCCCTCTCGGGAGGAGGTA	GTCCCCCTCTCGGGAGGGGGTA	-10.19	-18.14
## 432	CGGGAGGAGGTATTGGGTAGGAC	CGGGAGGGGGTATTGGGTAGGAC	-7.87	-3.31
## 433	CTGCTGGACGCTTCGGAGCCCC	CTGCTGGGCGCTTCGGAGCCCC	-24.56	-23.00
## 434	GGACGCTTCGGAGCCCCCACTGT	GGGCGCTTCGGAGCCCCCACTGT	-11.27	-11.01
## 435	TCATTGTGTATTTTCTTAGAAA	TCATTGTGTGTTTTCTTAGAAA	7.35	8.84
## 436	TCATTGTGTATTTTCTTAGAAA	TCATTGTGTGTTTTCTTAGAAA	7.35	8.84
## 437	TCATTGTGTATTTTCTTAGAAA	TCATTGTGTGTTTTCTTAGAAA	7.35	8.84
## 438	TCATTGTGTATTTTCTTAGAAA	TCATTGTGTGTTTTCTTAGAAA	7.35	8.84
## 439	TCATTGTGTATTTTCTTAGAAA	TCATTGTGTGTTTTCTTAGAAA	7.35	8.84
## 440	TCATTGTGTATTTTCTTAGAAA	TCATTGTGTGTTTTCTTAGAAA	7.35	8.84
## 441	TCATTGTGTATTTTCTTAGAAA	TCATTGTGTGTTTTCTTAGAAA	7.35	8.84
## 442	TCATTGTGTATTTTCTTAGAAA	TCATTGTGTGTTTTCTTAGAAA	7.35	8.84
## 443	TCTCTGTGTTTCCGTTTCAGCGT	TCTCTGTGTTTCCATTTCAGCGT	12.12	11.89
## 444	TCTCTGTGTTTCCGTTTCAGCGT	TCTCTGTGTTTCCATTTCAGCGT	12.12	11.89

## 445	TTTGATATCATCAACTGCAGAGA	TTTGATATCATCAACTGCAGACA	5.46	5.85
## 446	GATGATTCTTCCTTCTGCAGATT	GATGATTCTTCCTTCCGCAGATT	10.30	10.86
## 447	CTGACATTTTCTGTCCCTAGGCT	CTGACGTTTTTCTGTCCCTAGGCT	11.68	11.76
## 448	GCCACCTCCTATCCCTGCAGTAC	GCCACGTCTATCCCTGCAGTAC	8.54	8.16
## 449	CGTGCTGTCTGTACTCCTAGGAC	CGTCTGTCTGTACTCCTAGGAC	9.17	9.34
## 450	CGTGCTGTCTGTACTCCTAGGAC	CGTCTGTCTGTACTCCTAGGAC	9.17	9.34
## 451	TAAATCCTCGACATGTGTAGATG	TAAATCCTCAACATGTGTAGATG	3.36	3.13
## 452	CTGCCATCTGCTTCTGCAGATC	CTGCCACCTGCTTCTGCAGATC	10.37	10.27
## 453	CAAGCACAGAGATGTCAGCCTGG	CAAGCACAGAGATGTCATCCTGG	-44.97	-27.24
## 454	CTTTTCTCTTCCCTTGCAGCGC	CTTTTCTCTCCCTTGCAGCGC	13.51	13.84
## 455	TTTTCAATTCTGACCACCCAGATC	TTTTCAATTCTTACCACCCAGATC	7.43	8.77
## 456	TTTTCAATTCTGACCACCCAGATC	TTTTCAATTCTTACCACCCAGATC	7.43	8.77
## 457	GTTTTCCCACTGTCCCCCAGGTC	ATTTTCCCACTGTCCCCCAGGTC	10.57	10.56
## 458	GTTTTCCCACTGTCCCCCAGGTC	ATTTTCCCACTGTCCCCCAGGTC	10.57	10.56
## 459	CAAGAGCCAGAGCAAGCGCAGGG	CAAGAGCCAGAGCAAGAGCAGGG	-46.82	-50.28
## 460	AGAATCTGTTTGAATTTTAGGAG	AGAATCTGTTTGAATTTTAGGAG	7.04	6.56
## 461	AGAATCTGTTTGAATTTTAGGAG	AGAATCTGTTTGAATTTTAGGAG	7.04	6.56
## 462	AGAATCTGTTTGAATTTTAGGAG	AGAATCTGTTTGAATTTTAGGAG	7.04	6.56
## 463	TGGGGTGCTTTCTTATTTAGAAA	TGCGGTGCTTTCTTATTTAGAAA	7.65	8.80
## 464	CCCCTTTGCATTTTAATTAGACC	CCCCTTTGCATTTAAATTAGACC	6.13	5.72
## 465	CCCCTTTGCATTTTAATTAGACC	CCCCTTTGCATTTAAATTAGACC	6.13	5.72
## 466	TCTTCATGTTTCATTTTAGATT	TCTTCATGATTTCATTTTAGATT	9.56	8.51
## 467	TCTTCATGTTTCATTTTAGATT	TCTTCATGATTTCATTTTAGATT	9.56	8.51
## 468	TCTTCATGTTTCATTTTAGATT	TCTTCATGATTTCATTTTAGATT	9.56	8.51
## 469	TTTTTGTTTCTTTTATTAGATA	TTTTTGTTTCTTTTATTAGATA	10.04	9.74
## 470	TTACCATTTGTGTGTTTCAGCTG	TTACCATTTGTGTGTTTCAACTG	10.95	2.20
## 471	AACCATGTGCTCAAATTTAGTGT	AACAATGTGCTCAAATTTAGTGT	5.74	6.01
## 472	CTATTACTTTTCATTTACAGATG	TTATTACTTTTCATTTACAGATG	10.90	11.22
## 473	TGTACCTGTCTCCTCTCCAGGTC	TGTACCTCTCTCCTCTCCAGGTC	11.84	12.56
## 474	TGTACCTGTCTCCTCTCCAGGTC	TGTACCTCTCTCCTCTCCAGGTC	11.84	12.56
## 475	CTTTCCAGGAACCTGTTGGCCA	CTTTCCAGGAACCTGTTGGCCA	-26.09	-18.02
## 476	TATTTTCTTGTGATTGTAGAGT	TATTTTCTTGTGAATTGTAGAGT	7.84	6.24
## 477	TTCCCATTTTAATAATACAGGCT	TTTCCATTTTAATAATACAGGCT	5.54	6.06
## 478	CGTCTTTATGCAGAAGAGGCGGA	CGTCTTTATGCAGAAGAGGGGA	-41.86	-33.80
## 479	CGTCTTTATGCAGAAGAGGCGGA	CGTCTTTATGCAGAAGAGGGGA	-41.86	-33.80
## 480	CGACTGTTTCTCATCCCCAGCTC	CAACTGTTTCTCATCCCCAGCTC	8.87	8.52
## 481	TCCTTTTCCCTGCATAAAAGTTG	TCCTTTTCCCTGCATAAAAGTTG	3.73	3.96
## 482	TGTTTAAAAATGTGATTTCAGCAT	TGTTTAAAAATGTGATTTCAGCAT	3.18	3.88
## 483	TGTTTAAAAATGTGATTTCAGCAT	TGTTTAAAAATGTGATTTCAGCAT	3.18	3.88
## 484	TGTTTAAAAATGTGATTTCAGCAT	TGTTTAAAAATGTGATTTCAGCAT	3.18	3.88
## 485	TTTTTTTCCCTCTAATGTAGAGG	TTTTTTTCCCTCTAATGCAGAGG	8.29	8.89
## 486	TGGCCTTCTCTGTTACATAGATT	TGGCCTTCTCTGTTACATGGATT	7.14	-0.81
## 487	TGGCCTTCTCTGTTACATAGATT	TGGCCTTCTCTGTTACATGGATT	7.14	-0.81
## 488	AAAGATTTCAAATCCTCTAGAAG	AAAGATTTCAAATCCTCTGGAAG	3.27	-4.68
## 489	GGGCTATGATCTGCAGTAGTCTT	GGGCTATGATCTGCAGTAGTTCT	-24.56	-23.98
## 490	TATGATCTGCAGTAGTCTGTGG	TATGATCTGCAGTAGTTCTGTGG	-15.48	-14.88
## 491	TTTCTTTGTGTCGGTTTTAGGAT	TTTCTTTGTGTCGATTTTAGGAT	13.02	12.74
## 492	TTTCTTTGTGTCGGTTTTAGGAT	TTTCTTTGTGTCGATTTTAGGAT	13.02	12.74
## 493	TTTCTTTGTGTCGGTTTTAGGAT	TTTCTTTGTGTCGATTTTAGGAT	13.02	12.74
## 494	TTTCTTTGTGTCGGTTTTAGGAT	TTTCTTTGTGTCGATTTTAGGAT	13.02	12.74
## 495	TTTCTTTGTGTCGGTTTTAGGAT	TTTCTTTGTGTCGATTTTAGGAT	13.02	12.74
## 496	TTTCTTTGTGTCGGTTTTAGGAT	TTTCTTTGTGTCGATTTTAGGAT	13.02	12.74
## 497	GCGTCTTTTCCCTGGTCCCAGGCA	GGGTCTTTTCCCTGGTCCCAGGCA	7.49	6.48
## 498	TTGTTTTGTTTTTTGGATAGAAT	TTGTTTTCTTTTTTGGATAGAAT	6.10	6.68

## 499	TTGTTTTGTTTTTTGGATAGAAT	TTGTTTTCTTTTTTGGATAGAAT	6.10	6.68
## 500	TTGTTTTGTTTTTTGGATAGAAT	TTGTTTTCTTTTTTGGATAGAAT	6.10	6.68
## 501	TTGTTTTGTTTTTTGGATAGAAT	TTGTTTTCTTTTTTGGATAGAAT	6.10	6.68
## 502	ATGATTATTTTCTGTACAGGTC	ATGATTATTTTCTGTACAAGTC	9.72	0.97
## 503	CCCCACCCCTGTTTTGCAGGCA	CCCCACCCCTGCTTTGCAGGCA	8.27	7.92
## 504	TCCATGGGTTCTTCTTCAGTGC	TCCATGGGTTCTTCTTCAGTGC	8.51	9.29
## 505	TCGCATCTGTTTTTTACAGACA	TCACATCTGTTTTTTACAGACA	9.46	9.84
## 506	TCGCATCTGTTTTTTACAGACA	TCACATCTGTTTTTTACAGACA	9.46	9.84
## 507	TCGCATCTGTTTTTTACAGACA	TCACATCTGTTTTTTACAGACA	9.46	9.84
## 508	TCGCATCTGTTTTTTACAGACA	TCACATCTGTTTTTTACAGACA	9.46	9.84
## 509	TCGCATCTGTTTTTTACAGACA	TCACATCTGTTTTTTACAGACA	9.46	9.84
## 510	TCGCATCTGTTTTTTACAGACA	TCACATCTGTTTTTTACAGACA	9.46	9.84
## 511	TTAAGTTTTATTTTTCCAGAAC	TTAAGTTTTACTTTTTCCAGAAC	7.31	6.46
## 512	ACCTCCACCTCCGTCTTCTCCTC	ACCTCCACCTCTGTCTTCTCCTC	-7.40	-7.26
## 513	GGATCTATCCATGCCCCAGCAG	GGGTCTATCCATGCCCCAGCAG	4.34	4.82
## 514	CCATACTGCTCAAATCCCAGGTC	CCATGCTGCTCAAATCCCAGGTC	4.76	5.36
## 515	CCATACTGCTCAAATCCCAGGTC	CCATGCTGCTCAAATCCCAGGTC	4.76	5.36
## 516	CCATACTGCTCAAATCCCAGGTC	CCATGCTGCTCAAATCCCAGGTC	4.76	5.36
## 517	CAGAAAATGAATACTTTCAGATA	CAGAAAACGAATACTTTCAGATA	1.97	0.38
## 518	CAGAAAATGAATACTTTCAGATA	CAGAAAACGAATACTTTCAGATA	1.97	0.38
## 519	ATGAATACTTTCAGATAAAGAAA	ACGAATACTTTCAGATAAAGAAA	-5.63	-5.88
## 520	GAACTTTAATTCCTTCCCTAGGG	GAACTTTAATTCCTTCCCTAGGG	-1.70	-10.45
## 521	AGCTCCACTTCCGGCAACCTTAA	AGCTCCACTTCCAGCAACCTTAA	-15.59	-20.70
## 522	TCCACTTCCGGCAACCTTAACTC	TCCACTTCCAGCAACCTTAACTC	-5.74	-11.13
## 523	CTTCCGGCAACCTTAACTCCAGT	CTTCCAGCAACCTTAACTCCAGT	-14.35	-15.68
## 524	TCCGGCAACCTTAACTCCAGTTC	TCCAGCAACCTTAACTCCAGTTC	3.26	2.10
## 525	GTTTTCTCTTCTATATTAGCAG	GTTTTCTCTTCTATATTAACAG	5.93	-2.82
## 526	GTTTTCTCTTCTATATTAGCAG	GTTTTCTCTTCTATATTAACAG	5.93	-2.82
## 527	TTCTCTTCTATATTAGCAGTGA	TTCTCTTCTATATTAACAGTGA	4.85	7.76
## 528	TTCTCTTCTATATTAGCAGTGA	TTCTCTTCTATATTAACAGTGA	4.85	7.76
## 529	TACACGGCCGCGACCCCCGCG	TACACGGCCGCGACCCCCGCG	-13.21	-5.15
## 530	ATGTTTGATTTTTCTTTTAGTGT	ATGTTTGATTTTTCTTTTAGTGT	10.32	11.06
## 531	ATGTTTGATTTTTCTTTTAGTGT	ATGTTTGATTTTTCTTTTAGTGT	10.32	11.06
## 532	ATGTTTGATTTTTCTTTTAGTGT	ATGTTTGATTTTTCTTTTAGTGT	10.32	11.06
## 533	ATGTTTGATTTTTCTTTTAGTGT	ATGTTTGATTTTTCTTTTAGTGT	10.32	11.06
## 534	G TTCAGAGCTCTGTCTCCCC	G TTCAGAGCTCTGTCTCCCGC	-15.25	-14.65
## 535	TCAGAGCTCTGTCTCCCCAG	TCAGAGCTCTGTCTCCCGCAG	-11.33	-3.27
## 536	TAAATAATTCAATTTCTGCAGCTG	TAAATAATTCATTTCTGCGGCTG	7.52	-0.43
## 537	CCTTCCTCCTGTTGATGCAGGCT	CTTTCCTCCTGTTGATGCAGGCT	8.12	8.50
## 538	CCTTCCTCCTGTTGATGCAGGCT	CTTTCCTCCTGTTGATGCAGGCT	8.12	8.50
## 539	CCTTCCTCCTGTTGATGCAGGCT	CTTTCCTCCTGTTGATGCAGGCT	8.12	8.50
## 540	TCAAATTGTTTTGACCTCAGAGA	GCAAATTGTTTTGACCTCAGAGA	5.66	4.10
## 541	ATATTGGCCCTCCTCCTCCTTA	ATATTGGCCCTCCTCCTCCTTA	-9.72	-9.51
## 542	GCCCTTCCTCCTCCTTACAGGGA	GCCCTCCTCCTCCTTACAGGGA	12.57	12.37
## 543	GCCCTTCCTCCTCCTTACAGGGA	GCCCTCCTCCTCCTTACAGGGA	12.57	12.37
## 544	CTTCCTCCTCCTTACAGGGAGCA	CCTCCTCCTCCTTACAGGGAGCA	-23.29	-23.41
## 545	CGTATACTCTTATAAATCAGCAA	CGTATACTCTTACAAATCAGCAA	1.74	1.53
## 546	CTCTGGTTATGTGTCCACAGGAT	CTCTGGTTACGTGTCCACAGGAT	9.36	8.81
## 547	GCTCGGCCTCCAGCCCTGCTTGT	GCTCGGTCTCCAGCCCTGCTTGT	-33.80	-33.93
## 548	GCTCGGCCTCCAGCCCTGCTTGT	GCTCGGCCTCCAGCCCTGCCTGT	-33.80	-33.27
## 549	TGGGACAGCGGCGGCTTGGAGT	AGGGACAGCGGCGGCTTGGAGT	-10.28	-11.69
## 550	ACACTTCATTTCCATGTTAGTGA	GCACTTCATTTCCATGTTAGTGA	5.18	4.55
## 551	CTAATGGCATGTATCCTTTCCTT	CTAATGGCATGTTTCCTTTCCTT	-12.64	-11.70
## 552	CATGTATCCTTTCCTTTCAGATG	CATGTTTCCTTTCCTTTCAGATG	11.44	12.87

## 553	CATGTATCCTTTCCCTTTTCAGATG	CATGTTTCCTTTCCCTTTTCAGATG	11.44	12.87
## 554	TCGGAGGCCGGGCTTGCATCCT	TCGGAGGCCGGGCTTGCCTCCT	-8.54	-16.58
## 555	TTGTGTTGACACCTTTAAAGACA	TTGTGCTGACACCTTTAAAGACA	2.05	2.67
## 556	TGGATATTAATATTTATCAGGCT	TAGATATTAATATTTATCAGGCT	4.15	3.09
## 557	TGGATATTAATATTTATCAGGCT	TAGATATTAATATTTATCAGGCT	4.15	3.09
## 558	TTATTCAAAATTTTTATAGCAA	TTATTCAAACCTTTTTATAGCAA	5.85	6.19
## 559	ACCTTTTGTCTTTGATAGGCT	AACTTTTGTCTTTGATAGGCT	9.32	7.47
## 560	CGGCGCTTGTGATAACCCAGCAC	CGGCGCTTGTATAACCCAGCAC	1.49	2.18
## 561	GTCCCTGTGTGCTTTTTCAGATA	GTCCCTGTCTGCTTTTTCAGATA	11.24	11.40
## 562	GAACCGGGCGGACGGGCTGGGAG	GAACCGGGCGGAGGGGCTGGGAG	-10.59	-17.05
## 563	GAACCGGGCGGACGGGCTGGGAG	GAACCGGGCGGACGGGCTGGGAG	-10.59	-9.89
## 564	TGATTTTTTTGTGGCTTTAGGCA	TGATTATTTTGTGGCTTTAGGCA	7.84	7.43
## 565	TGATTTTTTTGTGGCTTTAGGCA	TGATTATTTTGTGGCTTTAGGCA	7.84	7.43
## 566	GTTTAAACATTTTTTTTCAGCTG	GTTTAAAAATTTTTTTTCAGCTG	6.94	7.14
## 567	GTTTAAACATTTTTTTTCAGCTG	GTTTAAACATTTTTTTTCAACTG	6.94	-1.81
## 568	CTGTTTCTCAGGCTCTGGGAAA	CTCTTTCTCAGGCTCTGGGAAA	-18.04	-18.15
## 569	TCTCTTCTTTGTCTTACCAGCAA	TCTCTGTTTGTCTTACCAGCAA	8.67	7.73
## 570	TCTCTTCTTTGTCTTACCAGCAA	TCTCTGTTTGTCTTACCAGCAA	8.67	7.73
## 571	TTATTGTCTCCGTTTGTACATA	TTATTGTCTCCGTTTGTAGATA	1.66	9.73
## 572	TATTTTGCTTTTGGTCACAGGAG	TATTTGTTTTTGGTCACAGGAG	7.03	7.55
## 573	GTGTAACCTGTTCTTTGTAGATT	GTGTAACCTGTTCTTCGTAGATT	7.96	7.38
## 574	AAATATTTATTTCCCATAGGAT	AAATAATTATTTCCCATAGGAT	9.54	8.65
## 575	CCAGCAGCCCTGTACTGCCCTTC	CCAGCAGCCCTGTGCTGCCCTTC	-14.61	-14.43
## 576	TTTGTTTGTTTTTGAGACAGGGT	TTTGTTTATTTTTGAGACAGGGT	2.59	1.97
## 577	TTTGTTTGTTTTTGAGACAGGGT	TTTGTTTATTTTTGAGACAGGGT	2.59	1.97
## 578	TTGTAATAATATCTTAACAGCAG	TTGTAATAATGATCTTAACAGCAG	5.69	3.40
## 579	TAAAATTATCTTAACAGCAGGTT	TAAAATGATCTTAACAGCAGGTT	3.96	3.67
## 580	CAAAATTTTCATTTATATAGTTG	CTAATTTTCATTTATATAGTTG	4.66	5.35
## 581	ATAGTATGGCTCTTCCACAGATT	ATACTATGGCTCTTCCACAGATT	6.40	8.31
## 582	CTCTCTGCTCTGGTAGACGGGAA	CTCTCTGCTCTGGTAGATGGGAA	-6.04	-6.39
## 583	ACGGGAAGAGCATTAAATGCTGGA	ATGGGAAGAGCATTAAATGCTGGA	-47.31	-47.40
## 584	GACTCCTGCATTCCCTCCTCCCT	CACCTCCTGCATTCCCTCCTCCCT	-10.67	-10.28
## 585	GCTATCTTTCTGTTTCCCAGGGA	GCTGTCTTTCTGTTTCCCAGGGA	8.59	9.61
## 586	GAAGGTGGCTCGAAAATTCTGGT	GAAGGTGGCTCGGAAATTCTGGT	-16.63	-17.25
## 587	GCTCGAAAATTCTGGTGGAAGAA	GCTCGGAAATTCTGGTGGAAGAA	-14.46	-14.44
## 588	AACCTCTCCCACCTGCCCTTCTC	AACCTCTCCCACCTGCCCTTCTT	-12.44	-13.11
## 589	CCACCTGCCCTTCTCTTCAGGGA	CCACCTGCCCTTCTTTTCAGGGA	11.14	11.60
## 590	CCACCTGCCCTTCTCTTCAGGGA	CCACCTGCCCTTCTTTTCAGGGA	11.14	11.60
## 591	CCACCTGCCCTTCTCTTCAGGGA	CCACCTGCCCTTCTTTTCAGGGA	11.14	11.60
## 592	CCACCTGCCCTTCTCTTCAGGGA	CCACCTGCCCTTCTTTTCAGGGA	11.14	11.60
## 593	CCACCTGCCCTTCTCTTCAGGGA	CCACCTGCCCTTCTTTTCAGGGA	11.14	11.60
## 594	TTCCCGAGGCCCTGCTGCCATGT	TTCCCGAGGCCCTGCTGCCACGT	-17.08	-16.14
## 595	CGAGGCCCTGCTGCCATGTTGTA	CGAGGCCCTGCTGCCACGTTGTA	-26.45	-24.07
## 596	GCTGCCATGTTGTATGCCCCAGA	GCTGCCACGTTGTATGCCCCAGA	-12.16	-13.61
## 597	ACCTCAGCCTCCCAAAGTGCTGG	ACCTCGGCCTCCCAAAGTGCTGG	-15.82	-13.81
## 598	TCCACCTCTCTGTGTATCCAGGG	TCCACCTCTCTGTGTCTCCAGGG	-8.65	-7.58
## 599	TCCACCTCTCTGTGTATCCAGGG	TCCACCTCTCTGTGTATCCAGCG	-8.65	-9.16
## 600	AGTTCATGTCACTTTTAAAGGAG	CGTTCATGTCACTTTTAAAGGAG	5.19	6.90
## 601	TTCCCTCCATATACTTGACAGAGC	TTCCCTCCATATACTTGTAGAGC	8.28	6.65
## 602	TCCTTCATGTTTTTATCCAAGAG	TCCTTCATGTTTTTATCCAAGAG	0.03	8.78
## 603	ATGCAGCCCTGCAGGGAGACCCT	ATGCAGCCCTGCAGGGCGACCCT	-22.37	-20.09
## 604	CAGCCCTGCAGGGAGACCCTGCC	CAGCCCTGCAGGGCGACCCTGCC	-29.38	-23.27
## 605	AGCCCTGCAGGGAGACCCTGCC	AGCCCTGCAGGGCGACCCTGCC	-22.97	-15.65
## 606	CCTGCAGGGAGACCCTGCCCTCC	CCTGCAGGGCGACCCTGCCCTCC	-22.08	-15.92

## 607	TGCAATGTCTTCTGTTTCAGGGA	TGCAATGTGTTCTGTTTCAGGGA	11.25	11.23
## 608	AGTGCTGGGATTACAGGCGTGAG	AGTGCTGGGATTGCAGGCGTGAG	-19.86	-19.98
## 609	AACTAGAACTCAGAGCTCCACCC	AACTAGAACTCAGAGCTCTACCC	-29.13	-29.45
## 610	TTTTCATTTGTTTCTGCCAGGCA	TTTTCATTTGTTTCTACCAGGCA	8.68	9.46
## 611	GTCTGGTACACGGTAAGCAGAAA	GTCTGCTACACGGTAAGCAGAAA	-2.47	-1.17
## 612	AATATAATTTTCTCCCTAGATA	AATACAATTTTCTCCCTAGATA	9.90	9.66
## 613	TCAGATCTTTCCCACTACAGGTC	TCAGATCTTTCCCAATTACAGGTC	8.39	9.50
## 614	TTTTTCTTCTTCTTCTTTAGACC	TTTTTCTTCTTCTTCTTTAGAGC	11.32	11.51
## 615	TTTTTCTTCTTCTTCTTTAGACC	TTTTTCTTCTTCTTCTTTAGAGC	11.32	11.51
## 616	CTCCACCCCACTCAGCGAGAAGC	CTTCACCCCACTCAGCGAGAAGC	-27.53	-26.99
## 617	TCAAAAAATTTATATTACAGAAA	TAAAAAAATTTATATTACAGAAA	5.94	6.09
## 618	AATTCTTTCCCTAATTACAGGCA	AATTCCTTCCCTAATTACAGGCA	7.78	6.97
## 619	AATTCTTTCCCTAATTACAGGCA	AATTCCTTCCCTAATTACAGGCA	7.78	6.97
## 620	TTGTGTGTTCTTCTACTGTAGTA	TTGTCTGTTCTTCTACTGTAGTA	-20.85	-20.72
## 621	TGTGTGTTCTTCTACTGTAGTAT	TGTCTGTTCTTCTACTGTAGTAT	8.20	8.26
## 622	AGTGCTGTTTGTTTTATAGGGG	AGTGCTGTTTGTTTTACAGGGG	8.09	8.81
## 623	AAACATTTCTCTTCTACAGGCA	AAACATTTCTTTTCTACAGGCA	9.02	9.15
## 624	AAACATTTCTCTTCTACAGGCA	AAACATTTCTTTTCTACAGGCA	9.02	9.15
## 625	AAACATTTCTCTTCTACAGGCA	AAACATTTCTTTTCTACAGGCA	9.02	9.15
## 626	AAACATTTCTCTTCTACAGGCA	AAACATTTCTTTTCTACAGGCA	9.02	9.15
## 627	ATTTCTCTTCTACAGGCAGGAC	ATTTCTTTTCTACAGGCAGGAC	3.55	3.79
## 628	ATTTCTCTTCTACAGGCAGGAC	ATTTCTTTTCTACAGGCAGGAC	3.55	3.79
## 629	TTCATACCTTCTCTCATAGAGC	TTCATACCTCCCTCTCATAGAGC	9.30	8.89
## 630	TTCATACCTTCTCTCATAGAGC	TTCATACCTCCCTCTCATAGAGC	9.30	8.89
## 631	TATTATGTGATGTATTTACAGAG	TGTTATGTGATGTATTTACAGAG	7.65	8.08
## 632	CAACCTATTTCTGCCCTAAGTTG	CAACCTATTTCTACCCTAAGTTG	3.98	3.29
## 633	CAACCTATTTCTGCCCTAAGTTG	CAACCTATTTCTACCCTAAGTTG	3.98	3.29
## 634	AAAACCTTACGCTTTTGTAGGCA	AAAACCTTATGCTTTTGTAGGCA	6.43	6.34
## 635	AAAACCTTACGCTTTTGTAGGCA	AAAACCTTATGCTTTTGTAGGCA	6.43	6.34
## 636	ATCCCTGTTTTGTTTTGAGGGA	ATCCTTGTTTTGTTTTGAGGGA	-1.40	-2.13
## 637	AGTCTTCGTTTCTTTCGCAGGTA	AGTCTTGTTTCTTTCGCAGGTA	9.80	8.93
## 638	TGGCTGTCCCTGTCTCCAGACG	TGGCTGTCCCTGTCTCCAGATG	9.00	10.42
## 639	GAGTCAGCTACGGGCAAGCGGGC	GAGTCAGCTACGGGCCAGCGGGC	-33.04	-27.63
## 640	TCAGCTACGGGCAAGCGGGCAGC	TCAGCTACGGGCCAGCGGGCAGC	-37.13	-35.50
## 641	TGTCTTTGCCTTCTCTCCAGGAA	TCTCTTTGCCTTCTCTCCAGGAA	11.09	11.12
## 642	TGTCTTTGCCTTCTCTCCAGGAA	TCTCTTTGCCTTCTCTCCAGGAA	11.09	11.12
## 643	TGTCTTTGCCTTCTCTCCAGGAA	TCTCTTTGCCTTCTCTCCAGGAA	11.09	11.12
## 644	GTTTTCCCTTTTCTCTGTAGAGG	GTTTTCCCTTTTCTCTATAGAGG	9.97	9.48
## 645	GTCCCTATGCTGTCTTGCAAGAT	GTCCCTATGCTGTCTTCCAGGAT	10.09	9.61
## 646	CTATATATGTTTTATATAGTAC	CTATATATGTTCTTATATAGTAC	4.88	5.16
## 647	CTATATATGTTTTATATAGTAC	CTATATATGTTCTTATATAGTAC	4.88	5.16
## 648	TACCCTCGTGATCAATGCAGAAC	TACCCTGTGATCAATGCAGAAC	5.77	6.47
## 649	CCTCAGCAGCTATCTCCATAGGT	CCTCAGCAGCTAACTCCATAGGT	-20.11	-21.91
## 650	CCTCAGCAGCTATCTCCATAGGT	CCTCAGCAGCTAACTCCATAGGT	-20.11	-21.91
## 651	GTAATTCATACTTCTTTACAGAG	GTAATTCGTACTTCTTTACAGAG	5.83	6.14
## 652	GTTTAAATTTCACTTTACAGCAA	GTTTAAATTTACCTTTACAGCAA	7.77	7.77
## 653	GTTTAAATTTCACTTTACAGCAA	GTTTAAATTTACCTTTACAGCAA	7.77	7.77
## 654	GTTTAAATTTCACTTTACAGCAA	GTTTAAATTTACCTTTACAGCAA	7.77	7.77
## 655	TCCTTGTTTTGTTTCCCCATCAG	TCCTTGTTTTGTTTCCCCAACAG	-0.25	-0.40
## 656	TTGTTTTGTTTCCCCATCAGAAT	TTGTTTTGTTTCCCCAACAGAAT	8.44	10.17
## 657	TTGTTTTGTTTCCCCATCAGAAT	TTGTTTTGTTTCCCCAACAGAAT	8.44	10.17
## 658	TTGTTTTGTTTCCCCATCAGAAT	TTGTTTTGTTTCCCCAACAGAAT	8.44	10.17
## 659	TTGTTTTGTTTCCCCATCAGAAT	TTGTTTTGTTTCCCCAACAGAAT	8.44	10.17
## 660	TTGTTTTGTTTCCCCATCAGAAT	TTGTTTTGTTTCCCCAACAGAAT	8.44	10.17

## 661	CCTCCCTCTTTTTTTTTTTTGT	CCTCCCTCTTTTTTTATTTTGT	-3.39	-6.02
## 662	CCCTCTTTTTTTTTTTTGTGT	CCCTCTTTTTTTATTTTGTGT	-9.93	-10.72
## 663	TCTTTTTTTTTTTTGTGTGAC	TCTTTTTTTATTTTGTGTGAC	-14.04	-15.29
## 664	CAATCGTGCCCTTGCTGCAGCA	CAATCGTGCCCTTACTGCAGCA	5.59	5.51
## 665	TTTATTTTCATTTTATCAGGGA	TTTATTTTATTTTATCAGGGA	8.89	8.47
## 666	TTTATTTTCATTTTATCAGGGA	TTTATTTTATTTTATCAGGGA	8.89	8.47
## 667	CATGACTGATTCTTCTACAGCAT	CATGACTGATTCTTCCACAGCAT	7.54	7.61
## 668	TGTCCATGTTTCTTGCTCAGGCC	TGTCCGTGTTTCTTGCTCAGGCC	9.33	9.78
## 669	TCTGTACTTTTGGTACCTAGATG	TCTGTACTTTTGGTACTTAGATG	6.48	6.16
## 670	AGGGAGCTCACTCAGTGGGTTT	AGGGAGCTCACTCAGTGGGTTTA	-31.55	-33.74
## 671	GAGCTCACTCAGTGGGTTTGATG	GAGCTCACTCAGTGGGTTTAATG	-13.46	-22.21
## 672	AGCTCACTCAGTGGGTTTGATGT	AGCTCACTCAGTGGGTTTAATGT	-19.58	-11.63
## 673	GCTCACTCAGTGGGTTTGATGTG	GCTCACTCAGTGGGTTTAATGTG	-14.16	-9.38
## 674	GCTCACTCAGTGGGTTTGATGTG	GCTCACTCAGTGGGTTTAATGTG	-14.16	-9.38
## 675	CACCTCAGTGGGTTTGATGTGGTG	CACCTCAGTGGGTTTAATGTGGTG	-16.99	-20.12
## 676	TTTGATGTGGTGGATGCTGGCTC	TTTAATGTGGTGGATGCTGGCTC	-5.00	-4.48
## 677	GATGTCATTATTATCCCTAGTGT	GATGTCATTATTATCCCCAGTGT	5.88	5.60
## 678	AACCTGACCTGGCTCCACAGATG	AACCTGCCCTGGCTCCACAGATG	7.69	9.22
## 679	TTTTATAATGTATTTTATAGGGG	TTTTATAATGTATTTTACAGGGG	8.26	8.99
## 680	GATGGGCTGTCTGTGCCCATGCT	GAAGGGCTGTCTGTGCCCATGCT	-1.71	-4.01
## 681	TTTCTCATCCATGAGGTTAGGCT	TTTCTCGTCCATGAGGTTAGGCT	-0.26	-0.09
## 682	GTTCCCTCACCTGACCTCCAGTGG	GTTCCCTCACCTCACCTCCAGTGG	6.15	7.60
## 683	CGCCTCCTGTCCCCCTGCAGAGC	CGCCTCCTGTCCCCCGGCAGAGC	12.07	9.98
## 684	TGTAATTACCATACTTTCCAG	TGTAATTACCAGACCTTTCCAG	-12.59	-20.20
## 685	TACCCTCATTGTCTTGAGAGGTG	TACCCTCATTGTCTTGGGAGGTG	2.62	1.25
## 686	TGCACACTTTGTGTCCCCAGACC	TGCACACTTTGTGACCCAGACC	9.94	5.64
## 687	AAATGACATATTTTTTTAGGAC	AAATGACGTATTTTTTTAGGAC	6.85	7.54
## 688	CTCCCGTGTGGGTCTGCAGGGG	CTCCCATGTTGGGTCTGCAGGGG	7.83	7.54
## 689	CTCCCGTGTGGGTCTGCAGGGG	CTCCCATGTTGGGTCTGCAGGGG	7.83	7.54
## 690	CTCCCGTGTGGGTCTGCAGGGG	CTCCCATGTTGGGTCTGCAGGGG	7.83	7.54
## 691	CTTTTCTTTTCCCCCCCCAGGGA	CTTTTCTTTTCCCCCCCCAGGGA	12.90	12.49
## 692	CTTTTCTTTTCCCCCCCCAGGGA	CTTTTCTTTTCCCCCCCCAGGGA	12.90	12.49
## 693	CTTTTCTTTTCCCCCCCCAGGGA	CTTTTCTTTTCCCCCCCCAGGGA	12.90	12.49
## 694	TTTTTAAATTTTCTTTCAGACC	TTTTTAAATTTTCTTTCAGACC	9.92	10.29
## 695	TTTTTAAATTTTCTTTCAGACC	TTTTTAAATTTTCTTTCAGACC	9.92	10.29
## 696	TTTAAAACTGCTTTCTCAAGTCG	TTTAAAACTGCTTTCTCAAGTTG	1.21	2.48
## 697	CTTCTGCGTTTCTGTACAGTCC	CCTCTGCGTTTCTGTACAGTCC	9.03	9.15
## 698	CTGATGTATTAATTTCTCAGGAA	CTAATGTATTAATTTCTCAGGAA	5.98	5.46
## 699	CTGATGTATTAATTTCTCAGGAA	CTAATGTATTAATTTCTCAGGAA	5.98	5.46
## 700	CTCTCCTTCAATTTCTGTAGGCA	TTCTCCTTCAATTTCTGTAGGCA	9.42	9.12
## 701	CTCTCCTTCAATTTCTGTAGGCA	TTCTCCTTCAATTTCTGTAGGCA	9.42	9.12
## 702	CTCTCCTTCAATTTCTGTAGGCA	TTCTCCTTCAATTTCTGTAGGCA	9.42	9.12
## 703	CCCATGTCTTGATTTGGTAGGCC	CCCATGTCTTGATTTGGTAGGCC	5.47	5.80
## 704	CCCATGTCTTGATTTGGTAGGCC	CCCATGTCTTGATTTGGTAGGCC	5.47	5.80
## 705	CATTTTGAGTGTCTTTACAGGTT	CGTTTGTAGTGTCTTTACAGGTT	5.62	6.00
## 706	CATTCTCTTCCGTCATCCAGCTT	CATTCTCTTCCATCATCCAGCTT	6.51	6.32
## 707	ATACAGTTCATCCCCCTCAGGTG	ATACAGTTCATCCCCCTCAGGTG	4.24	5.99
## 708	TTGCTATACTGTATCGTTTAGGG	TTGCTGTACTGTATCGTTTAGGG	-13.63	-12.64
## 709	ACACCGTGTCTTTCTTAAGATC	ACACCATGTTCTTTCTTAAGATC	8.73	8.34
## 710	CTTTCCCCTTCTGAAGAAGAAG	CTTGCCCCTTCTGAAGAAGAAG	-0.21	-0.58
## 711	AAAGGGATTTCTCATAACAGGAT	AAAGGGATTTCTCATTACAGGAT	4.89	5.77
## 712	AGTAGTACTTTCTCTTTCAGAAC	AGTAGTACTTTCTCTTTCAGAGC	7.82	7.72
## 713	GTTCTCCCCTTCTATAAAGGAA	CTTCTCCCCTTCTATAAAGGAA	8.21	8.94
## 714	TGTATTCCTTTTTTTTTCAGATC	TGTATTCCTTTTGTTTTCAGATC	11.47	10.98

## 715	TGTATTCCTTTTTTTTTCAGATC	TGTATTCCTTTTGTTCAGATC	11.47	10.98
## 716	TGTATTCCTTTTTTTTTCAGATC	TGTATTCCTTTTGTTCAGATC	11.47	10.98
## 717	CTCTACACTACTGACCACAGGGA	CTCTACACTACTGGCCACAGGGA	3.09	3.06
## 718	CTGACCTCTTTTCCTTCCCCAGCG	CTGACCTCTTTTCCTTCCCTCAGCG	-5.52	-5.24
## 719	CTGACCTCTTTTCCTTCCCCAGCG	CTGACCTCTTTTCCTTCCCTCAGCG	-5.52	-5.24
## 720	TGACCTCTTTTCCTTCCCCAGCGT	TGACCTCTTTTCCTTCCCTCAGCGT	10.35	10.39
## 721	TGACCTCTTTTCCTTCCCCAGCGT	TGACCTCTTTTCCTTCCCTCAGCGT	10.35	10.39
## 722	TTCCTTCCCCAGCGTCCCAGATC	TTCCTTCCCTCAGCGTCCCAGATC	1.62	1.71
## 723	CTTCTTAATTTTCATTGTAGTAT	CTTCTTAATTTTCACTGTAGTAT	6.50	6.11
## 724	CTTCTTAATTTTCATTGTAGTAT	CTTCTTAATTTTCACTGTAGTAT	6.50	6.11
## 725	CTTCTTAATTTTCATTGTAGTAT	CTTCTTAATTTTCACTGTAGTAT	6.50	6.11
## 726	CTTCTTAATTTTCATTGTAGTAT	CTTCTTAATTTTCACTGTAGTAT	6.50	6.11
## 727	TATTTGTTTTGTTTGTTTCAGCAT	TATTTATTTTGTTTGTTTCAGCAT	6.51	6.54
## 728	TTGGCATGTTTTTCCAAAGTGT	TTGGCATGTCCTTTCCAAAGTGT	5.16	4.66
## 729	ACTCTTGTTCTTTTACTCAGCTC	ACTCTTGTTCTTTTACTCACCTC	6.66	-1.40
## 730	ACGGCTTGGGCCCTCGCAGGAG	ATGGCTTGGGCCCTCGCAGGAG	5.05	4.72
## 731	AAATGAAGCTTTTTTTTAGGCT	AAATGAGCTTTTTTTTAGGCT	6.66	5.38
## 732	GGCGCTGCTTTTTATTTCAAGAA	GGCGCTGCTTTTTATTTCAAGAA	9.16	0.41
## 733	GGCGCTGCTTTTTATTTCAAGAA	GGCGCTGCTTTTTATTTCAAGAA	9.16	0.41
## 734	TGCTATTCTTTCTTTATTTTAGG	TGCTATTCTTCTTTATTTTAGG	-9.80	-10.06
## 735	CTATTCTTTCTTTATTTTAGGTG	CTATTCTTCTTTATTTTAGGTG	12.49	12.00
## 736	CTATTCTTTCTTTATTTTAGGTG	CTATTCTTCTTTATTTTAGGTG	12.49	12.00
## 737	CTATTCTTTCTTTATTTTAGGTG	CTATTCTTCTTTATTTTAGGTG	12.49	12.00
## 738	CTATTCTTTCTTTATTTTAGGTG	CTATTCTTCTTTATTTTAGGTG	12.49	12.00
## 739	CTATTCTTTCTTTATTTTAGGTG	CTATTCTTCTTTATTTTAGGTG	12.49	12.00
## 740	CTATTCTTTCTTTATTTTAGGTG	CTATTCTTCTTTATTTTAGGTG	12.49	12.00
## 741	TTACCTTGGGCTGGAGCAGCCA	TTCCCTTGGGCTGGAGCAGCCA	0.32	0.99
## 742	TATGCACTCTTTTCCCTCAGGAG	TATGCACTCTTTTCCCCCAGGAG	9.67	10.52
## 743	TATGCACTCTTTTCCCTCAGGAG	TATGCACTCTTTTCCCCCAGGAG	9.67	10.52
## 744	TATGCACTCTTTTCCCTCAGGAG	TATGCACTCTTTTCCCCCAGGAG	9.67	10.52
## 745	CAGAGGAATCGCTTGAGTTAAGG	CAGAGGAATCGCTTGAGTTCAGG	-21.28	-20.59
## 746	ACTTTCCTGACCTTTGCAGCTA	TCTTTCCTGACCTTTGCAGCTA	9.29	9.46
## 747	TATTTACCCCTACACTGCAGTGA	TATTTACCCCACTGCAGTGA	3.53	2.98
## 748	ACAGAGTCTCTTTTGGCAGCCA	ACAGAGTCTCTTTTGGCAGCCA	2.73	2.59
## 749	CCCCCAGAGGGGCGAGCCCTG	CCCCCAGAGGGGCGAGCCGCTG	-32.73	-28.77
## 750	TAATGCCTGCCCTTCCTAGAAC	TAATTCCTGCCCTTCCTAGAAC	6.38	6.66
## 751	GAACCTCCCCTCTCTCCTAGTCA	GTACCTCCCCTCTCTCCTAGTCA	7.14	7.89
## 752	TCCCCATTGCCCACTCCAGAAT	TCCCCATTGTCCACTCCAGAAT	6.65	7.46
## 753	TTTTTCTTCTTCTTTCAGGAT	TTTTTTTCTTCTTTCAGGAT	12.90	12.78
## 754	TTTTTCTTCTTCTTTCAGGAT	TTTTTTTCTTCTTTCAGGAT	12.90	12.78
## 755	CAGTGAGGCTGTTGGTGCAGGCG	CGTGAGGCTGTTGGTGCAGGCG	1.66	1.99
## 756	CATGTGGCTTTCTTCCGAGCTG	CATGTGGCTTTCTTCCACAGCTG	10.55	10.56
## 757	TGGCTAGGCCAACCCCCAGGAG	TGGCTAGGCCACCCCCAGGAG	-0.89	-0.32
## 758	CTTCAAGAAATGTTTCTCAGTTT	CTTCAAGAAATATTTCTCAGTTT	1.05	1.02
## 759	CTTCAAGAAATGTTTCTCAGTTT	CTTCAAGAAATATTTCTCAGTTT	1.05	1.02
## 760	TTCAAGAAATGTTTCTCAGTTT	TTCAAGAAATATTTCTCAGTTT	-16.72	-17.57
## 761	GTTTCTCAGTTTTTTTGCAGATT	ATTTCTCAGTTTTTTTGCAGATT	6.32	6.58
## 762	TCCATGACTTTTCATCTGCAGGAT	TCCATCACTTTTCATCTGCAGGAT	10.56	11.00
## 763	TCCATGACTTTTCATCTGCAGGAT	TCCATCACTTTTCATCTGCAGGAT	10.56	11.00
## 764	TGTTTTCTCCCCACATTAGCCC	TGTTTTCTCCCCACCTTAGCCC	5.12	7.68
## 765	TGTTTTCTCCCCACATTAGCCC	TGTTTTCTCCCCACCTTAGCCC	5.12	7.68
## 766	TGTTTTCTCCCCACATTAGCCC	TGTTTTCTCCCCACCTTAGCCC	5.12	7.68
## 767	TGTTTTCTCCCCACATTAGCCC	TGTTTTCTCCCCACCTTAGCCC	5.12	7.68
## 768	CAGCCTTCTCTTTTTTCAGAAC	CAGCCTTCTCTATTTTCAGAAC	11.28	10.34

## 769	CATATTTTTGTTGTGTACAGCAG	CATCTTTTTGTTGTGTACAGCAG	6.50	7.35
## 770	TTTCACTTTCTGTCCTGCAGAGA	TTTCCCTTTCTGTCCTGCAGAGA	11.06	12.34
## 771	TTCTTTTTTCTGACGTGCAGCAC	TTCTTTTTTCTGACATGCAGCAC	7.04	7.18
## 772	CCGCGGCTCCAGGGAACGGCCGC	ACGCGGCTCCAGGGAACGGCCGC	-41.86	-42.03
## 773	CCGCGGCTCCAGGGAACGGCCGC	CCGCGGCTCCGGGGAACGGCCGC	-41.86	-36.41
## 774	CGGCTCCAGGGAACGGCCGCGCA	CGGCTCCGGGGAACGGCCGCGCA	-23.19	-19.03
## 775	ACACTTCTGTATATACACAGGGT	ACACTTCTGTATATACACAAGGT	6.26	-2.50
## 776	AGTCTCGCTCTGTGGCCAGGCT	AGTCTCGCTCTGTTGCCAGGCT	2.84	3.46
## 777	ATTCACGCCCCCGCGCCCCC	ATTCACGCCCCCGCGCCCCC	-11.36	-19.28
## 778	GGCGCGTTTTCTGGGAAGAGT	TGCGCGTTTTCTGGGAAGAGT	1.30	2.79
## 779	TGAATCTTCTTTGTTACCAGAGT	TGAATCTTCTTTGTTACCAGCGT	6.88	6.63
## 780	CTTTTCTGTTTACTTCAAGGGC	CTTTTCTGTTTCACTTCAAGGGC	9.02	9.96
## 781	ATGTGTGCTTTTTCTAATAGAAA	ATGTGTGCTTTTTCTAAGAGAAA	8.48	-4.93
## 782	ATGTGTGCTTTTTCTAATAGAAA	ATGTGTGCTTTTTCTCATAGAAA	8.48	9.09
## 783	ATGTGTGCTTTTTCTAATAGAAA	ATGTGTGCTTTTTCAAATAGAAA	8.48	8.00
## 784	TATTTCTGTTGCGTACTCAGAAT	TATTTCTGTTGCATACTCAGAAT	7.13	5.66
## 785	TTCTTTTTTATATGTTGCAGATT	TTCTTTTTTATGTGTTGCAGATT	10.00	10.24
## 786	TTCTTTTTTATATGTTGCAGATT	TTCTTTTTTATGTGTTGCAGATT	10.00	10.24
## 787	TATTAATTTCTGAAATATAGGTC	TATGAAATTTCTGAAATATAGGTC	5.03	4.32
## 788	ATTGATTTTTTTTTTCTCTTAG	ATTGATTTTTTTTTTCTCCTAG	-10.58	-10.04
## 789	TGATTTTTTTTTTCTCTTAGTC	TGATTTTTTTTTTCTCCTAGTC	-4.54	-4.99
## 790	GATTTTTTTTTTCTCTTAGTCC	GATTTTTTTTTTCTCCTAGTCC	7.99	8.43
## 791	ATTTTTTTTTTCTCTTAGTCCT	ATTTTTTTTTTCTCCTAGTCCT	-9.68	-9.99
## 792	CTTAATTACTTTCTTGAAAGGGG	CTTAATTACTTTCTTGAAAGGGA	3.49	4.01
## 793	ATTCCTTTTCGGCCCTGCAGAGT	ATTCATTTTCGGCCCTGCAGAGT	9.51	7.85
## 794	ATTCCTTTTCGGCCCTGCAGAGT	ATTCATTTTCGGCCCTGCAGAGT	9.51	7.85
## 795	AAAGTTAGGGTCACCGGGAAGGT	AAAGTTTGGGTACACGGGAAGGT	-24.44	-20.00
## 796	AACAATGTTGTATGTACAGGAA	AACAATGTTTTATGTACAGGAA	6.66	7.40
## 797	CCAGCAGGTGGCGAGAATCCTCC	CCAGCAGGTGGCAAGAATCCTCC	-24.76	-25.24
## 798	GTGATTTTTTTTCCCTTAAGACA	ATGATTTTTTTTCCCTTAAGACA	5.40	5.38
## 799	CTGTTTACGTTCCCCACGTAGAA	CTGTTTACGTTCTCCACGTAGAA	-19.72	-19.62
## 800	TGTTTACGTTCCCCACGTAGAAC	TGTTTACGTTCTCCACGTAGAAC	8.50	9.08
## 801	CCGCTTCTGTTGCTCCACCTGA	CTGCTTCTGTTGCTCCACCTGA	-10.75	-10.38
## 802	ACACACGCGCGTGACACACACC	ACACACGCGCGGCACACACACC	-3.50	-4.22
## 803	TTTTCTGATTCTTTTTTCAGTCA	TTTTCTGATTCTTTTTTCAGTGA	9.29	10.03
## 804	TTTTCTGATTCTTTTTTCAGTCA	TTTTCTGATTCTTTTTTCAGTGA	9.29	10.03
## 805	TGCTTTCGTTTAAATATGTAGACA	TGCTTTCATTTAAATATGTAGACA	5.24	5.40
## 806	CTGCCTTCTTATTCTTCCAGGAG	CTGCCTTCTTATTCTTCCAGGAG	10.53	10.14
## 807	CTGCCTTCTTATTCTTCCAGGAG	CTGCCTTCTTATTCTTCCAGGAG	10.53	10.14
## 808	CTGCCTTCTTATTCTTCCAGGAG	CTGCCTTCTTATTCTTCCAGGAG	10.53	10.14
## 809	TACCTCTTATGTATTTATAGGGT	TACCTCTTACGTATTTATAGGGT	7.68	7.00
## 810	TACCTCTTATGTATTTATAGGGT	TACCTCTTACGTATTTATAGGGT	7.68	7.00
## 811	TTAAATTTTTCTTTCTTAATAG	TTAAATGTTTCTTTCTTAATAG	-3.34	-2.92
## 812	AATTTTCTTTTCTTAATAGGTG	AATGTTTCTTTTCTTAATAGGTG	10.13	10.52
## 813	AATTTTCTTTTCTTAATAGGTG	AATGTTTCTTTTCTTAATAGGTG	10.13	10.52
## 814	ATTTTCTTTTCTTAATAGGTGA	ATGTTTCTTTTCTTAATAGGTGA	-3.47	-3.37
## 815	TTTTCTTTTCTTAATAGGTGAAT	GTTTCTTTTCTTAATAGGTGAAT	-12.27	-13.32
## 816	TGTAGTCTCTATACATTCACTTT	TGTAGTCTTTATACATTCACTTT	3.87	3.91
## 817	GTTACTTGAAGCAAAACGAAATC	TTTACTTGAAGCAAAACGAAATC	-29.22	-27.73
## 818	TAATGAACATGATCTTCGTGGTG	TAATGAACATGATCTTCATGGTG	-7.43	-4.05
## 819	ACACATATGTTGATGTATAGGTG	ACACATATGTTGATATATAGGTG	4.49	5.10
## 820	ACACATATGTTGATGTATAGGTG	ACACATATGTTGATATATAGGTG	4.49	5.10
## 821	CCACCTCTCCTTTATTTTAGGTA	CCACCTCTCCTTTCTTTTAGGTA	12.00	12.85
## 822	CCACCTCTCCTTTATTTTAGGTA	CCACCTCTCCTTTCTTTTAGGTA	12.00	12.85



## 823	CGCATAATTTATGATTTTAGAAA	CACATAATTTATGATTTTAGAAA	5.30	5.63
## 824	CCCCTCACCCCAACCACCTTACT	CCCCTCAACCCCAACCACCTTACT	-13.26	-14.21
## 825	TATTTGCTTTTGTCTCCCTCTG	TGTTTGCTTTTGTCTCCCTCTG	-8.40	-7.61
## 826	ATGAACTTTTGTGTTGTAGGTC	ATGAACTTCTGTGTTGTAGGTC	9.04	8.19
## 827	ATGAACTTTTGTGTTGTAGGTC	ATGAACTTCTGTGTTGTAGGTC	9.04	8.19
## 828	CTAACCAGCTTCTACCCAGCCC	CTAACCAGCCTCTACCCAGCCC	2.16	1.08
## 829	TTATGCATCTATTTATTTAGAGA	TTATGCATTTATTTATTTAGAGA	5.96	6.52
## 830	TTATGCATCTATTTATTTAGAGA	TTATGCATTTATTTATTTAGAGA	5.96	6.52
## 831	TGTGTATATTTTCGTTGAAGCAT	TGTGTATATTTTCGTTTGAAGCAT	5.22	6.01
## 832	AAAAGGGTTTTTCTCTAGAGA	AGAAGGGTTTTTCTCTAGAGA	5.96	4.97
## 833	CCCTGTGCTTTTGTCCCCAGGGA	CCCTGTGCTTTTGTCCCCAGAGA	12.40	11.39
## 834	CCCTGTGCTTTTGTCCCCAGGGA	CCCTGTGCTTTTGTCCCCAGAGA	12.40	11.39
## 835	CCCTGTGCTTTTGTCCCCAGGGA	CCCTGTGCTTTTGTCCCCAGAGA	12.40	11.39
## 836	CCCTGTGCTTTTGTCCCCAGGGA	CCCTGTGCTTTTGTCCCCAGAGA	12.40	11.39
## 837	CCCTGTGCTTTTGTCCCCAGGGA	CCCTGTGCTTTTGTCCCCAGAGA	12.40	11.39
## 838	CCCTGTGCTTTTGTCCCCAGGGA	CCCTGTGCTTTTGTCCCCAGAGA	12.40	11.39
## 839	GTGGCCAAGGTCTCGGAGGCCAG	GTGGCCAAGTTCTCGGAGGCCAG	-28.51	-26.50
## 840	TAAAAAAATTTTTTTTACAGGTA	TAAAAAAATTTTTTTTACAGGTA	9.83	9.37
## 841	TAAAAAAATTTTTTTTACAGGTA	TAAAAAAATTTTTTTTACAGGTA	9.83	9.37
## 842	TCCTCTTATCCCTGCTCTAGAAC	TCCTCTCATCCCTGCTCTAGAAC	9.22	9.16
## 843	CTTTTGCTCTACCATCTAGGAT	CTTTTGCTCTACCATCTAGAAAT	10.67	9.05
## 844	CCCTCTGGTCTCTGCCGACGCT	CCCTCTGGTCTCTGCCACAGCCT	8.95	8.54
## 845	CACCCTCGTTCTCCTCGCAGTGG	CACCCTCGTTCTCCTTGCAGTGG	10.19	10.77
## 846	GGCGTTCTCTCCACCCACAGGTG	GGCATTCTCTCCACCCACAGGTG	11.51	10.41
## 847	GGCGTTCTCTCCACCCACAGGTG	GGCATTCTCTCCACCCACAGGTG	11.51	10.41
## 848	TTTACTCTCTGTCTCCACAGATA	TTTACTCGTGTCTCCACAGATA	13.35	11.54
## 849	TTTACTCTCTGTCTCCACAGATA	TTTACTCGTGTCTCCACAGATA	13.35	11.54
## 850	CCTGTCATCAGTCTCCCCAGGTC	CCTGTCGTCACTCTCCCCAGGTC	4.35	4.83
## 851	CCTGTCATCAGTCTCCCCAGGTC	CCTGTCGTCACTCTCCCCAGGTC	4.35	4.83
## 852	CCTGTCATCAGTCTCCCCAGGTC	CCTGTCGTCACTCTCCCCAGGTC	4.35	4.83
## 853	CCCGTCCAGCCTGTCACTAGTCT	CCCGTCCAGCCTGTCTCACTAGTCT	1.70	0.74
## 854	CCTGGCCCATCCCATCGAAGACA	CCTGTCCCATCCCATCGAAGACA	4.87	6.12
## 855	TTCGTTTTTATCTAATGTAGCTG	TTCGTTTTTATCTAATGTAGCTG	6.47	7.10
## 856	TTCGTTTTTATCTAATGTAGCTG	TTCGTTTTTATCTAATGTAGCTG	6.47	7.10
## 857	GACCCGTGCCAACCCCATAGCCA	GACCTGTGCCAACCCCATAGCCA	4.83	4.96
## 858	ATGTATGTCATCTTTCTAGACC	GTGTATGTCATCTTTCTAGACC	9.17	9.46
## 859	CGCCTCATTTTAAATTGCAGATT	CACCTCATTTTAAATTGCAGATT	9.02	8.65
## 860	CGCCTCATTTTAAATTGCAGATT	CACCTCATTTTAAATTGCAGATT	9.02	8.65
## 861	CGCCTCATTTTAAATTGCAGATT	CACCTCATTTTAAATTGCAGATT	9.02	8.65
## 862	TCCGCCTTCCCTACCTGCAGTTA	TCCGCCTTCCCACCTGCAGTTA	9.72	9.12
## 863	CTTTTCCTTTTTTTTAAATAGGAG	CTTTTCTTTTTTTTAAATAGGAG	10.34	10.03
## 864	CTTTTCCTTTTTTTTAAATAGGAG	CTTTTCTTTTTTTTAAATAGGAG	10.34	10.03
## 865	CTTTTCCTTTTTTTTAAATAGGAG	CTTTTCTTTTTTTTAAATAGGAG	10.34	10.03
## 866	CTTTTCCTTTTTTTTAAATAGGAG	CTTTTCTTTTTTTTAAATAGGAG	10.34	10.03
## 867	CTTTTCCTTTTTTTTAAATAGGAG	CTTTTCTTTTTTTTAAATAGGAG	10.34	10.03
## 868	CTTTTCCTTTTTTTTAAATAGGAG	CTTTTCTTTTTTTTAAATAGGAG	10.34	10.03
## 869	CTTTTCCTTTTTTTTAAATAGGAG	CTTTTCTTTTTTTTAAATAGGAG	10.34	10.03
## 870	CGTGCCCGTGTCTGGCCAGGTG	CGTGCCCGTGTCTCGGCCAGGTG	9.76	9.50
## 871	CGTGCCCGTGTCTGGCCAGGTG	CGTGCCCGTGTCTCGGCCAGGTG	9.76	9.50
## 872	CGTGCCCGTGTCTGGCCAGGTG	CGTGCCCGTGTCTCGGCCAGGTG	9.76	9.50
## 873	CGTGCCCGTGTCTGGCCAGGTG	CGTGCCCGTGTCTCGGCCAGGTG	9.76	9.50
## 874	CGTGCCCGTGTCTGGCCAGGTG	CGTGCCCGTGTCTCGGCCAGGTG	9.76	9.50
## 875	CGTGCCCGTGTCTGGCCAGGTG	CGTGCCCGTGTCTCGGCCAGGTG	9.76	9.50
## 876	GCTCCTGCTTCTCCCCTAGATC	GCTCCTGCTTCTCCCCTAGATC	11.55	10.87

## 877	GTACTGTTTGTGTTACAGGTG	GTACTATTTGTGTTACAGGTG	10.91	10.51
## 878	CTGTACTGTCTTCACTGCAGGTG	CTATACTGTCTTCACTGCAGGTG	10.69	9.97
## 879	TGAATCTACCTACTCCACAGAGC	TGAATCTACCTACTCCACAGAGT	7.02	6.65
## 880	TGAATCTACCTACTCCACAGAGC	TGAATCTACCTACTCCACAGAGT	7.02	6.65
## 881	TTGTTTCTTTCTTTTTTAGACA	TTGTTTCTTTATTTTTTAGACA	10.72	8.69
## 882	TCTTGTGCTATTTTACTTAGGTT	TCTTGTGCTATTTTACGTAGGTT	8.10	7.52
## 883	ATTTACATTCTTTATTTTCAGCTA	ATTTACATTATTTATTTTCAGCTA	8.08	6.52
## 884	ATTTACATTCTTTATTTTCAGCTA	ATTTACATTATTTATTTTCAGCTA	8.08	6.52
## 885	ATGCAAATCTTTTTTCCAAGGTG	ACGCAAATCTTTTTTCCAAGGTG	5.20	5.11
## 886	ATGCAAATCTTTTTTCCAAGGTG	ACGCAAATCTTTTTTCCAAGGTG	5.20	5.11
## 887	ACGACTCTTAATCCTTACAGATG	AAGACTCTTAATCCTTACAGATG	7.80	6.18
## 888	ACGACTCTTAATCCTTACAGATG	AAGACTCTTAATCCTTACAGATG	7.80	6.18
## 889	ACGACTCTTAATCCTTACAGATG	AAGACTCTTAATCCTTACAGATG	7.80	6.18
## 890	ACGACTCTTAATCCTTACAGATG	AAGACTCTTAATCCTTACAGATG	7.80	6.18
## 891	CCCTCCCCACTCCTTTTAAGGTA	CCTTCCCCACTCCTTTTAAGGTA	9.29	9.29
## 892	TTTTCCCATTCCTTTGTAGCCC	TTTTTCCATTCCCTTTGTAGCCC	10.94	10.89
## 893	TTTTCCCATTCCTTTGTAGCCC	TTTTTCCATTCCCTTTGTAGCCC	10.94	10.89
## 894	GATGCTGCAAAGGAAATCATGCA	GATGCTGCAAAGGAAATCGTGCA	-16.89	-24.84
## 895	GTTGTTTCATTTCTGTTCCAGCTG	GTTGTTTCATTTCTGTTCTAGCTG	9.20	9.20
## 896	CCTTGCTTTTACAAATGTTTCTG	CCTTGCTTTTACAAATATTTCTG	-10.22	-10.74
## 897	TTGCTTTTACAAATGTTTCTGAG	TTGCTTTTACAAATATTTCTGAG	-11.71	-11.43
## 898	GCTTTTACAAATGTTTCTGAGCT	GCTTTTACAAATATTTCTGAGCT	-11.03	-11.30
## 899	CCTTGTCAGGAGTATCCCAAG	CCTTGTCAGGAGTATCCCAAG	-24.53	-24.77
## 900	TGTGTTGCTTCCTTTACTAGAAA	TGTGTTGCTTCCTTTATTAGAAA	8.65	8.23
## 901	ATAATGTTCTTGTATAGCAGCTC	ATAATGTTCTTGTATAGCAGTTC	3.97	3.60
## 902	GCGTCTGTTGTACACTTAGCTTT	GCGTCTGCTGTACACTTAGCTTT	-13.39	-13.81
## 903	AAGCATTTTCTGCATTTTCAGGAA	AAGCATTTTCTGCATTTTCAGAAA	7.24	6.14
## 904	TGACTCCCCTATGCCTTTCCCA	TGACTCCCCCTATGCCTTTCCCA	-12.98	-12.06
## 905	AATATGTATTTTATTTCCAGGGA	AGTATGTATTTTATTTCCAGGGA	7.49	6.35
## 906	AATATGTATTTTATTTCCAGGGA	AGTATGTATTTTATTTCCAGGGA	7.49	6.35
## 907	AATATGTATTTTATTTCCAGGGA	AGTATGTATTTTATTTCCAGGGA	7.49	6.35
## 908	AGTTTGATGTCCTTATTTCAGGTT	AGTTCGATGTCCTTATTTCAGGTT	7.38	6.57
## 909	ACAAAAGATATTTTAAACCCACT	ACAAAAGATATTTTAACTCACT	-13.65	-13.98
## 910	TGCCTATGCGGCCGTGGCCGTGG	TGCCTATGCGGCCGTGGCCGTGG	-6.09	-6.18
## 911	GCCTATGCGGCCGTGGCCGTGGC	GCCTATGCGGCCGTGGCCGTGGC	-22.91	-12.44
## 912	TATGCGGCCGTGGCGGTGGCTCA	TATGCGGCCGTGGCCGTGGCTCA	-27.52	-27.96
## 913	TATGCGGCCGTGGCGGTGGCTCA	TATGCGGCCGTGGCCGTGGCTCA	-27.52	-27.96
## 914	ATGCGGCCGTGGCGGTGGCTCAC	ATGCGGCCGTGGCCGTGGCTCAC	-24.22	-23.42
## 915	GCGGCCGTGGCGGTGGCTCACGT	GCGGCCGTGGCCGTGGCTCACGT	-17.47	-15.77
## 916	CGGCCGTGGCGGTGGCTCACGTG	CGGCCGTGGCCGTGGCTCACGTG	-5.77	-4.93
## 917	CGTGGCGGTGGCTCACGTGGCCC	CGTGGCCGTGGCTCACGTGGCCC	-4.23	-2.93
## 918	GGCGGTGGCTCACGTGGCCCCTA	GGCCGTGGCTCACGTGGCCCCTA	-14.36	-13.59
## 919	GCGGTGGCTCACGTGGCCCCTAA	GCCGTGGCTCACGTGGCCCCTAA	-14.79	-13.70
## 920	GCGGTGGCTCACGTGGCCCCTAA	GCCGTGGCTCACGTGGCCCCTAA	-14.79	-13.70
## 921	CGGTGGCTCACGTGGCCCCTAAG	CCGTGGCTCACGTGGCCCCTAAG	-17.06	-16.74
## 922	TCACACATCCTCACACACACCCT	TTACACATCCTCACACACACCCT	-3.98	-3.71
## 923	AATCTTTTCTCCCCGTTAGGTC	AATCTTTTCTCCCCGCTAGGTC	9.19	10.53
## 924	AGTGAATGTTTTCTCAACAGGTT	GGTGAATGTTTTCTCAACAGGTT	8.67	8.32
## 925	TTTCTTAACTTTTTTTAAGGCT	TTTCTTAACTTCTTTTTAAGGCT	7.82	8.33
## 926	TTTCTTAACTTTTTTTAAGGCT	TTTCTTAACTTCTTTTTAAGGCT	7.82	8.33
## 927	TGGTCTCCTGCGCATCACAGATG	TGGTCTCCTGCGCATCGCAGATG	6.32	7.31
## 928	ATATGTATTTCTGTACTTAGTTT	ATAAGTATTTCTGTACTTAGTTT	6.55	4.14
## 929	TTCTCTGTATTCTTTTTTAGTTT	TTCTCTGCATTCTTTTTTAGTTT	10.83	10.20
## 930	GATGTCCATTTTACATACAGTAC	GATGTCCACTTTACATACAGTAC	5.21	4.84

## 931	CTGTGATTTACCACTGCACTCC	CCGTGATTTACCACTGCACTCC	-1.41	-2.31
## 932	GAATTGCTTACTCCCTATAGGCA	GAATTGCTTACTCCCTGTAGGCA	5.91	6.07
## 933	GTCACAAATTCACCTCTTAGCAC	GTCACAAATTCACCTTTTAGCAC	5.20	4.65
## 934	TCCATGTATTGTTTTCTCAGGTG	TCCACGTATTGTTTTCTCAGGTG	8.64	8.50
## 935	TCCATGTATTGTTTTCTCAGGTG	TCCACGTATTGTTTTCTCAGGTG	8.64	8.50
## 936	TCAACTTTTGTTTGTCTAGTTT	TCAACTCTTGTTTGTCTAGTTT	7.64	6.65
## 937	TCAACTTTTGTTTGTCTAGTTT	TCAACTCTTGTTTGTCTAGTTT	7.64	6.65
## 938	TTCTCTTTCCTTGTCTTAGATC	TTCTCTTTCCTTGTCTTAGATC	12.03	11.62
## 939	TTTGATATTGCATATTTTAGGCA	TTTAATATTGCATATTTTAGGCA	6.24	6.75
## 940	TTCAAACATTTACTTGACAGACA	TTCAAATATTTACTTGACAGACA	4.82	4.93
## 941	TTCAAACATTTACTTGACAGACA	TTCAAATATTTACTTGACAGACA	4.82	4.93
## 942	TTATGTAAAATACCATTTAGACA	CTATGTAAAATACCATTTAGACA	2.21	1.95
## 943	TTATGTAAAATACCATTTAGACA	CTATGTAAAATACCATTTAGACA	2.21	1.95
## 944	ATTTCTCTTTTCGTTTTTAGGTT	ATTTCTCTTTTGTTTTTTAGGTT	13.55	12.27
## 945	ATTTCTCTTTTCGTTTTTAGGTT	ATTTCTCTTTTGTTTTTTAGGTT	13.55	12.27
## 946	GGGGGTGATTTTCTTTTAGCCT	GGGGGTATATTTCTTTTAGCCT	5.84	4.56
## 947	TGTTCTCCTTCTTTTCCAGTAT	TGTTCCCTTCTTTTCCAGTAT	8.91	8.80
## 948	GTGATTGTTCTTCTTTTCAAGG	ATGATTGTTCTTCTTTTCAAGG	-7.61	-7.64
## 949	GTGATTGTTCTTCTTTTCAAGG	ATGATTGTTCTTCTTTTCAAGG	-7.61	-7.64
## 950	TGCCTGTCTCTCCCTGCAGAGG	TGCCTGTGTCTTCCCTGCAGAGG	12.10	11.79
## 951	TCTCCGCCCTCGCCCGCCTGCC	TCTCCGCCCTCGCCCGCCTGTC	-5.53	-4.30
## 952	GGCCTGCCAGCGCTGCTCTCCGC	GGCCTGTGAGCGCTGCTCTCCGC	-19.22	-19.51
## 953	CCCTGCATCTGCGCGTTCAGCAA	CCCTGCGTCTGCGCGTTCAGCAA	5.28	6.31
## 954	CCTCCTCCGTCTGCATGCAGTCA	CCTCCTCCGTCTGCGTGCAGTCA	7.83	8.44
## 955	CCTCCTCCGTCTGCATGCAGTCA	CCTCCTCCGTCTGCGTGCAGTCA	7.83	8.44
## 956	CCTCCTCCGTCTGCATGCAGTCA	CCTCCTCCGTCTGCGTGCAGTCA	7.83	8.44
## 957	CCTCCTCCGTCTGCATGCAGTCA	CCTCCTCCGTCTGCGTGCAGTCA	7.83	8.44
## 958	CCTCCTCCGTCTGCATGCAGTCA	CCTCCTCCGTCTGCGTGCAGTCA	7.83	8.44
## 959	TCCTGTACCTCTCACCTCACAGG	TCCTGTACCTCTCACTTCACAGG	-1.30	-1.09
## 960	TCCTGTACCTCTCACCTCACAGG	TCCTGTACCTCTCACTTCACAGG	-1.30	-1.09
## 961	CTGTACCTCTCACCTCACAGGAT	CTGTACCTCTCACTTCACAGGAT	10.21	10.39
## 962	CTGTACCTCTCACCTCACAGGAT	CTGTACCTCTCACTTCACAGGAT	10.21	10.39
## 963	CTGTACCTCTCACCTCACAGGAT	CTGTACCTCTCACTTCACAGGAT	10.21	10.39
## 964	CTGTACCTCTCACCTCACAGGAT	CTGTACCTCTCACTTCACAGGAT	10.21	10.39
## 965	GATGGCCTGGCCCCACCCAGGTG	GATGGCTTGGCCCCACCCAGGTG	5.55	4.51
## 966	GATGGCCTGGCCCCACCCAGGTG	GATGGCTTGGCCCCACCCAGGTG	5.55	4.51
## 967	ATAAAGATTATTTGTAAAGGTT	ATAAAGATTATTCGTAAAGGTT	0.33	-0.46
## 968	ATATATATATCTCCCCACAGATT	ATATATATATCTCTCCACAGATT	10.40	10.40
## 969	ATATATATATCTCCCCACAGATT	ATATATATATATCCCCACAGATT	10.40	9.14
## 970	TCTTTTCTTTTTTCTCTCAGGAA	TCTTTTCTTTTTTGTCTCTCAGGAA	11.19	10.69
## 971	TCTTTTCTTTTTTCTCTCAGGAA	TCTTTTCTTTTTTGTCTCTCAGGAA	11.19	10.69
## 972	TCTTTTCTTTTTTCTCTCAGGAA	TCTTTTCTTTTTTGTCTCTCAGGAA	11.19	10.69
## 973	GGGGTGGCATCGGGGCTGCGGGG	GGGGTGGCATCGGGGCTGCAGGG	-20.02	-28.78
## 974	GGTGGCATCGGGGCTGCGGGGTG	GGTGGCATCGGGGCTGCAGGGTG	-11.56	-9.86
## 975	TCGGGGCTGCGGGGTGGGGACCC	TCGGGGCTGCAGGGTGGGGACCC	-27.04	-33.34
## 976	TATCTTTAACTTCGTGCACCAG	TATCTTTAACTTTGTGCACCAG	-2.98	-2.84
## 977	AATGCTGTCCCTTTATCTAGTTG	AATGCTGTCCCTTTCATCTAGTTG	7.76	8.36
## 978	TTCTACTTCTCGCCTGCAGATG	TTCTACTTCTCGCCTGCAGATA	11.38	11.12
## 979	TTCTACTTCTCGCCTGCAGATG	TTCTACTTCTCGCCTGCAGATA	11.38	11.12
## 980	AGTCCCCCTCCTCCTGCAGACC	AGTCTCCCTCCTCCTGCAGACC	11.46	11.38
## 981	TCTGCTTTGCTTCTTTTCAGCTT	TCTACTTTGCTTCTTTTCAGCTT	10.17	9.49
## 982	TCTGCTTTGCTTCTTTTCAGCTT	TCTACTTTGCTTCTTTTCAGCTT	10.17	9.49
## 983	TATCTGGTTTGTGTTGTAAGAAA	TCTCTGGTTTGTGTTGTAAGAAA	1.15	1.82
## 984	TATCTGGTTTGTGTTGTAAGAAA	TCTCTGGTTTGTGTTGTAAGAAA	1.15	1.82

## 985	TATCTGGTTTGTGTTGTAAGAAA	TCTCTGGTTTGTGTTGTAAGAAA	1.15	1.82
## 986	GTTCTTAACTTGTTCGCAGAGA	GTTCTTGAAGTTGTTCGCAGAGA	7.45	7.27
## 987	GTTCTTAACTTGTTCGCAGAGA	GTTCTTGAAGTTGTTCGCAGAGA	7.45	7.27
## 988	GTTCTTAACTTGTTCGCAGAGA	GTTCTTGAAGTTGTTCGCAGAGA	7.45	7.27
## 989	ATACTACCAGCCCTGCCAGCCC	ATGCTCACCAGCCCTGCCAGCCC	-3.21	-3.43
## 990	ATACTACCAGCCCTGCCAGCCC	ATATTCACCAGCCCTGCCAGCCC	-3.21	-2.55
## 991	TTGAATTGAATTCGCTCCAGGTT	TTGAATTGAATTCAGTCCAGGTT	5.84	5.99
## 992	TTGAATTGAATTCGCTCCAGGTT	TTGAATTGAATTCAGTCCAGGTT	5.84	5.99
## 993	AACTGATTATTGGTTTTTCAGCTT	AACTGATAATTGGTTTTTCAGCTT	5.72	4.53
## 994	AACTGATTATTGGTTTTTCAGCTT	AACTGATAATTGGTTTTTCAGCTT	5.72	4.53
## 995	CCATCTTAACCCCATTTAAGAAC	CCATCTTAACCCCGTTTAAGAAC	3.91	3.28
## 996	CCATCTTAACCCCATTTAAGAAC	CCATCTTAACCCCGTTTAAGAAC	3.91	3.28
## 997	TGCATACTTTGTGTTTTTCAGTCT	TGCATAGTTTGTGTTTTTCAGTCT	7.57	5.10
## 998	ATGCATTCTGCTTTTCTTAGGAA	ATGCATTCTCCTTTTCTTAGGAA	7.51	8.53
## 999	ATGCATTCTGCTTTTCTTAGGAA	ATGCATTCTCCTTTTCTTAGGAA	7.51	8.53
## 1000	GTGAAACCTTGTCTCTACTAAAA	GTGAAACCTTGTCTCCACTAAAA	-8.95	-8.15
## 1001	GTGAAACCTTGTCTCTACTAAAA	GTGAAACCTTGTCTCCACTAAAA	-8.95	-8.15
## 1002	GTGAAACCTTGTCTCTACTAAAA	GTGAAACCTTGTCTCTACCAAAA	-8.95	-8.63
## 1003	GTGAAACCTTGTCTCTACTAAAA	GTGAAACCTTGTCTCTACCAAAA	-8.95	-8.63
## 1004	TGTGTATAAATTCTCTATAGACT	TGTGTATAAATTCTCTATAGGCT	6.35	7.52
## 1005	CATGAGACCTGTCTGAAAAGAAG	CATGAGACCTGTCTGAAAAGACG	-1.15	-0.65
## 1006	ACTTAATTCTGTTTTCTATAGGGA	ACTTAATTCATTTTCTATAGGGA	8.31	7.66
## 1007	CGGGCCCCCTTCTCTCTACAGG	CGGGCCACCTTCTCTCTACAGG	0.18	-0.62
## 1008	GGGGCCCCCTTCTCTCTACAGG	GGGGCCACCTTCTCTCTACAGG	-9.64	-11.56
## 1009	GGCCCCCTTCTCTCTACAGGTG	GGGGCCACCTTCTCTCTACAGGTG	13.02	11.98
## 1010	GGCCCCCTTCTCTCTACAGGTG	GGGGCCACCTTCTCTCTACAGGTG	13.02	11.98
## 1011	GGCCCCCTTCTCTCTACAGGTG	GGGGCCACCTTCTCTCTACAGGTG	13.02	11.98
## 1012	TTTATTTTGTGTTTCTATAGGAC	TTTATTTTGTGTTTCTATAGGAC	13.15	11.64
## 1013	TATCTTCTCTCTCTTTTAGTTC	TATTTTCTTCTCTCTTTTAGTTC	11.66	11.01
## 1014	TGCTCTATCCCTGACCCAGGTG	TGCTCTATCCCTGACTCCAGGTG	8.80	8.53
## 1015	TTGTGCTGCTCTCCTCTTTAGGG	TTGTGCTGCTCTCCTCTTAGGG	-7.23	-7.03
## 1016	TGTGCTGCTCTCCTCTTTAGGGC	TGTGCTGCTCTCCTCTTAGGGC	12.11	12.34
## 1017	TGTGCTGCTCTCCTCTTTAGGGC	TGTGCTGCTCTCCTCTTAGGGC	12.11	12.34
## 1018	TGTGCTGCTCTCCTCTTTAGGGC	TGTGCTGCTCTCCTCTTAGGGC	12.11	12.34
## 1019	TGCTGCTCTCCTCTTTAGGGCAT	TGCTGCTCTCCTCTTAGGGCAT	-5.19	-6.66
## 1020	TTGTGCTGCTCTCCTCTTTAGGG	TTGTGCTGCTCTCCTCTTAGGG	-7.23	-6.91
## 1021	TGTGCTGCTCTCCTCTTTAGGGC	TGTGCTGCTCTCCTCTTAGGGC	12.11	11.84
## 1022	TGTGCTGCTCTCCTCTTTAGGGC	TGTGCTGCTCTCCTCTTAGGGC	12.11	11.84
## 1023	TGTGCTGCTCTCCTCTTTAGGGC	TGTGCTGCTCTCCTCTTAGGGC	12.11	11.84
## 1024	TGCTGCTCTCCTCTTTAGGGCAT	TGCTGCTCTCCTCTTAGGGCAT	-5.19	-7.23
## 1025	GGGTCAGTCCCTGTTGACAGCTG	GGGTCGGTCCCTGTTGACAGCTG	3.63	5.69
## 1026	CCGTTTTCCCCTTGAGGCAGGCT	CCGATTTCCCCTTGAGGCAGGCT	2.15	0.54
## 1027	GCTGATGCTGCCTCCCGCAGGTG	GCTGACGCTGCCTCCCGCAGGTG	9.11	8.89
## 1028	AGCTCTGCGCCCTCCACAGCAC	AGCTCTGCGCCCTCCACAGCAC	7.66	7.23
## 1029	CTCCTCTCTGCTGTGAGCAGATC	CTCCTCACTGCTGTGAGCAGATC	6.12	3.95
## 1030	ACCAGGCTTTGTCGCTGCAGAGC	ACCAGGCTTTGTCACTGCAGAGC	6.61	5.92
## 1031	TGTCGCTCCTGCATTTGCAGGTG	TGTCGTTCCCTGCATTTGCAGGTG	10.64	10.49
## 1032	TTGTGCCTTTGTATCTCCAGGTC	TTTTCGCTTTGTATCTCCAGGTC	11.60	12.27
## 1033	TTAATTGATTCTACCTACAGTTT	TTAATTGATTGTACCTACAGTTT	7.03	5.85
## 1034	ACTTTAAACATTATTTTTAGGGA	ACTTTAAACATTGTTTTTAGGGA	7.10	7.43
## 1035	ACTTTAAACATTATTTTTAGGGA	ACTTTAAACATTGTTTTTAGGGA	7.10	7.43
## 1036	ACTTTAAACATTATTTTTAGGGA	ACTTTAAACATTGTTTTTAGGGA	7.10	7.43
## 1037	ACTTTAAACATTATTTTTAGGGA	ACTTTAAACATTGTTTTTAGGGA	7.10	7.43
## 1038	ACTTTAAACATTATTTTTAGGGA	ACTTTAAACATTGTTTTTAGGGA	7.10	7.43

## 1039	CTGTGCTTTACATGTTCCAGGTG	CTGTGCTTTACGTGTTCCAGGTG	8.90	9.23
## 1040	CTTCACCTGTCTCCCTACAGCAT	CTTCACCTGTTTCCCTACAGCAT	11.35	10.55
## 1041	ACCAGATGTCTGATTCGTAGTGG	ACCAGATGTTTGATTCGTAGTGG	2.25	3.04
## 1042	CAAATCCTTTTTTTAAATAGGAA	CAAATCCTTTTTTTAAATAGGGA	8.01	7.31
## 1043	TTTCGTTTCATCTATAGCAGAAA	TTTCGTTTCGTCTATAGCAGAAA	5.56	6.49
## 1044	AAATTTGTTTTTCATCTATAGCAG	AAATTTGTTTTTCGTCTATAGCAG	5.37	5.27
## 1045	AAATTTGTTTTTCATCTATAGCAG	AAATTTGTTTTTCGTCTATAGCAG	5.37	5.27
## 1046	AAATTTGTTTTTCATCTATAGCAG	AAATTTGTTTTTCGTCTATAGCAG	5.37	5.27
## 1047	AAATTTGTTTTTCATCTATAGCAG	AAATTTGTTTTTCGTCTATAGCAG	5.37	5.27
## 1048	AAATTTGTTTTTCATCTATAGCAG	AAATTTGTTTTTCGTCTATAGCAG	5.37	5.27
## 1049	AAATTTGTTTTTCATCTATAGCAG	AAATTTGTTTTTCGTCTATAGCAG	5.37	5.27
## 1050	GACTTTCAAATACTCAGCAGTTA	GACTTTCAAATACTCGGCAGTTA	0.97	3.34
## 1051	TACAGGCTTGCACTGTCACACCT	TACAGGCTTGCACTGTCACGCCT	-19.07	-10.32
## 1052	GCTTTGCTTATTCACTACAGCAA	ACTTTGCTTATTCACTACAGCAA	4.96	5.59
## 1053	ATCCTCTGTTTTTGCTGTAGGTT	ATCCTCTGTTTTTCGTGTAGGTT	10.78	10.95
## 1054	ATCCTCTGTTTTTGCTGTAGGTT	ATCCTCTGTTTTTCGTGTAGGTT	10.78	10.95
## 1055	CTCTCTCTTTCTTTGTTTAGATA	CTCTCTCCTTCTTTGTTTAGATA	10.24	10.14
## 1056	GCACTCATGACCCCTCCAGGCC	GCACTCATGACTCCTCCAGGCC	-8.64	-7.85
## 1057	AACACATCCCTCACCACAGGGG	AACCCATCCCTCACCACAGGGG	9.11	9.17
## 1058	AACACATCCCTCACCACAGGGG	AACCCATCCCTCACCACAGGGG	9.11	9.17
## 1059	CTTTTGTCCTGTTCCAGGAT	CTATTGTCCTGTTCCAGGAT	9.74	9.03
## 1060	ACATCTCTTTTCATTTGCTTCAG	ACATCTTTTTTCATTTGCTTCAG	-7.13	-6.46
## 1061	CATCTCTTTTCATTTGCTTCAGA	CATCTTTTTTCATTTGCTTCAGA	-10.72	-10.83
## 1062	TCTCTTTTCATTTGCTTCAGACT	TCTTTTTTCATTTGCTTCAGACT	8.67	8.74
## 1063	TCTCTTTTCATTTGCTTCAGACT	TCTTTTTTCATTTGCTTCAGACT	8.67	8.74
## 1064	CTCTTCCGGTATTCAATTTAGGAT	CTCTTCTGGTATTCAATTTAGGAT	8.63	8.84
## 1065	GCGCCTGTCTATTGCCAGCTC	GCGCCGTCTATTGCCAGCTC	5.26	4.25
## 1066	CCTTCCTGCGTGAGAACCTGCGG	CCTTCCTGCGGAGAACCTGCGG	-10.72	-12.61
## 1067	GACAGCCCTTCTGGCTCCCCCA	GACACCCCTTCTGGCTCCCCCA	-12.35	-11.61
## 1068	CCTCTTTGTAGATATTGCAGCAA	CCTCTTTGTAAATATTGCAGCAA	-0.50	6.39
## 1069	AGCTGACATAACACAGGCCATC	AGCTGACATACTACAGGCCATC	-18.40	-17.87
## 1070	TGACATAACACAGGCCATCCCA	TGACATACTACAGGCCATCCCA	-27.01	-27.12
## 1071	CAAGCTGCTAGAAGATGCTGCTG	CGAGCTGCTAGAAGATGCTGCTG	-19.69	-19.34
## 1072	AAGCTGCTAGAAGATGCTGCTGT	GAGCTGCTAGAAGATGCTGCTGT	-30.06	-29.36
## 1073	GCTGCCATATCCCGTCCTAGGTC	GCTGCCATATCCCGTCCTAGATC	6.66	5.75
## 1074	GCTGCCATATCCCGTCCTAGGTC	GCTGCCATATCCCGTCCTAGATC	6.66	5.75
## 1075	CACCCTCTGGCCCCCGCAGCCC	CACCTCTGGCCCCCGCAGCCC	9.22	8.54
## 1076	TCGGGTTTTTTCTTTAACAAGGGT	TGGGGTTTTTTCTTTAACAAGGGT	3.90	4.34
## 1077	TTGACCGTTTTTATCAGCAGGTC	TTGACTGTTTTTATCAGCAGGTC	8.37	8.23
## 1078	TTGACCGTTTTTATCAGCAGGTC	TTGACTGTTTTTATCAGCAGGTC	8.37	8.23
## 1079	CACAACCTCCTCTCCAACCAGCAG	CACGACTCCTCTCCAACCAGCAG	5.33	5.21
## 1080	CACAACCTCCTCTCCAACCAGCAG	CACGACTCCTCTCCAACCAGCAG	5.33	5.21
## 1081	CACAACCTCCTCTCCAACCAGCAG	CACGACTCCTCTCCAACCAGCAG	5.33	5.21
## 1082	CACAACCTCCTCTCCAACCAGCAG	CACGACTCCTCTCCAACCAGCAG	5.33	5.21
## 1083	CACAACCTCCTCTCCAACCAGCAG	CACGACTCCTCTCCAACCAGCAG	5.33	5.21
## 1084	CACAACCTCCTCTCCAACCAGCAG	CACGACTCCTCTCCAACCAGCAG	5.33	5.21
## 1085	CACAACCTCCTCTCCAACCAGCAG	CACGACTCCTCTCCAACCAGCAG	5.33	5.21
## 1086	AACTCCTCTCCAACCAGCAGCCC	GACTCCTCTCCAACCAGCAGCCC	2.85	3.13
## 1087	AACTCCTCTCCAACCAGCAGCCC	GACTCCTCTCCAACCAGCAGCCC	2.85	3.13
## 1088	AACTCCTCTCCAACCAGCAGCCC	GACTCCTCTCCAACCAGCAGCCC	2.85	3.13
## 1089	AACTCCTCTCCAACCAGCAGCCC	GACTCCTCTCCAACCAGCAGCCC	2.85	3.13
## 1090	AACTCCTCTCCAACCAGCAGCCC	GACTCCTCTCCAACCAGCAGCCC	2.85	3.13
## 1091	GGTCCAGAAACCACCTCGGGGTG	GGTCCAGAAGCCACCTCGGGGTG	-13.89	-19.48
## 1092	TGCTGTGGTCTGTCACACAGACA	CGCTGTGGTCTGTCACACAGACA	6.95	7.01

## 1093	GATCGCTTCTCTGTGACCAGACC	GATCTCTTCTCTGTGACCAGACC	6.44	7.22
## 1094	GATCGCTTCTCTGTGACCAGACC	GATCTCTTCTCTGTGACCAGACC	6.44	7.22
## 1095	GATCGCTTCTCTGTGACCAGACC	GATCTCTTCTCTGTGACCAGACC	6.44	7.22
## 1096	GATCGCTTCTCTGTGACCAGACC	GATCTCTTCTCTGTGACCAGACC	6.44	7.22
## 1097	GATCGCTTCTCTGTGACCAGACC	GATCTCTTCTCTGTGACCAGACC	6.44	7.22
## 1098	GATCGCTTCTCTGTGACCAGACC	GATCTCTTCTCTGTGACCAGACC	6.44	7.22
## 1099	GATCGCTTCTCTGTGACCAGACC	GATCTCTTCTCTGTGACCAGACC	6.44	7.22
## 1100	CGGCTGTGCTCCACGCACTGCC	CGGCTGTGCTCCACGCACTGCC	-14.47	-13.94
## 1101	CGGCTGTGCTCCACGCACTGCC	CGGCTGTGCTCCACGCACTGCC	-14.47	-13.94
## 1102	CTGTGTTTTCTTTGGTTCAGGGT	CTGTGTTTTCTTTGGTTCAGGGT	10.12	9.40
## 1103	CTGTGTTTTCTTTGGTTCAGGGT	CTGTGTTTTCTTTGGTTCAGGGT	10.12	9.40
## 1104	AACGTCACGTCATTTTACAGAGG	AACGTCACATCATTTTACAGAGG	6.05	6.62
## 1105	CTACCCATTCTGGAGAACAGGTC	CTACCCGTTCTGGAGAACAGGTC	-0.48	1.02
## 1106	ACTGTTGTGTTGTTTTTACAGACC	ACTGTTGTGTTGTTTTTACAGACC	11.16	10.63
## 1107	CCTGACAGGAGCCGCTGGGGAC	CCTGACAAGAGGCCGCTGGGGAC	-26.08	-27.27
## 1108	AGCAGTGTGGACATCAGCCACTT	AGCAGTGTGGACATCAGCCGCTT	-19.94	-11.19
## 1109	CATCTTTTTGATCTATTTCAGGCC	CATCTTTTTCATCTATTTCAGGCC	8.27	9.20
## 1110	CATCTTTTTGATCTATTTCAGGCC	CATCTTTTTCATCTATTTCAGGCC	8.27	9.20
## 1111	GACAGCACTTTTGCTCCTAGAGC	GACAGCACCTTTGCTCCTAGAGC	5.10	4.33
## 1112	CTCCATGTTCTCTAATTTAGGAA	CTCCGTGTTCTCTAATTTAGGAA	10.35	11.62
## 1113	ACTTTTGTATGTCATTTTCAGCAC	ACTTTTGTATGTCATTTTCAGCGC	7.33	8.21
## 1114	CGTATTGTGCTCTACCTAGGCC	CGTATTGTGCTCTACCTAGGCC	8.18	9.48
## 1115	AAAAATAATATTTGTTAAAGATC	AAAAATAATATCTGTTAAAGATC	1.77	2.47
## 1116	TTTCTTTTTCAAAAATGAAGTTT	TTTCTTTCTCAAAAATGAAGTTT	1.73	2.01
## 1117	ACAGCATGCCACCATGGCAGCAA	ACAGCATGCCGCCATGGCAGCAA	1.70	0.48
## 1118	TTTTCTTTTATCTTTTAAAGCTG	TCTTCTTTTATCTTTTAAAGCTG	10.08	9.71
## 1119	CCCAGGCAGGGAGGAATACTCAC	CCCAGGCAGGTAGGAATACTCAC	-37.40	-35.00
## 1120	TTCTTCCTTATGTCTTTTCAGATC	TTCTTCCTAATGTCTTTTCAGATC	10.95	11.14
## 1121	TACTCTATGTCATCTGACAGGTC	TACTCTATGTCATCCGACAGGTC	7.95	7.76
## 1122	ATTCTCTTTTGTTTTCACAGCTG	TTTCTCTTTTGTTTTCACAGCTG	9.95	11.18
## 1123	ATTCTCTTTTGTTTTCACAGCTG	TTTCTCTTTTGTTTTCACAGCTG	9.95	11.18
## 1124	CCTGGACGCTTGGACCATAGCTG	CCTGGAGGCTTGGACCATAGCTG	2.26	-0.52
## 1125	TCTCCCTGCTGTCATTTTCAGGAG	TCTCCCTGCTATCATTTTCAGGAG	9.21	10.28
## 1126	TTAATGTGCTTTCTCTTAGCAA	TTAGTGTGCTTTCTCTTAGCAA	7.10	6.06
## 1127	TTTCCCCCTCCCCCACCAGGCA	TTTCCCCCTCCCGCCACCAGGCA	11.16	10.05
## 1128	AATGAAAAAATTTTTTTTAGGTA	AATGAAAAAATTTTTTTTAGGTA	6.29	5.08
## 1129	AATGAAAAAATTTTTTTTAGGTA	AATGAAAAAATTTTTTTTAGGTA	6.29	5.08
## 1130	GGGAATTATTATGGTTACAGGAT	GGGAATTATTATGGTTACAGAAT	2.93	1.97
## 1131	GGGAATTATTATGGTTACAGGAT	GGGAATTATTATGGTTACAGAAT	2.93	1.97
## 1132	GTTCTCCATTCCCTGGGTAGTTG	TTTCTCCATTCCCTGGGTAGTTG	7.18	8.32
## 1133	GTTCTCCATTCCCTGGGTAGTTG	TTTCTCCATTCCCTGGGTAGTTG	7.18	8.32
## 1134	TCCCAAACCTTTCTTTACAGAGG	TCCCAAACCTTTTTTACAGAGG	8.38	7.09
## 1135	AGGTATTATCATTTTTGGCAGGAA	AGGTATTATCATTTTTGGCAGGAG	4.98	4.23
## 1136	TCTGTTCCACCCCACTGCAGGGC	TCTGTTTCACCCCACTGCAGGGC	9.16	8.68
## 1137	TCTGTTCCACCCCACTGCAGGGC	TCTGTTTCACCCCACTGCAGGGC	9.16	8.68
## 1138	TCTGTTCCACCCCACTGCAGGGC	TCTGTTTCACCCCACTGCAGGGC	9.16	8.68
## 1139	TGTGTTGTTGGGATGGCGTAGGA	TGTGTTGTTGGGATGGTGTAGGA	-26.28	-28.18
## 1140	GTGTTGTTGGGATGGCGTAGGAT	GTGTTGTTGGGATGGTGTAGGAT	3.58	4.41
## 1141	GTGTTGTTGGGATGGCGTAGGAT	GTGTTGTTGGGATGGTGTAGGAT	3.58	4.41
## 1142	TGTGTTGTTGGGATGGCGTAGGA	TGTGTTGTTGGGATGGCGCAGGA	-26.28	-25.95
## 1143	GTGTTGTTGGGATGGCGTAGGAT	GTGTTGTTGGGATGGCGCAGGAT	3.58	3.24
## 1144	GTGTTGTTGGGATGGCGTAGGAT	GTGTTGTTGGGATGGCGCAGGAT	3.58	3.24
## 1145	GTTCTCTTCTCTTTTCCAGTCT	GTTCTCATCCTCTTTTCCAGTCT	9.43	7.84
## 1146	GTTCTCTTCTCTTTTCCAGTCT	GTTCTCATCCTCTTTTCCAGTCT	9.43	7.84

## 1147	GTTCTCTTCCTCTTTTCCAGTCT	GTTCTCATCCTCTTTTCCAGTCT	9.43	7.84
## 1148	ATCCATATCCCACTCCATAGAAT	ATCCATATCTCACTCCATAGAAT	5.52	7.38
## 1149	GGTTTGCCCTTTGCTTCAGTTA	GGTTTGCCCTTTGATTTCAGTTA	5.69	5.16
## 1150	GGTTTGCCCTTTGCTTCAGTTA	GGTTTGCCCTTTGATTTCAGTTA	5.69	5.16
## 1151	TCTGCCTTAACCCCAACAGGCG	TCTGCCTTAATTCCCAACAGGCG	8.75	9.44
## 1152	GTAGCTATGATTGTCCGTAGGCC	GTAGCTATGATTGTCCATAGGCC	5.39	5.44
## 1153	GTAGCTATGATTGTCCGTAGGCC	GTAGCTATGATTGTCCATAGGCC	5.39	5.44
## 1154	TGTATTTTCTGTACACACAGGGT	TGTATTTTCTGTACATACAGGGT	6.49	6.77
## 1155	GAATGTTTTTTTATTGTTTAGATG	GAATGTTTTTTTATTGTTTCAGATG	6.70	7.11
## 1156	CCATTTGCCCTCTCGGCAGGTT	CCATTTGCCCTCTTGGCAGGTT	10.88	10.26
## 1157	AATAAATATTTTATTAAGGAG	AATAAATATTTTATTAAGGAA	3.20	4.25
## 1158	CTGATTTCTTCTTGATACAGGTT	CTGATTTCTTCTTCATACAGGTT	8.51	9.80
## 1159	CTGATTTCTTCTTGATACAGGTT	CTGATTTCTTCTTCATACAGGTT	8.51	9.80
## 1160	CTGATTTCTTCTTGATACAGGTT	CTGATTTCTTCTTCATACAGGTT	8.51	9.80
## 1161	AATGCTACATTTTCTTCCAGTCA	AACGCTACATTTTCTTCCAGTCA	6.19	5.86
## 1162	AATGCTACATTTTCTTCCAGTCA	AACGCTACATTTTCTTCCAGTCA	6.19	5.86
## 1163	ATCGCACCTCATGTTGCAGTGT	ATCGCACCTCGTGTGCAGTGT	6.72	6.73
## 1164	ACACATTATTGTTCTGATAGATG	ACACGTTATTGTTCTGATAGATG	5.81	6.35
## 1165	GAGGTGGCTGTGCTGGGGCCACC	GAGGTGGCTGTGCTGGGGCCACC	-24.12	-24.03
## 1166	AAGCCAGCAACTGCCGCAGCGG	AAGCCAGCACCTGCCGCAGCGG	0.46	2.35
## 1167	GGAAGTGGGGCCTTGCTTGCAG	GGAAGTGGGGCCTTGCTTGCAG	-9.94	-9.82
## 1168	AACTGGGGCCTTGCTTGCAGCC	AACTGGGGCCTTGCTTGCAGCC	-20.70	-20.12
## 1169	GGGCCTTGCTTGCAGCCACATG	GGGCCTTGCTTGCAGCCACATG	-7.70	-7.99
## 1170	GACCCCCCCCCGACCCCCAGATT	GACCCCCCCCCACCCCCAGATT	7.87	7.02
## 1171	TGAGATTGTCCATTTTTCAGTAT	TGAGATTGTACATTTTTCAGTAT	4.89	3.81
## 1172	TTGCTGTGAGCCGAGATCGTGCC	TTGCTGTGAGCCGGGATCGTGCC	-23.08	-19.27
## 1173	CCGAGATCGTGCCATTGCACTCC	CCGGGATCGTGCCATTGCACTCC	-5.74	-5.03
## 1174	TTGCTGTGAGCCGAGATCGTGCC	TTGCTGTGAGCCGAGATCCTGCC	-23.08	-23.17
## 1175	CCGAGATCGTGCCATTGCACTCC	CCGAGATCCTGCCATTGCACTCC	-5.74	-5.52
## 1176	TGGATTTTTTTAATCTACAGGAA	TGGATTTTTTTAATTTACAGGAA	8.83	9.12
## 1177	TGGATTTTTTTAATCTACAGGAA	TGGATTTTTTTAATTTACAGGAA	8.83	9.12
## 1178	TGGATTTTTTTAATCTACAGGAA	TGGATTTTTTTAATTTACAGGAA	8.83	9.12
## 1179	GCTTCTGCGTCCCTGTGCAGGAC	GCTTCCGCGTCCCTGTGCAGGAC	9.78	9.26
## 1180	GTTAACGTCTGGTACAATTGCTT	GTGAACGTCTGGTACAATTGCTT	-8.18	-7.89
## 1181	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.32
## 1182	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.32
## 1183	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.32
## 1184	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.32
## 1185	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.32
## 1186	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.32
## 1187	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.24
## 1188	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.24
## 1189	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.24
## 1190	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.24
## 1191	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.24
## 1192	TAAAAAAATTTTTGATTACAGAAA	TAAAAAAATTTTTGATTACAGAAA	5.77	6.24
## 1193	CAGTTGTAATGTCTTTTAGTCT	CAGTTGTAATGTCTTTCTAGTCT	4.45	4.24
## 1194	CAGTTGTAATGTCTTTTAGTCT	CAGTTGTAATGTCTTTCTAGTCT	4.45	4.24
## 1195	TTTTTCTTAATTACCTAGGTA	TTTTTCTTAATTACCCAGGTA	9.04	8.04
## 1196	TTTTTCTTAATTACCTAGGTA	TTTTTCTTAATTACCCAGGTA	9.04	8.04
## 1197	TTTTCTTAATTACCTAGGTAGT	TTTTCTTAATTACCCAGGTAGT	-24.68	-24.54
## 1198	TTTTACTTTTAACTTTAAGGAT	TTTTACGTTTAACTTTAAGGAT	8.00	7.35
## 1199	ATTTCTATTTCTCCCATAGATT	ATTTCTATTTCTCCCATCGATT	10.92	2.88
## 1200	ATTTCTATTTCTCCCATAGATT	ATTTCTATTTCTCCCATCGATT	10.92	2.88

##	1201	ATTTCTATTTCTTCCCATAGATT	ATTTCTATTTCTTCCCATCGATT	10.92	2.88
##	1202	ATTTCTATTTCTTCCCATAGATT	ATTTCTATTTCTTCCCATCGATT	10.92	2.88
##	1203	CCATTCCCCATGACCTGCAGAGA	CCATTCCCCACGACCTGCAGAGA	5.81	5.21
##	1204	TGCGTTTTGTCTTTTTGCAGATG	TGCATTTTGTCTTTTTGCAGATG	12.33	11.64
##	1205	TGCGTTTTGTCTTTTTGCAGATG	TGCATTTTGTCTTTTTGCAGATG	12.33	11.64
##	1206	TGCGTTTTGTCTTTTTGCAGATG	TGCATTTTGTCTTTTTGCAGATG	12.33	11.64
##	1207	AGGCCGGTGTCTCCCCTCAGCCC	AGGCCGGTGTCTCTCCTCAGCCC	5.93	5.93
##	1208	AGGCCGGTGTCTCCCCTCAGCCC	AGGCCGGTGTCTCTCCTCAGCCC	5.93	5.93
##	1209	AGGCCGGTGTCTCCCCTCAGCCC	AGGCCGGTGTCTCTCCTCAGCCC	5.93	5.93
##	1210	AGGCCGGTGTCTCCCCTCAGCCC	AGGCCGGTGTCTCTCCTCAGCCC	5.93	5.93
##	1211	AGGCCGGTGTCTCCCCTCAGCCC	AGGCCGGTGTCTCTCCTCAGCCC	5.93	5.93
##	1212	CTGCCGCCCTTGTGTTCTAGCGC	CTGCTGCCCTTGTGTTCTAGCGC	10.38	10.12
##	1213	TTATTGCAATTTAAACTAGATC	TTATCGCAATTTAAACTAGATC	3.78	2.95
##	1214	TTACATGATTCTGTTCCAGCTG	TTACCTGATTCTGTTCCAGCTG	7.28	8.59
##	1215	CGCTGATGGTTTTTGGCCAGGCC	CGCTGATGGTTTTTCCCCAGGCC	5.12	8.59
##	1216	CGCTGATGGTTTTTGGCCAGGCC	CGCTGATGGTTTTTCCCCAGGCC	5.12	8.59
##	1217	TGGTGTTCCTGTATCCTCGGC	TGGTGTTCCTGTATCCTCAGC	-8.13	-9.34
##	1218	GTGTTTTCTGTATCCTCGGCCA	GTGTTTTCTGTATCCTCAGCCA	-0.67	7.28
##	1219	GTGTTTTCTGTATCCTCGGCCA	GTGTTTTCTGTATCCTCAGCCA	-0.67	7.28
##	1220	TTTCCTGTATCCTCGGCCAGGTG	TTTCCTGTATCCTCAGCCAGGTG	8.78	4.62
##	1221	TTTCCTGTATCCTCGGCCAGGTG	TTTCCTGTATCCTCAGCCAGGTG	8.78	4.62
##	1222	TCCTGTCTTCTCTCTTGTAGACT	TCCTGTCTTCTCTCTTGTAGACA	11.47	11.27
##	1223	TCCTGTCTTCTCTCTTGTAGACT	TCCTGTCTTCTCTCTTGTAGACA	11.47	11.27
##	1224	TCCTGTCTTCTCTCTTGTAGACT	TCCTGTCTTCTCTCTTGTAGACA	11.47	11.27
##	1225	CTCTCTTCCCTCCTCCACAGCTC	CTATCTTCCCTCCTCCACAGCTC	12.09	11.42
##	1226	GCTGTTTTACCTACGCATCCTT	GCTGTTTTACCTACGCACCCTT	-17.10	-16.78
##	1227	ACTCCCCTTCTCCCCTACAGGTG	ACTCCCCTTCTCCCCTACAGGCG	13.08	11.59
##	1228	AAGGGGCCCCCGCCGAGCCAAC	AAGGGGCCCCAGCCGAGCCAAC	-23.55	-31.34
##	1229	ATCCCTGTCTCTCCCCAGGCT	ATCCCTGTCTCTCCCCAGGCT	11.80	11.51
##	1230	GAGGGGGCGGGCTGGGGGTGCGA	TAGGGGGCGGGCTGGGGGTGCGA	-27.21	-27.45
##	1231	CTGTCTGTTCTGTTGGCAAGTAA	TTGTCTGTTCTGTTGGCAAGTAA	1.70	1.15
##	1232	CTGAGCTATAACCTCCTAAGCCT	CTGAGCTATGACCTCCTAAGCCT	-0.15	-0.06
##	1233	GCGGCCCGCCCCCTGCGAGGTG	GTGGCCCGCCCCCTGCGAGGTG	3.15	3.62
##	1234	CACTGCCATCCCCGCCCCAAAGG	CACTGCCATCCCCGCCCCAGAGG	-3.01	5.74
##	1235	TCCACGGGCTACTGACTCATTTG	TCCACGGGCTACTGACTCACTTG	-5.95	-5.41
##	1236	TGGTGATTTCTTCCCCACAGCAC	TGGTGATTTCTTCCCCGACGAC	9.13	9.33
##	1237	CAGCTGAAGTTCTCCGAGGTG	TAGCTGAAGTTCTCCGAGGTG	3.59	3.26
##	1238	TGACCATGCATCCCTTTGGGGAC	TGAGCATGCATCCCTTTGGGGAC	-5.60	-7.87
##	1239	ATGTTTTCTTGTCCATTAGTAG	ATGTTTTCTTGTCCATTAATAG	4.58	-4.17
##	1240	TTTTTCTTGTCCATTAGTAGAAT	TTTTTCTTGTCCATTAATAGAAT	5.52	8.26
##	1241	CTACGTTGTTGTCAATGCAGAAA	CTGCGTTGTTGTCAATGCAGAAA	7.17	7.64
##	1242	CTTTTCTTTTTTTTTTCCAGACA	CTTTTCTTTTTTTTTTCCCAGACA	11.36	10.66
##	1243	CCCATCGCCGCTCCATACAGAGC	CCCATCGCCACTCCATACAGAGC	6.13	5.93
##	1244	CCGTGCCACCTGTCCGCCCTCA	CCGTGCCACCTGTCCGCCTCCA	-7.14	-7.67
##	1245	GCCACCTGTCCGCCCTCAGATG	GCCACCTGTCCGCCTCCAGATG	10.77	10.18
##	1246	ATTCCTTGTTTTTCTCACCAGGT	ATTCCTTCTTTTTTCTCACCAGGT	-6.68	-6.07
##	1247	TTCCTTGTTTTTCTCACCAGGTA	TTCCTTCTTTTTTCTCACCAGGTA	11.71	12.03
##	1248	TTTCTTTGATGTTTTAAAGCAT	TTTCTTTGATGTTTTAAAGCAT	4.96	4.75
##	1249	CTCTCCCCACCGACAATTAGGAA	CTCTCCCCACCAACAATTAGGAA	4.29	4.51
##	1250	CTCTCCCCACCGACAATTAGGAA	CTCTCCCCACCAACAATTAGGAA	4.29	4.51
##	1251	GAGAGGAGAGGAGGTGCCAGGCT	CAGAGGAGAGGAGGTGCCAGGCT	-22.13	-21.87
##	1252	CACCGTGCCTGGCCTTATTGGCT	CACCATGCCTGGCCTTATTGGCT	-0.91	-2.04
##	1253	ACTCATCTTTCTTCCACAGCAG	ACTCCTCTTTCTTCCACAGCAG	9.47	10.63
##	1254	CATCTTTCCTTCCACAGCAGCCT	CCTCTTTCCTTCCACAGCAGCCT	4.21	4.72



##	1255	ACAGGGAGCCCCCTGTGCTGGGG	ACGGGGAGCCCCCTGTGCTGGGG	-7.55	-6.95
##	1256	CTCCCTGTTCCGCCTCCACAGAT	CTACCTGTTCCGCCTCCACAGAT	-9.44	-10.00
##	1257	TCCCTGTTCCGCCTCCACAGATC	TACCTGTTCCGCCTCCACAGATC	11.81	10.71
##	1258	TCCCTGTTCCGCCTCCACAGATC	TACCTGTTCCGCCTCCACAGATC	11.81	10.71
##	1259	TTCTCTGGATCATGATTTAGTCT	TTCTTTGGATCATGATTTAGTCT	3.45	3.72
##	1260	TTCTCTGGATCATGATTTAGTCT	TTCTTTGGATCATGATTTAGTCT	3.45	3.72
##	1261	ACAAAGATTCTCTTTTCCAGTGG	ACAAAGGTTCTCTTTTCCAGTGG	5.86	6.30
##	1262	ACAAAGATTCTCTTTTCCAGTGG	ACAAAGGTTCTCTTTTCCAGTGG	5.86	6.30
##	1263	ACAAAGATTCTCTTTTCCAGTGG	ACAAAGGTTCTCTTTTCCAGTGG	5.86	6.30
##	1264	ACAAAGATTCTCTTTTCCAGTGG	ACAAAGGTTCTCTTTTCCAGTGG	5.86	6.30
##	1265	TGCTCCTGGCTCTGTTTCAGGAG	TGCTCCTGGCTCCGTTTCAGGAG	8.62	7.61
##	1266	CTTCTCTGCTTCCCTCAACAGGTT	CTTCTCTGCTTCCCAACAGGTT	11.54	11.65
##	1267	CTTCTCTGCTTCCCTCAACAGGTT	CTTCTCTGCTTCCCAACAGGTT	11.54	11.65
##	1268	TTCTCCCAGCTCCCTTCCAGGTC	TTCTCCCACTCCCTTCCAGGTC	6.12	9.66
##	1269	TCACGCCCCCTTTTCTCCCAGCTC	TCACGCCCCCTTTTCTCCCACTC	7.94	-0.81
##	1270	TCACGCCCCCTTTTCTCCCAGCTC	TCACACCCCTTTTCTCCCAGCTC	7.94	7.18
##	1271	TCCTTTTTTCCCCCTACAGGAT	TCCTTTTTTCTCCCCCTACAGGAT	13.18	13.12
##	1272	TTTATCTTCTACTCTACAGTTC	TTTATCTTCTACTCTACAATTC	8.37	-0.38
##	1273	AATAGAAGGCGCTCATTCCAATA	AATAGAAGGCGCTCGTTCCAATA	-18.40	-18.80
##	1274	CTTCTGTTTTCTTTCTATAGTAT	CTTCTGTTTTCTTTCTACAGTAT	9.02	9.67
##	1275	CTTCTGTTTTCTTTCTATAGTAT	CTTCTGTTTTCTTTCTACAGTAT	9.02	9.67
##	1276	TTTCTACCGCTTTGTTTTAGAGT	TTTCTACCGGTTGTTTTAGAGT	9.36	8.81
##	1277	GGGGGCTACGAGGATGACGTGGA	GGGGGCTATGAGGATGACGTGGA	-24.42	-23.44
##	1278	GGGGGCTACGAGGATGACGTGGA	GGGGGCTATGAGGATGACGTGGA	-24.42	-23.44
##	1279	CCGCTACGATGGCATCTACAAGG	CCGCTATGATGGCATCTACAAGG	-18.38	-18.65
##	1280	CCGCTACGATGGCATCTACAAGG	CCGCTATGATGGCATCTACAAGG	-18.38	-18.65
##	1281	CTTCCTTTTCACTTTTTTCAGTTT	CTTCCTTTTCACTTTTTTCAGTGT	10.52	10.66
##	1282	ACGGCATTCTTCATGCCAGGAA	ACGGCATTCTTCATGGCAGGAA	6.39	6.75
##	1283	ACGGCATTCTTCATGCCAGGAA	ACGGCATTCTTCATGGCAGGAA	6.39	6.75
##	1284	ATGTTATTTTCATACAACAGAAT	ATGTTATTTTCATACAACAGAGT	5.25	4.75
##	1285	GCTTCTTGCTTTTGTGTTAGATG	GCTTCTTGCTATTGTGTTAGATG	7.14	5.72
##	1286	TGTGTTATTTTTGGCTTCAGGTG	TATGTTATTTTTGGCTTCAGGTG	9.91	9.47
##	1287	TGTGTTATTTTTGGCTTCAGGTG	TATGTTATTTTTGGCTTCAGGTG	9.91	9.47
##	1288	AGTTTAGTTGTTCTAAGCAGAAG	AGTTTAGTTATTCTAAGCAGAAG	0.60	-0.23
##	1289	TACTGTATTTGTTCCCTCAGAGC	TACTCTATTTGTTCCCTCAGAGC	9.01	9.16
##	1290	TACCCTTCTCTGTGCCTTAGGTT	TAACCTTCTCTGTGCCTTAGGTT	10.51	10.03
##	1291	CCTGCCACCCCTCCTTATAGGAT	CCTGCCACCCCTCCTTATAGGAT	10.34	10.19
##	1292	CCTGCCACCCCTCCTTATAGGAT	CCTGCCACCCCTCCTTATAGGAT	10.34	10.19
##	1293	CCTGCCACCCCTCCTTATAGGAT	CCTGCCACCCCTCCTTATAGGAT	10.34	10.19
##	1294	CCTTTTCCTTCTCTCACCAGAAT	CCTTTTCCTTCTCTCATCAGAAT	11.36	10.90
##	1295	CCTTTTCCTTCTCTCACCAGAAT	CCTTTTCCTTCTCTCATCAGAAT	11.36	10.90
##	1296	CTCCTCATTCCCTGGAGTAGCCT	CTCTTCATTCCCTGGAGTAGCCT	1.42	2.05
##	1297	CTCCTCATTCCCTGGAGTAGCCT	CTCTTCATTCCCTGGAGTAGCCT	1.42	2.05
##	1298	CTCTTCTTTTCTACCATCAGGAG	CTCTTCTTTTCTACCATGAGGAG	9.30	-2.54
##	1299	TTCTTTTCTACCATCAGGAGAAA	TTCTTTTCTACCATGAGGAGAAA	-11.38	-11.08
##	1300	ACCTCATTTAATTCCTACAGTAT	ACCTTATTTAATTCCTACAGTAT	6.90	7.15
##	1301	CTCGCTTTTCCCCCCCACAGGGT	CTCACTTTTCCCCCCCACAGGGT	11.92	12.14
##	1302	CTCGCTTTTCCCCCCCACAGGGT	CTCACTTTTCCCCCCCACAGGGT	11.92	12.14
##	1303	CACATGCTTGCTTTTATAGATG	CACATGCTTGCTTTTGTAGATG	7.48	7.57
##	1304	CTTGTGCCCCCTCCTTCTCAGGCC	CTTGTGCCCCCTCCTTCTCAAGCC	9.71	0.96
##	1305	TGTGTTTTTGTAACTTCAGGTA	GGTGTTTTTGTAACTTCAGGTA	10.40	8.41
##	1306	TGTGTTTTTGTAACTTCAGGTA	GGTGTTTTTGTAACTTCAGGTA	10.40	8.41
##	1307	TGTGTTTTTGTAACTTCAGGTA	GGTGTTTTTGTAACTTCAGGTA	10.40	8.41
##	1308	ATTGGAATCCATCATGTAGATC	ATTGGAAGTCCATCATGTAGATC	2.48	-0.72

## 1309	CAGCGTCTCCTTGTGCCTAGGTC	CAGCGTTTCCTTGTGCCTAGGTC	7.86	7.73
## 1310	TTGAGTAGTATTTTGTTCATATT	TTGAGTAATATTTTGTTCATATT	-8.37	-5.44
## 1311	TTGAGTAGTATTTTGTTCATATT	TTGAGTAGTACTTTGTTCATATT	-8.37	-9.29
## 1312	ATTTTCAGATGAACCCCTATTGT	ATTTTAGATGAACCCCTATTGT	-8.80	-9.22
## 1313	TTTGCTCTTTCCCTTCTGTAGCAT	TTTGCTCTTTCCCTTTTGTAGCAT	10.33	10.99
## 1314	GTCTTATTTCCAAATTTGCAGCAC	GTCTTATTTCCAGTTTGCAGCAC	8.27	2.18
## 1315	GCCCCGAGCACCAGACTCGCCGCC	GCCCCGAGCAACGACTCGCCGCC	-6.86	-8.84
## 1316	CCGAGCACCAGACTCGCCGCCCGT	CCGAGCAACGACTCGCCGCCCGT	-29.16	-30.88
## 1317	CCGAGCACCAGACTCGCCGCCCGT	CCGAGCAACGACTCGCCGCCCGT	-29.16	-30.88
## 1318	CTGTTTGCTTTACTTCCCAGACA	CTGTTTGCTTTATTTCCCAGACA	9.02	9.72
## 1319	GCACGATCTGGGCTCGATGCAAC	GCACGATCTGGGCTCGGTGCAAC	-14.33	-14.80
## 1320	CTGGAAATTATTTGTATTTTCAGA	CTGGAAATTATTTATATTTTCAGA	-15.54	-15.61
## 1321	GGAAATTATTTGTATTTTCAGAGG	GGAAATTATTTATATTTTCAGAGG	4.22	4.05
## 1322	GGAAATTATTTGTATTTTCAGAGG	GGAAATTATTTATATTTTCAGAGG	4.22	4.05
## 1323	TATTAATATACTTCTCTCAGATT	TATTAATATAATTCTCTCAGATT	6.16	5.57
## 1324	TGAAAAATGCTGTCTTCCAGATT	CGAAAAATGCTGTCTTCCAGATT	6.53	5.92
## 1325	TCATGATATTTTCTCTCATTAGG	TCATGATATTTTTCTCTCATTAGG	-13.64	-14.18
## 1326	ATGATATTTTCTCTCATTAGGTT	ATGATATTTTTCTCTCATTAGGTT	9.95	9.58
## 1327	ATGATATTTTCTCTCATTAGGTT	ATGATATTTTTCTCTCATTAGGTT	9.95	9.58
## 1328	ATGATATTTTCTCTCATTAGGTT	ATGATATTTTTCTCTCATTAGGTT	9.95	9.58
## 1329	AAAAAACCCCCAAATTTTCAGAAC	AAAAAACCCCCAAATTTTCAGAAC	4.02	3.07
## 1330	TTTTGTGGCTGTCATTGCAGACT	TTTTGTGGCTGTCATTGCAAACT	6.85	-1.90
## 1331	GCCTGCCTGTATACGACGCCCTG	GCCTGCCGGTATACGACGCCCTG	-23.55	-24.84
## 1332	TGGTTCAGAGTGATGTGCAGCTG	TTGTTTCAGAGTGATGTGCAGCTG	-4.53	-3.32
## 1333	CCCACTATTATCTGGTTCAGAGT	CCCACTATTATCTTGTTCAGAGT	5.76	6.35
## 1334	CCCACTATTATCTGGTTCAGAGT	CCCACTATTATCTTGTTCAGAGT	5.76	6.35
## 1335	CCCACTATTATCTGGTTCAGAGT	CCCACTATTATCTTGTTCAGAGT	5.76	6.35
## 1336	TCCTTGCTTTTGTCTCAGCCT	TCCTTGCTTTTGTCTTAGCCT	9.06	9.16
## 1337	TCCTTGCTTTTGTCTCAGCCT	TCCTTGCTTTTGTCTTAGCCT	9.06	9.16
## 1338	TTTTCCCTTCTCTCTTATCTAGT	TTTTCCCTTCTCTCTTATCCAGT	-4.47	-3.94
## 1339	TTCTTTTCTCTCTTATCTAGTCT	TTCTTTTCTCTCTTATCCAGTCT	9.09	8.67
## 1340	TTCTTTTCTCTCTTATCTAGTCT	TTCTTTTCTCTCTTATCCAGTCT	9.09	8.67
## 1341	TTTCGCTTTTGTTTTCTTGGTT	TTTCACTTTTGTTTTCTTGGTT	4.03	3.46
## 1342	AGAAAGTGTCTTTTATACAGCAG	ACAAAGTGTCTTTTATACAGCAG	2.35	4.14
## 1343	TCCCCGGCCTCTGCCCCAGCTC	TCCCCGGCCTCTGCCCCAGCTT	9.62	8.94
## 1344	TCCCCGGCCTCTGCCCCAGCTC	TCCCCGGCCTCTGCCCCAGCTT	9.62	8.94
## 1345	CATGTCCCTGTCACATGCAGCCA	CACGTCCCTGTCACATGCAGCCA	7.95	7.35
## 1346	TCCTCCTTCTTCTGTCCAGGCA	TCCTCCTCCTTCTGTCCAGGCA	10.19	9.95
## 1347	GAGTGTGTTTATATCTTACAGAAA	GGGTGTGTTTATATCTTACAGAAA	6.93	7.49
## 1348	CACACTGTCTATAAATCTAGGCC	CACACTGTCTTAAATCTAGGCC	7.01	8.98
## 1349	GAGGAATCTTAAAGACCGAGGGAG	GAGGAATCTTAAAGACGGAGGGAG	-16.45	-20.88
## 1350	AGGAATCTTAAAGACCGAGGGAGA	AGGAATCTTAAAGACGGAGGGAGA	-31.25	-32.82
## 1351	CTCATAAATAAAGCCCTAAGATG	CTCATAAATAAACCCCTAAGATG	-6.74	-0.61
## 1352	CTGCATCCTCATAAATAAAGCCC	CTGCATCCTCATAAATAAACCCC	0.11	-7.95
## 1353	ACAATATACTGTATATTTTCAGGA	ACAATATACTGTGTATTTTCAGGA	-11.38	-10.55
## 1354	CAATATACTGTATATTTTCAGGAT	CAATATACTGTGTATTTTCAGGAT	7.72	8.08
## 1355	GGTGTCTTTTCTCCCTGCAGAGG	GGTGTCTTTTCTCCATGCAGAGG	10.42	8.57
## 1356	TGTCCTGCTTCGTGCTGCAGCAG	TGTCCTGCTTCATGCTGCAGCAG	7.43	7.18
## 1357	TGTCCTGCTTCGTGCTGCAGCAG	TGTCCTGCTTCATGCTGCAGCAG	7.43	7.18
## 1358	TGTCCTGCTTCGTGCTGCAGCAG	TGTCCTGCTTCATGCTGCAGCAG	7.43	7.18
## 1359	CCTGCTTCGTGCTGCAGCAGATC	CCTGCTTCATGCTGCAGCAGATC	4.10	3.60
## 1360	CCTGCTTCGTGCTGCAGCAGATC	CCTGCTTCATGCTGCAGCAGATC	4.10	3.60
## 1361	CCTGCTTCGTGCTGCAGCAGATC	CCTGCTTCATGCTGCAGCAGATC	4.10	3.60
## 1362	TGCCCTGCGGCCACCCTGGGGAG	TGCCCTGGGGCCACCCTGGGGAG	-11.31	-12.53

## 1363	TGCCCTGCGGCCACCCTGGGGAG	TGCCCTGGGGCCACCCTGGGGAG	-11.31	-12.53
## 1364	TGCCCTGCGGCCACCCTGGGGAG	TGCCCTGGGGCCACCCTGGGGAG	-11.31	-12.53
## 1365	CCCTGCGGCCACCCTGGGGAGCA	CCCTGGGGCCACCCTGGGGAGCA	-21.35	-22.70
## 1366	CCCTGCGGCCACCCTGGGGAGCA	CCCTGGGGCCACCCTGGGGAGCA	-21.35	-22.70
## 1367	CCCTGCGGCCACCCTGGGGAGCA	CCCTGGGGCCACCCTGGGGAGCA	-21.35	-22.70
## 1368	GTTGCGCATCCAGGTGAGACGCG	GTTGCGCATCCAGGTGAGTCGCG	-20.04	-28.41
## 1369	GTTGCGCATCCAGGTGAGACGCG	GTTGCGCATCCAGGTGAGTCGCG	-20.04	-28.41
## 1370	ACAGGATCAACCGAGCCCAGGAG	ACAGGATCGACCGAGCCCAGGAG	-5.13	-5.35
## 1371	CTTCTGATTTCTTTATACAGCAG	CTTCTGATTTCTTTATACAGCAA	7.14	7.63
## 1372	GAAATTTTTTTGTGCCGTCAGTCA	GAAATTTTTTTGTACCGTCAGTCA	3.21	3.08
## 1373	CTCTTACTCTGTCAACCAAGCTG	CTCTTACTCTGTCAACCAAGCTG	3.06	-4.89
## 1374	ATCCATTGCCTGCCTTTTAGAAC	ATCCATTGCCTTCCTTTTAGAAC	6.84	7.97
## 1375	ATCCATTGCCTGCCTTTTAGAAC	ATCCATTGCCTTCCTTTTAGAAC	6.84	7.97
## 1376	ATCCATTGCCTGCCTTTTAGAAC	ATCCATTGCCTTCCTTTTAGAAC	6.84	7.97
## 1377	TTCTTTTCATTTTGTATTAGAGG	TTGTTTTCATTTTGTATTAGAGG	5.32	5.23
## 1378	TTGTTACAGCCTAATTGTAAGGTC	TTGTTACAGCCTAATTGTAAGGTT	-0.80	-0.79
## 1379	CATTGTCATTTCCAGGTCAGACA	CATTGTCATTTCCAGGTCAGACA	4.11	0.25
## 1380	CACTGTGTTCTTCTCTGCAGATG	CACTGTGTTCTTCTCTGTAGATG	12.53	11.06
## 1381	CACTGTGTTCTTCTCTGCAGATG	CACTGTGTTCTTCTCTGTAGATG	12.53	11.06
## 1382	TTTCACGATTTGTGTTTTAGTTT	TTTCATGATTTGTGTTTTAGTTT	9.06	8.84
## 1383	CAGTGTGTTTTTCTGCAGATT	CGGTGTTGTTTTTCTGCAGATT	9.87	11.33
## 1384	CAGTGTGTTTTTCTGCAGATT	CGGTGTTGTTTTTCTGCAGATT	9.87	11.33
## 1385	CAGTGTGTTTTTCTGCAGATT	CGGTGTTGTTTTTCTGCAGATT	9.87	11.33
## 1386	CACGTGAGGCCTTTGTTTACAGG	CACGTAAGGCCTTTGTTTACAGG	-8.03	-8.52
## 1387	CGTGAGGCCTTTGTTTACAGGTT	CGTAAGGCCTTTGTTTACAGGTT	5.92	5.00
## 1388	CCTTCACCTCCGTCTTCTAGGTG	CCTTCACCTCCGTCTTTTAGGTG	11.52	11.51
## 1389	GTGTCTCGTTCTCTCAGCAGAAT	GTGTCTCGTTCTCTCAGCAGAAC	8.86	8.95
## 1390	GTGTCTCGTTCTCTCAGCAGAAT	GTGTCTCGTTCTCTCAGCAGAAC	8.86	8.95
## 1391	GTGTCTCGTTCTCTCAGCAGAAT	GTGTCTCGTTCTCTCAGCAGAAC	8.86	8.95
## 1392	GTGTCTCGTTCTCTCAGCAGAAT	GTGTCTCGTTCTCTCAGCAGAAC	8.86	8.95
## 1393	TAACCTCTGCTTGTTCCTTAGGTG	TAACCTCTGCTTGTTCCTTAGGTG	9.16	9.03
## 1394	ACGTGTACTGCACATCTCAGGGC	ACATGTACTGCACATCTCAGGGC	4.20	4.13
## 1395	GAATATTTCAAACCTGCAGGTATG	GAATATTTCAAACCTGCAGGTATG	-12.17	-23.09
## 1396	GTTTTTTTATCCCACTCCAGAGC	GTTTTTTTATCCCACTCCAGAGC	7.59	8.86
## 1397	ATGTTATTCTATTTATATCTAGA	GTGTTATTCTATTTATATCTAGA	-11.24	-10.82
## 1398	GCTCAGGGAAGCAGGAGCAGGGA	GCTCAGGGAAGCAGGAGCAGGGA	-19.27	-18.51
## 1399	CCCGGAGCTCAGGGAAGCAGGAG	CCCGGAGCTCAGGGAAGCAGGAG	-11.07	-10.45
## 1400	ATGTCTTTGTGTTCCATTAGCTA	ATGACTTTGTGTTCCATTAGCTA	6.49	5.59
## 1401	GTA AAAACCTTTCTCTCTGGGAAA	GTA AATCCCTTTCTCTCTGGGAAA	-12.60	-11.59
## 1402	GTA AAAACCTTTCTCTCTGGGAAA	GTA AATCCCTTTCTCTCTGGGAAA	-12.60	-11.59
## 1403	AAAACCTTTCTCTCTGGGAAAAGA	AAATCCCTTTCTCTCTGGGAAAAGA	-17.06	-17.49
## 1404	GGGAACTACAGCCAGAACTTCAG	GGGAACTACAACCAGAACTTCAG	-29.75	-22.95
## 1405	TCTCTGTTTTAAAAATCCAGCTG	TTTCTGTTTTAAAAATCCAGCTG	5.44	5.48
## 1406	TTTTTTTCTTTTGATTTTAGACT	TTTTTTTCTTTTGATTTTAGACG	9.23	8.63
## 1407	CGTCATTTTTATAACTACAGGGT	CATCATTTTTATAACTACAGGGT	5.90	6.09
## 1408	CATGAGGAAGCCACCTAAGAAGA	CATGAGGAAGCCACCGAAGAAGA	-27.78	-30.21
## 1409	TCACCTCAACCTCAACAGGCGAA	TCATCTCAACCTCAACAGGCGAA	-22.40	-23.05
## 1410	TCACCTCAACCTCAACAGGCGAA	TCACCTCAACCTCGACAGGCGAA	-22.40	-24.30
## 1411	ATGGGACGGCCCATCAGCATTGA	ATGGGACAGCCCATCAGCATTGA	-10.26	-14.10
## 1412	ATGGGACGGCCCATCAGCATTGA	ATGGGACGGCCCATCAGCGTTGA	-10.26	-18.22
## 1413	TTCTTTCTTCTTTCTTCAGGTG	TTCTTTCTTCTTTCTTCAGGTG	12.62	12.98
## 1414	TTCTTTCTTCTTTCTTCAGGTG	TTCTTTCTTCTTTCTTCAGGTG	12.62	12.98
## 1415	AGAGCTGCCTGTCCTTACAGGTC	AGAGCTGCCTGTCCTTACAGGGC	9.46	8.36
## 1416	AGAGCTGCCTGTCCTTACAGGTC	AGAGCTGCCTGTCCTTACAGGGC	9.46	8.36

## 1417	GTCACACTTTGTTCTTCCAGGGT	GTCACACTTCGTTCTTCCAGGGT	9.29	9.24
## 1418	CCCACCCTCTGTTTCTGCAGTTT	CGCACCCTCTGTTTCTGCAGTTT	9.39	8.77
## 1419	GTGTCTCTCCTCTTTCTAGTGG	GTGTCTCTCCTCTTTCTAGTGG	9.10	10.07
## 1420	CTATTTATTCTGTTCTCTAGCCT	CTATTTATTCTGTTCTCTAGCCT	7.14	7.31
## 1421	GTTTTGTAATATTTTCACAGTAA	GTTTTGTAATGTTTTCACAGTAA	4.41	5.11
## 1422	GTTTTGTAATATTTTCACAGTAA	GTTTTGTAATGTTTTCACAGTAA	4.41	5.11
## 1423	TAGTGATTCTTCGTATTTAGTGA	TAGTGATTCTTCGCATTTAGTGA	3.59	3.01
## 1424	GTTTCTTGTCATTTCCAGATC	GTTTCTTGTCATTTCCCATATC	7.30	-1.30
## 1425	GTTTCTTGTCATTTCCAGATC	GTTTCTTGTCATTTCCGAGATC	7.30	-1.97
## 1426	GTTTCTTGTCATTTCCAGATC	GTTTCTTGTCATTTCTCAGATC	7.30	7.62
## 1427	TTAGTGCAGGTGCTGTGGACAAA	TTAGTGCAGGTGCCGTGGACAAA	-20.87	-21.90
## 1428	CCACGTCTGATAGACTCCACAGC	CCACATCTGATAGACTCCACAGC	-10.67	-11.38
## 1429	GTGTACTATTTGTTAAACAGGTG	GTGTAGTATTTGTTAAACAGGTG	8.33	5.64
## 1430	GTGTACTATTTGTTAAACAGGTG	GTGTAGTATTTGTTAAACAGGTG	8.33	5.64
## 1431	ATTCGTGTTGCCTCTGTAGACG	ATCTCGTGTTGCCTCTGTAGACG	8.08	7.93
## 1432	ATTCGTGTTGCCTCTGTAGACG	CTTTCGTGTTGCCTCTGTAGACG	8.08	8.91
## 1433	TTGGGGCTCTCCACCCGCTCTGG	TTGGGGCTCTCCACCCCTCTGG	-8.67	-9.43
## 1434	ACACGTTTCTGTCTGCTCAGGTT	ACACGTTTCTGTCTGCACAGGTT	7.90	8.50
## 1435	ACACGTTTCTGTCTGCTCAGGTT	ACACGTTTCTGTCTGCACAGGTT	7.90	8.50
## 1436	AATGACAGCTGTCCACAGGAC	AATGACGGCTGTCCACAGGAC	6.81	9.73
## 1437	TAAACCAAGTTCTCAGCAGGAT	TAAACCAAGTTCTCAGCAGGGT	-0.16	-0.66
## 1438	TAAACCAAGTTCTCAGCAGGAT	TAAACCAAGTTCTCAGCAGGGT	-0.16	-0.66
## 1439	TAAACCAAGTTCTCAGCAGGAT	TAAACCAAGTTCTCAGCAGGGT	-0.16	-0.66
## 1440	TAAACCAAGTTCTCAGCAGGAT	TAAACCAAGTTCTCAGCAGGGT	-0.16	-0.66
## 1441	GCCGTTCTGCCACTCACCTCCCT	GCCGTTCTGCCACTCACCTTCCT	-12.62	-13.15
## 1442	GGGTGGTCCACGGCCCTGGAGA	GGGTGGTCCCGGCCCTGGAGA	-5.72	-2.94
## 1443	GGAGTGGGGGGCGGTCTGCCTTT	GGAGTGGGGGGCGGTCTGCCTTT	-30.79	-29.78
## 1444	GCCTCCCTCCGCGTCTTCAGACG	GCCTCCCTCCGCGTCTTCAAACG	7.26	-1.49
## 1445	TGGGGCTAATCTGTAACCAGGAC	TGGGGCTAATCTGCAACCAGGAC	5.32	4.57
## 1446	GTGCTGGGATTACAGGTGTGAGC	GTGCTGGGATTACAGGTGTGAGA	-23.98	-24.48
## 1447	GATTACAGGTGTGAGCCACTGCA	GATTACAGGTGTGAGACACTGCA	-25.59	-26.68
## 1448	CTTTTCTACTTAACTCTAGTTT	CTTTTCTACTTATCTCTAGTTT	7.31	8.21
## 1449	GATTACAGGCGTAAGCCACCGTG	GATTACAGGCGTAAGCCACTGTG	-26.51	-27.04
## 1450	CTGCCTTCCACCGTGAGCAGCCT	CTGCCTTCCACCATGAGCAGCCT	3.91	3.17
## 1451	CTGCCTTCCACCGTGAGCAGCCT	CTGCCTTCCACCATGAGCAGCCT	3.91	3.17
## 1452	CTGCCTTCCACCGTGAGCAGCCT	CTGCCTTCCACCATGAGCAGCCT	3.91	3.17
## 1453	CTGCCTTCCACCGTGAGCAGCCT	CTGCCTTCCACCATGAGCAGCCT	3.91	3.17
## 1454	GCCTGTCTCTGTCCCAATAGATC	GCCTGTCTCTGTCCCAGTAGATC	10.52	7.57
## 1455	GCCTGTCTCTGTCCCAATAGATC	GCCTGTCTCTGTCCCAGTAGATC	10.52	7.57
## 1456	ATCTCTAATTATATCCTTAGGAT	ATCTCTAATTATATCCTTAGGGT	8.30	8.34
## 1457	AAAACTTTGTATTTTGACAGATG	AAAACTTTTATTTTGACAGATG	7.07	7.53
## 1458	AAAACTTTGTATTTTGACAGATG	AAAACTTTTATTTTGACAGATG	7.07	7.53
## 1459	AAAACTTTGTATTTTGACAGATG	AAAACTTTTATTTTGACAGATG	7.07	7.53
## 1460	AAAACTTTGTATTTTGACAGATG	AAAACTTTTATTTTGACAGATG	7.07	7.53
## 1461	AAAACTTTGTATTTTGACAGATG	AAAACTTTTATTTTGACAGATG	7.07	7.53
## 1462	AAAACTTTGTATTTTGACAGATG	AAAACTTTTATTTTGACAGATG	7.07	7.53
## 1463	CGTGGGCACGCGCCGACAGACT	TGTGGGCACGCGCCGACAGACT	4.32	4.54
## 1464	CTCGCAGGTCACTTTATCAGTCT	CTCGCATGTCACTTTATCAGTCT	1.15	4.69
## 1465	TTCTGTCTTGATGCTGCAGGGC	TTCTGTCTTTGATGCTGCAGGGC	6.31	7.93
## 1466	TTTCTTTTGTGGAATACAGGCT	TTTCTTTTGTGAAATACAGGCT	4.82	5.39
## 1467	CAGAAATCCTGTCTCTCCAGGGC	CAGGAATCCTGTCTCTCCAGGGC	6.72	5.81
## 1468	CAGAAATCCTGTCTCTCCAGGGC	CAGAAATCCTCTCTCTCCAGGGC	6.72	7.71
## 1469	CTTATTCCCATATCTTTGAGAGA	CTTATTCCCGTATCTTTGAGAGA	-5.71	-5.20
## 1470	CTTATTCCCATATCTTTGAGAGA	CTTATTCCCGTATCTTTGAGAGA	-5.71	-5.20

## 1471	TGAGGATATCCCTTTTACAGATG	TGAGCATATCCCTTTTACAGATG	7.40	8.76
## 1472	GTTTGCTCTATTCTTCCTAGCTC	ATTTGCTCTATTCTTCCTAGCTC	6.93	7.20
## 1473	CGGTGTCGTCTTCCTCCTAGCCA	CGGTGTCATCTTCCTCCTAGCCA	6.26	6.45
## 1474	CGGTGTCGTCTTCCTCCTAGCCA	CGGTGTCATCTTCCTCCTAGCCA	6.26	6.45
## 1475	CGGTGTCGTCTTCCTCCTAGCCA	CGGTGTCATCTTCCTCCTAGCCA	6.26	6.45
## 1476	GTTATGTTTTTATACCCTAGTGT	GCTATGTTTTTATACCCTAGTGT	6.54	6.12
## 1477	ATTCTTCTCCTTGTAATGTAGG	ATTCTTCTCCTCGTAAATGTAGG	-11.40	-11.61
## 1478	TCTTCTCCTTGTAATGTAGGCC	TCTTCTCCTCGTAAATGTAGGCC	6.78	6.92
## 1479	TCTTCTCCTTGTAATGTAGGCC	TCTTCTCCTCGTAAATGTAGGCC	6.78	6.92
## 1480	CCTGGTGATTCTGCCCCAGGCC	CCTGGTAATTCTGCCCCAGGCC	9.51	8.76
## 1481	TCATATTTTCTTTTCCCCAGAAC	TCATGTTTTCTTTTCCCCAGAAC	10.53	10.53
## 1482	TCATATTTTCTTTTCCCCAGAAC	TCATGTTTTCTTTTCCCCAGAAC	10.53	10.53
## 1483	TCATATTTTCTTTTCCCCAGAAC	TCATGTTTTCTTTTCCCCAGAAC	10.53	10.53
## 1484	CCATGTCTTCCATCTCCCAGGCC	CCACGTCTTCCATCTCCCAGGCC	8.77	8.78
## 1485	CCCCCATCTGTGCTGTATAGTCC	CCCCCATCTGTGCTATATAGTCC	5.25	5.40
## 1486	ACGTGGTGTGTCTCCTGCAGACT	ACGTGATGTGTCTCCTGCAGACT	10.33	9.80
## 1487	ACGTGGTGTGTCTCCTGCAGACT	ACGTGATGTGTCTCCTGCAGACT	10.33	9.80
## 1488	GCAATCTGCTCTTTCTCTAGCCC	GCAATCTGCTCTTTCCCTAGCCC	7.45	7.67
## 1489	GCAATCTGCTCTTTCTCTAGCCC	GCAATCTGCTCTTTCCCTAGCCC	7.45	7.67
## 1490	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1491	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1492	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1493	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1494	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1495	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1496	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1497	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1498	ATTCTTTTTGTCTCTGCAGAAA	ATTCTTTTTGTTCTCTGCAGAAA	11.25	11.13
## 1499	TTCTTTTTGTCTCTGCAGAAAT	TTCTTTTTGTTCTCTGCAGAAAT	-12.89	-12.32
## 1500	TTCTTTTTGTCTCTGCAGAAAT	TTCTTTTTGTTCTCTGCAGAAAT	-12.89	-12.32
## 1501	CTATACTGTTTCTTCCCTAGGTT	CTATACTGTTTCTTCCCTAAGTT	11.67	2.92
## 1502	CTATACTGTTTCTTCCCTAGGTT	CTATACTGTTTCTTCCCTAAGTT	11.67	2.92
## 1503	CTATACTGTTTCTTCCCTAGGTT	CTATACTGTTTCTTCCCTAAGTT	11.67	2.92
## 1504	CTGCCCTTGGTCTTTTGTAGGTT	CTGCCCTTGGTCTTTTGTAGGTT	10.68	11.55
## 1505	CTGCCCTTGGTCTTTTGTAGGTT	CTGCCCTTGGTCTTTTGTAGGTT	10.68	11.55
## 1506	CGTCCTCCCGCCACCTGCAGGTA	CGTCCTCCCGCCACCCGCAGGTA	11.53	11.60
## 1507	TCACACGCCCGTCCTTGTAGCCT	TCACACGCCCTCCTTGTAGCCT	7.07	7.77
## 1508	ACCCAGCCCGCCGCTCCAGGAG	ACCCAGCCACCGCCTCCAGGAG	5.60	4.58
## 1509	GTTGTTTTCTTTTCTCTCAGGGT	GTTGTTTCCTTTTCTCTCAGGGT	9.91	9.48
## 1510	GTTGTTTTCTTTTCTCTCAGGGT	GTTGTTTCCTTTTCTCTCAGGGT	9.91	9.48
## 1511	TTCTGTCTCGTGGTCCCCAGGCT	TTCTGTCTCGCGGTCCCCAGGCT	9.49	8.89
## 1512	TCATCCAGTCTTTCCCTGCAGAC	TCATCCAGTCTTTTCTGCAGAC	-20.60	-20.75
## 1513	CATCCAGTCTTTCCCTGCAGACA	CATCCAGTCTTTTCTGCAGACA	10.05	9.20
## 1514	CAGTCTTTCCCTGCAGACAGAGG	CAGTCTTTTCTGCAGACAGAGG	0.05	-0.32
## 1515	TCGCCTCCTTCCCTTGCAGGTT	TCGCCTCCTTCCCTCGCAGGTT	13.49	12.20
## 1516	TCGCCTCCTTCCCTTGCAGGTT	TCGCCTCCTTCCCTCGCAGGTT	13.49	12.20
## 1517	TCCTCATGTTGCCACTCACGGAC	TCCTCATGTTGCCACTCACCGAC	-3.79	-11.85
## 1518	CCTTCTTTGCCTGCCTTAGTTC	CCTTCTTGCCTGCCTTAGTTC	7.19	7.09
## 1519	TCTTTCTCTGTTTGCTGCAGGA	TCTTTCTCTATTGCTGCAGGA	-22.28	-22.99
## 1520	CTTTTCTCTGTTTGCTGCAGGAG	CTTTTCTCTATTGCTGCAGGAG	10.92	9.46
## 1521	CTTTTCTCTGTTTGCTGCAGGAG	CTTTTCTCTATTGCTGCAGGAG	10.92	9.46
## 1522	CTTTTCTCTGTTTGCTGCAGGAG	CTTTTCTCTATTGCTGCAGGAG	10.92	9.46
## 1523	CAAAATATGGATTGGTTAATTT	CAAAATATGGATTGGATAATTT	-8.72	-8.14
## 1524	CAAAATATGGATTGGTTAATTT	CAAAATATGGATTGGATAATTT	-8.72	-8.14

## 1525	GCTGGTGGCTCTCTGGTGAGCTA	GCTGGTGGCTCCCTGGTGAGCTA	-4.96	-5.83
## 1526	CTCATTTGCTCCTGCTGTAGATG	CTCATTTGCTTCTGCTGTAGATG	6.92	7.79
## 1527	GTCTATTGCGGTATACACAGCTC	GTCTATTGCGGTATACGCAGCTC	2.82	2.77
## 1528	ACTAAGACGCTTGTCACAGCGG	ACTAAGACGCTTGTCACAGCAG	3.29	2.03
## 1529	AATGCTGGGACTATAGGCATGAG	AGTGCTGGGACTATAGGCATGAG	-12.29	-12.99
## 1530	TGAAGCCAGGAGTTTGAGACCAG	TGCAGCCAGGAGTTTGAGACCAG	-26.18	-25.47
## 1531	TCCTGCTCCTCTTCTGTGAGACC	TCCTGCTCCTCTTCTATCAGACC	7.54	8.47
## 1532	TCCTGCTCCTCTTCTGTGAGACC	TCCTGCTCCTCTTCTATCAGACC	7.54	8.47
## 1533	CTTCCCTACCCCTCCCCAGCACA	CTTCCCTGCCCTCCCCAGCACA	-11.18	-10.81
## 1534	CTGTCTTTTCATTTTGCAGACA	CTGTGTTTTTCATTTTGCAGACA	11.23	10.68
## 1535	ATTTCTATTTCACTTACTAGATT	ATTTGTATTTCACTTACTAGATT	6.68	6.30
## 1536	ACTCAGTGACTTGTGTTAGGAT	ACTCATGTGACTTGTGTTAGGAT	4.04	4.85
## 1537	CATTTGGTGTTTTTTTACAGGTT	CATTTGGTGTTTTTTTACATGTT	9.90	1.30
## 1538	CTGATTTGTGTTTTACGTAGGTC	CTGATTTGTGTTTTATGTAGGTC	8.64	9.04
## 1539	ACACTTGTCTTTCTTTCCAGGTG	ACACGTGTCTTTCTTTCCAGGTG	12.88	12.44
## 1540	ACACTTGTCTTTCTTTCCAGGTG	ACACGTGTCTTTCTTTCCAGGTG	12.88	12.44
## 1541	ACACTTGTCTTTCTTTCCAGGTG	ACACGTGTCTTTCTTTCCAGGTG	12.88	12.44
## 1542	ACACTTGTCTTTCTTTCCAGGTG	ACACGTGTCTTTCTTTCCAGGTG	12.88	12.44
## 1543	ACACTTGTCTTTCTTTCCAGGTG	ACACGTGTCTTTCTTTCCAGGTG	12.88	12.44
## 1544	ACACTTGTCTTTCTTTCCAGGTG	ACACGTGTCTTTCTTTCCAGGTG	12.88	12.44
## 1545	ACACTTGTCTTTCTTTCCAGGTG	ACACGTGTCTTTCTTTCCAGGTG	12.88	12.44
## 1546	ACACTTGTCTTTCTTTCCAGGTG	ACACGTGTCTTTCTTTCCAGGTG	12.88	12.44
## 1547	TAAAATTGTCTCTCTCATAGGAC	TAAAATTGTCCCTCTCATAGGAC	9.45	8.72
## 1548	TAAAATTGTCTCTCTCATAGGAC	TAAAATTGTCCCTCTCATAGGAC	9.45	8.72
## 1549	TAAAATTGTCTCTCTCATAGGAC	TAAAATTGTCCCTCTCATAGGAC	9.45	8.72
## 1550	CCTGTCTGTGCCTCTTGACAGCTG	CCCGTCTGTGCCTCTTGACAGCTG	11.98	11.76
## 1551	GTTTGTCATTTTATCTATAGCCG	GTTTGTCATTTTATCTGTAGCCG	7.03	7.33
## 1552	GTTTGTCATTTTATCTATAGCCG	GTTTGTCATTTTATCTGTAGCCG	7.03	7.33
## 1553	CCTTCCTTCTCGGGCCCCAGTTC	CCTTCTTTCTCGGGCCCCAGTTC	7.09	7.35
## 1554	CCTTCCTTCTCGGGCCCCAGTTC	CCTTCTTTCTCGGGCCCCAGTTC	7.09	7.35
## 1555	ACCATCTCCTGTCTTTTCAGAGC	ACCGTCTCCTGTCTTTTCAGAGC	11.35	11.91
## 1556	ACACGCGGGTCTCCCTGTAGGCG	ACACGCGGGTCTCCCTGCAGGCG	9.30	10.21
## 1557	ACACGCGGGTCTCCCTGTAGGCG	ACACGCGGGTCTCCCTGCAGGCG	9.30	10.21
## 1558	GCCACTTCTTGGTGTTGCAGACC	GCCATTTCTTGGTGTTGCAGACC	8.17	8.42
## 1559	GCCACTTCTTGGTGTTGCAGACC	GCCATTTCTTGGTGTTGCAGACC	8.17	8.42
## 1560	TCATGAGCTCGTCTCCGCGGAG	TCATGAGCTCGTCTCCGCGGAG	7.60	-0.35
## 1561	TTGGTTTTATGGTTTTTCAGATT	TTGGTTTTGTGGTTTTTCAGATT	9.13	9.77
## 1562	CATCTGGCCTCCTGTTCCAGTGC	CATCTGGCCTGCTGTTCCAGTGC	7.96	6.40
## 1563	GTGGGGCTCTATCTCATCAGTGA	GTGGGGCTCTGTCTCATCAGTGA	5.15	5.75
## 1564	GTGGGGCTCTATCTCATCAGTGA	GTGGGGCCCTATCTCATCAGTGA	5.15	4.91
## 1565	TGTTTTTTGTCTTTCTGTAGCCC	TATTTTTTGTCTTTCTGTAGCCC	10.16	9.40
## 1566	TGTTTTTTGTCTTTCTGTAGCCC	TATTTTTTGTCTTTCTGTAGCCC	10.16	9.40
## 1567	TTCTCCTTCCTCCGCCACAGATA	TTCTCTTTCCCTCCGCCACAGATA	10.02	10.72
## 1568	TTCTCCTTCCTCCGCCACAGATA	TTCTCTTTCCCTCCGCCACAGATA	10.02	10.72
## 1569	TTCTCCTTCCTCCGCCACAGATA	TTCTCTTTCCCTCCGCCACAGATA	10.02	10.72
## 1570	TGTAATGTCTTCCATGGTAGATG	TATAATGTCTTCCATGGTAGATG	7.98	8.23
## 1571	TGTAATGTCTTCCATGGTAGATG	TATAATGTCTTCCATGGTAGATG	7.98	8.23
## 1572	GTATATTTCCCTCATCCCAGCAT	GTGTATTTCCCTCATCCCAGCAT	4.74	5.83
## 1573	GCCGGCGCCCTCTGCGGGACTGG	GCCGGCGCCCTCTGTGGGACTGG	-23.19	-20.55
## 1574	GCCGGCGCCCTCTGCGGGACTGG	GCCGGCGCCCTCTGTGGGACTGG	-23.19	-20.55
## 1575	GCCGGCGCCCTCTGCGGGACTGG	GCCGGCGCCCTCTGTGGGACTGG	-23.19	-20.55
## 1576	GCCGGCGCCCTCTGCGGGACTGG	GCCGGCGCCCTCTGTGGGACTGG	-23.19	-20.55
## 1577	CTCTGCGGGACTGGGTTTCCCGG	CTCTGTGGGACTGGGTTTCCCGG	-13.48	-13.51
## 1578	CTCTGCGGGACTGGGTTTCCCGG	CTCTGTGGGACTGGGTTTCCCGG	-13.48	-13.51

## 1579	TTCTCCACCCTTCGCTGTGTCCC	CTCTCCACCCTTCGCTGTGTCCC	-9.77	-9.46
## 1580	TTCTCCACCCTTCGCTGTGTCCC	CTCTCCACCCTTCGCTGTGTCCC	-9.77	-9.46
## 1581	CCCCCTCTCCCCTTCTGACAGTGC	CCCCCTCTCCCCTTCTGACAGCGC	9.37	9.72
## 1582	CCCCCTCTCCCCTTCTGACAGTGC	CCCCCTCTCCCCTTCTGACAGCGC	9.37	9.72
## 1583	CCCCCTCTCCCCTTCTGACAGTGC	CCCCCTCTCCCCTTCTGACAGCGC	9.37	9.72
## 1584	CCCCCTCTCCCCTTCTGACAGTGC	CCCCCTCTCCCCTTCTGACAGCGC	9.37	9.72
## 1585	CCCTCTCCCCTTCTGACAGTGCG	CCCTCTCCCCTTCTGACAGCGCG	-10.75	-10.22
## 1586	CCCTCTCCCCTTCTGACAGTGCG	CCCTCTCCCCTTCTGACAGCGCG	-10.75	-10.22
## 1587	CCTCTCCCCTTCTGACAGTGCGA	CCTCTCCCCTTCTGACAGCGCGA	-20.82	-20.50
## 1588	CCTCTCCCCTTCTGACAGTGCGA	CCTCTCCCCTTCTGACAGCGCGA	-20.82	-20.50
## 1589	TCTCTTCCCTTGCTTTCCAGACC	TCTCTTCCCTTGCTTTCCAGACC	10.96	11.45
## 1590	TCTCTTCCCTTGCTTTCCAGACC	TCTCTTCCCTTGCTTTCCAGACC	10.96	11.45
## 1591	GGTTCCTTTTCTTCATTGGTAG	GGTTCCTTTTCTTCATTGGTAG	-4.48	-4.30
## 1592	TCCTTTTCTTCATTGGTAGCCA	TCCTTTTCTTCATTGGTAGCCA	6.19	6.15
## 1593	GTCTCCCTGTATTTATTTAGCAT	GTCTCCCTGTATTTATTTAGCGT	6.44	7.15
## 1594	GTCTCCCTGTATTTATTTAGCAT	GTCTCCCTGTATTTATTTAGCGT	6.44	7.15
## 1595	TCCAGCATATGGGGTCCCCTCAG	TCCAGCATATGGGGTCCCCTCAG	-17.55	-17.22
## 1596	TCCAGCATATGGGGTCCCCTCAG	TCCAGCATATGGGGTCCCCTCAG	-17.55	-17.22
## 1597	AGGAAAATCAGGAAAATTAAGAA	AGGAAAATCAGGAAAATGAAGAA	-19.13	-32.87
## 1598	AGCTGCTAACAATTATCTAGGGG	AGCTGCTAACAATTATTTAGGGG	2.79	2.82
## 1599	GAGTCTCACTCTCTCGCCAGGCT	GAGTCTCGCTCTCTCGCCAGGCT	7.48	7.39
## 1600	TCACTCTTTTCTTTCCCTAGTTA	TCACTCTTTTCTTTCCCTAGTTG	10.12	10.61
## 1601	TCACTCTTTTCTTTCCCTAGTTA	TCACTCTTTTCTTTCCCTAGTTG	10.12	10.61
## 1602	TCACTCTTTTCTTTCCCTAGTTA	TCACTCTTTTCTTTCCCTAGTTG	10.12	10.61
## 1603	TCACTCTTTTCTTTCCCTAGTTA	TCACTCTTTTCTTTCCCTAGTTG	10.12	10.61
## 1604	TCACTCTTTTCTTTCCCTAGTTA	TCACTCTTTTCTTTCCCTAGTTG	10.12	10.61
## 1605	TCACTCTTTTCTTTCCCTAGTTA	TCACTCTTTTCTTTCCCTAGTTG	10.12	10.61
## 1606	TCACTCTTTTCTTTCCCTAGTTA	TCACTCTTTTCTTTCCCTAGTTG	10.12	10.61
## 1607	GTTCTGTCTTGGCTGGGGACCC	GTTCTTTCCTTGGCTGGGGACCC	-21.58	-21.76
## 1608	CCGTTTGTATGTGTGTGCAGCAA	CTGTTTGTATGTGTGTGCAGCAA	7.58	8.04
## 1609	CCGTTTGTATGTGTGTGCAGCAA	CTGTTTGTATGTGTGTGCAGCAA	7.58	8.04
## 1610	CCGTTTGTATGTGTGTGCAGCAA	CTGTTTGTATGTGTGTGCAGCAA	7.58	8.04
## 1611	CAGTCTCTTCCCCTCGGCAGGAC	CAGTCCCCTTCCCCTCGGCAGGAC	7.64	6.76
## 1612	GCCCATTGCGCTGTCTCAGGGT	GCCCATTGCGCTGTCTCAGGGT	8.88	9.18
## 1613	GCCCATTGCGCTGTCTCAGGGT	GCCCATTGCGCTGTCTCAGGGT	8.88	9.18
## 1614	CTAACTTCTAACCCTTACAGCCT	CTAACTTCTAACCCTTACAGCCT	7.36	7.62
## 1615	TGCTGTTTCTCTGCTCAAAGGAT	TGCTGTTTCTCTACTCAAAGGAT	7.17	6.51
## 1616	TGTCTGATTTTCCGGTGCAGTTC	TGTCTGATTTTCTGGTGCAGTTC	8.76	8.92
## 1617	TGTCTGATTTTCCGGTGCAGTTC	TGTCTGATTTTCTGGTGCAGTTC	8.76	8.92
## 1618	CCTTGCTGTCTCCCCCTAGATGT	CCTTGCTGTCTCCCCCTAGGTGT	-9.98	-1.23
## 1619	CTTGCTGTCTCCCCCTAGATGTC	CTTGCTGTCTCCCCCTAGGTGTC	-7.94	-15.90
## 1620	TTGCTGTCTCCCCCTAGATGTCC	TTGCTGTCTCCCCCTAGGTGTCC	-5.68	-20.73
## 1621	GAATTTGACCATTTGGGTGAGAGC	GCATTTGACCATTTGGGTGAGAGC	0.35	1.26
## 1622	TGCCTTTCCACCCTCTCAGCTT	TGCCTTTCCACCCTCTCACCTT	7.19	-0.88
## 1623	TGCCTTTCCACCCTCTCAGCTT	TGCCTTTCCACCCTCTCACCTT	7.19	-0.88
## 1624	TGCCTTTCCACCCTCTCAGCTT	TGCCTTTCCACCCTCTCACCTT	7.19	-0.88
## 1625	ATGGTATTTCTTTTTACAGCAT	ATGGTATTTCTTTTTACAGCAT	8.14	9.49
## 1626	TCGTTTTCCTCTCTGGTTAGAAG	CCGTTTTCCTCTCTGGTTAGAAG	5.71	6.28
## 1627	GAAGTGAACCGACGCCGAGGC	GAAGTGGAGCCGACGCCGAGGC	-18.95	-23.10
## 1628	TACCAACACTTCACCCCCAGATC	TACCAACGCTTCACCCCCAGATC	7.44	8.22
## 1629	TACCAACACTTCACCCCCAGATC	TACCAACGCTTCACCCCCAGATC	7.44	8.22
## 1630	TATGGAATGTTCTTTTGTAGGGA	TATGGAATGTTCTTTTGTAGGAA	7.41	8.10
## 1631	TATGGAATGTTCTTTTGTAGGGA	TATGGAATGTTCTTTTGTAGGAA	7.41	8.10
## 1632	TATGGAATGTTCTTTTGTAGGGA	TATGGAATGTTCTTTTGTAGGAA	7.41	8.10

## 1633	CTGAGGCCATCCTGTCCCAGGCC	CTGAGGCCATCCTGTCCCAGGCC	5.63	5.38
## 1634	CCGTAATGCCTGTCCCCAGCAA	CCCTAATGCCTGTCCCCAGCAA	4.55	5.26
## 1635	TGCCTCCCTATGTGCTGTAGACC	TGCCTCCCTATGTGCCGTAGACC	6.68	7.41
## 1636	ATGTGCTACTGTCTTCATAGACC	ATGTGCTACTGTCTTCACAGACC	7.93	8.99
## 1637	ATGTGCTACTGTCTTCATAGACC	ATGTGCTACTGTCTTCACAGACC	7.93	8.99
## 1638	TGCCTTAACTGGCTATGCAGTAT	TGCCTTGA CTGGCTATGCAGTAT	2.90	2.70
## 1639	TGCCTTAACTGGCTATGCAGTAT	TGCCTTAACTGGCCATGCAGTAT	2.90	3.24
## 1640	CCTCTCCCCTCCATTTTATGTTT	CCTCTCCCCTCCACTTTTATGTTT	1.67	0.64
## 1641	CCTCTCCCCTCCATTTTATGTTT	CCTCTCCCCTCCACTTTTATGTTT	1.67	0.64
## 1642	TCCATTTTATGTTTTCTTCTGGA	TCCACTTTATGTTTTCTTCTGGA	-7.62	-8.06
## 1643	CTCTGACTTTTCTCTCCAGAAT	CTCTGACTTTTCTCTACAGAAT	10.05	10.46
## 1644	AATTTTTGTATTTTTGTAGAGA	AATTTTTGTGTTTTTTGTAGAGA	6.53	8.08
## 1645	GGGCAGCTGTCTGGGGAGGTG	GGGCAGCTTTCTGGGGAGGTG	-4.99	-4.26
## 1646	GTGATCCCTGCTCTGGGCAGCTG	GTGATCCCTGCTCTGGGCAGCTT	7.62	7.03
## 1647	GTGATCCCTGCTCTGGGCAGCTG	GTGATCCCTGCTCTGGGCAGCTT	7.62	7.03
## 1648	GTGATCCCTGCTCTGGGCAGCTG	GTGATCCCTGCTCTGGGCAGCTT	7.62	7.03
## 1649	GTGATCCCTGCTCTGGGCAGCTG	GTGATCCCTGCTCTGGGCAGCTT	7.62	7.03
## 1650	GTGATCCCTGCTCTGGGCAGCTG	GTGATCCCTGCTCTGGGCAGCTT	7.62	7.03
## 1651	TCCTCACCCTGTGTCCGTAGGAA	TCCTCACCCTGTGTTCCGTAGGAA	10.71	8.64
## 1652	TCCTCACCCTGTGTCCGTAGGAA	TCCTCACCCTGTGTTCCGTAGGAA	10.71	8.64
## 1653	TGGTGCAGCCCTGATCCAGGGC	TGGTGCAGCCCTGGTCCAGGGC	1.17	0.88
## 1654	TTGTCTCTTGTCTGCCACAGCTG	TTGTCTCTTGTCCGCCACAGCTG	9.70	8.72
## 1655	TTGTCTCTTGTCTGCCACAGCTG	TTGTCTCTTGTCCGCCACAGCTG	9.70	8.72
## 1656	TTATTACAGTGTTCTGCAGATG	TTATTACAATGTTCTGCAGATG	6.79	10.18
## 1657	CACCAAATAATACAGAGCAGTTA	CACCAAATAATACAGAGCAATTA	-6.95	-15.70
## 1658	CATTTCTAACTAATTCCCAGGTT	CATTTCTAACCAATTCCCAGGTT	5.47	5.10
## 1659	GACTGGGAATTCATTTGCAGAAA	GACCGGAATTCATTTGCAGAAA	5.38	5.71
## 1660	CCGTGTTTCCTTTTGAACAGGCT	CTGTGTTTCCTTTTGAACAGGCT	8.38	9.11
## 1661	CCGTGTTTCCTTTTGAACAGGCT	CTGTGTTTCCTTTTGAACAGGCT	8.38	9.11
## 1662	GCCTGCTCTTTTGTTTTAAAGGAG	GCCTACTCTTTTGTTTTAAAGGAG	8.65	7.79
## 1663	AACCGCGTCTTCTCCGCAGCAC	AACGGCGTCTTCTCCGCAGCAC	8.97	9.00
## 1664	TCCTCTTCCACTTTGCCAAGGAG	TCCTCTTCCACTTTGCCAAGAAG	3.88	1.45
## 1665	CTTCTTTGTTGTGTTGCAAGATA	CTCCTTTGTTGTGTTGCAAGATA	3.85	3.69
## 1666	CTTCTTTGTTGTGTTGCAAGATA	CTCCTTTGTTGTGTTGCAAGATA	3.85	3.69
## 1667	GTTTGAACCTCTCTCCCCAGGCA	GTTTGAACCTCTCTCCGCCAGGCA	9.27	6.84
## 1668	GTTTGAACCTCTCTCCCCAGGCA	GTTTGAACCTCTCTCCGCCAGGCA	9.27	6.84
## 1669	GCCGAGGGCTTCCCCTGGTGGCC	GCCGAGGGCTCCCCCTGGTGGCC	-14.37	-14.52
## 1670	GCCGAGGGCTTCCCCTGGTGGCC	GCCGAGGGCTTCCCCTGGCGGCC	-14.37	-14.05
## 1671	CTGGTGGCCGCTCCCCGCAGGTC	CTGGCGGCCGCTCCCCGCAGGTC	9.51	9.70
## 1672	CTGGTGGCCGCTCCCCGCAGGTC	CTGGCGGCCGCTCCCCGCAGGTC	9.51	9.70
## 1673	CTGAGCCTCCGGCCGGGCCTGGA	CTGAGCCTCGGGCCGGGCCTGGA	-12.69	-14.36
## 1674	GCTTCCATGTTTTTTACAAGCTG	GCTTCCATGTTTTTTACGAGCTG	4.11	-3.13
## 1675	TTTTTACAAGCTGCTGGCAGGGC	TTTTTACGAGCTGCTGGCAGGGC	-0.57	0.20
## 1676	GATTCTGCTTTATCTCCAGATG	GACTTCTGCTTTATCTCCAGATG	9.73	9.83
## 1677	GGTGACCCCGTGTGTCTTAGCGG	GATGACCCCGTGTGTCTTAGCGG	4.11	5.21
## 1678	GGTGACCCCGTGTGTCTTAGCGG	GATGACCCCGTGTGTCTTAGCGG	4.11	5.21
## 1679	GGTGACCCCGTGTGTCTTAGCGG	GATGACCCCGTGTGTCTTAGCGG	4.11	5.21
## 1680	TGGCTGGTGGGGTCCCCAAGGTG	TGGCTGGTGGGGTCCCCAAGATG	1.79	-0.11
## 1681	CACTGTCCTTCCCCTTTCAGGTG	CACTGTCCTTCCCCTCTCAGGTG	14.23	12.09
## 1682	CGGTGCCTTCTGTTTCCAGGCA	CAGTGCCTTCTGTTTCCAGGCA	8.55	6.98
## 1683	CGGTGCCTTCTGTTTCCAGGCA	CAGTGCCTTCTGTTTCCAGGCA	8.55	6.98
## 1684	TGACCACAGTGCCCTCCTCAGGTT	TGACCACAGTGCCCCCTCAGGTT	4.08	4.17
## 1685	CTGTCTCCCTGCCCTCAGGAT	CTGTCTCCCTGCTCCCTCAGGAT	11.49	11.20
## 1686	ATGTCTCTTTTGTCTTCCAGGTT	ACGTCTCTTTTGTCTTCCAGGTT	10.78	10.57



## 1687	CTTGGTGTAGCGGTCCCGCGGGA	CTTGGTGTAGCGATCCCGCGGGA	-19.90	-21.19
## 1688	CTTGGTGTAGCGGTCCCGCGGGA	CTTGGTGTAGCGATCCCGCGGGA	-19.90	-21.19
## 1689	GGCATCACTGTCTTCGGCAGGCT	GGCATCACTGTCTTCGGCAGGCC	5.13	5.66
## 1690	CTGTTCTCTGTTTGCCAGCCC	CTGTTCTCTCTTTGCCAGCCC	6.57	7.93
## 1691	TTAAGTTTTTTTCTGTGAGCAA	TTAAGTTCTTTTCTGTGAGCAA	4.99	4.87
## 1692	CCCATGACGGCCCTCTGCAGGTA	CCCATGACAGCCCTCTGCAGGTA	6.20	1.79
## 1693	CCCATGACGGCCCTCTGCAGGTA	CCCATGACGGCCCTCTGCAGGGA	6.20	5.24
## 1694	GGCACCCCTCTGGCGGTCCCCCCC	GGCACCCCTCTGGTGGTCCCCCCC	-14.22	-14.05
## 1695	CCCTCTGGCGGTCCCCCCCAGCA	CCCTCTGGTGGTCCCCCCCAGCA	-7.61	-7.37
## 1696	CCTCTGGCGGTCCCCCCCAGCAG	CCTCTGGTGGTCCCCCCCAGCAG	3.97	4.92
## 1697	CTGGCGGTCCCCCCCAGCAGCAG	CTGGTGGTCCCCCCCAGCAGCAG	4.01	3.71
## 1698	CCCAGGCCTGTGCCGGGCCCCAG	CCCAGGCCTGTGCCGGGACCCAG	-14.71	-19.70
## 1699	GACCACCACCCCATCTTCAGGTG	GACCACCACCCCATCTTCAGGTG	7.73	7.12
## 1700	GACCACCACCCCATCTTCAGGTG	GACCAACACCCCATCTTCAGGTG	7.73	6.95
## 1701	TGACGTGCTCTCTGGGACAGGGA	TGACATGCTCTCTGGGACAGGGA	7.80	7.01
## 1702	CACGTCCGCTCTGTCTGCAGCGT	CACGTCTCTCTGTCTGCAGCGT	10.74	11.33
## 1703	CTCCTGTCTTCTCTCATCTAATCC	CTCCTGTCTTCTCTCATCTAGTCC	0.06	8.81
## 1704	CTAGTTCCTTTTTCTTTTAGAGC	CTAGTTCCTTCTCTTTTAGAGC	8.60	9.13
## 1705	GGGGAACCTCTTCTCCTGCAGCAC	GGGGAACCTCTCCTGCAGCAC	5.58	4.98
## 1706	GGGGAACCTCTTCTCCTGCAGCAC	GGGGAACCTCTCCTGCAGCAC	5.58	4.98
## 1707	TTTTTGTTTTTTATTTTAGGTC	TTTTTGTTTTTTATTTTAGGTC	11.64	13.09
## 1708	CCTGCTTTTTATTGTTGCAGATA	CCTGCTTTTTGTTGTTGCAGATA	10.71	10.89
## 1709	CCTGCTTTTTATTGTTGCAGATA	CCTGCTTTTTGTTGTTGCAGATA	10.71	10.89
## 1710	CCTGCTTTTTATTGTTGCAGATA	CCTGCTTTTTGTTGTTGCAGATA	10.71	10.89
## 1711	CCTGCTTTTTATTGTTGCAGATA	CCTGCTTTTTGTTGTTGCAGATA	10.71	10.89
## 1712	TATTGGTTTTTGCTTATTAGCCT	TATTGGTTTTTGCTGATTAGCCT	4.85	3.54
## 1713	TAATGTTTTTTCTCTTGGTGCAG	TAATGTTTTTTCTCTTGGTACAG	-8.05	-16.80
## 1714	TGTTTTTTCTCTTGGTGCAGGTG	TGTTTTTTCTCTTGGTACAGGTG	10.25	9.57
## 1715	TGTTTTTTCTCTTGGTGCAGGTG	TGTTTTTTCTCTTGGTACAGGTG	10.25	9.57
## 1716	TGTTTTTTCTCTTGGTGCAGGTG	TGTTTTTTCTCTTGGTACAGGTG	10.25	9.57
## 1717	TGTTTTTTCTCTTGGTGCAGGTG	TGTTTTTTCTCTTGGTACAGGTG	10.25	9.57
## 1718	TAAAAATTTACCTTTATTCGAG	TAAAAATTTACCTTTATTAGAG	-8.49	-9.18
## 1719	AAAAATTTACCTTTATTCGAGG	AAAAATTTACCTTTATTAGAGG	-5.48	2.56
## 1720	AAAAATTTACCTTTATTCGAGG	AAAAATTTACCTTTATTAGAGG	-5.48	2.56
## 1721	CTACTGTATCCTTTGCCCAAAGG	CTGCTGTATCCTTTGCCCAAAGG	-3.23	-2.95
## 1722	TACTGTATCCTTTGCCCAAAGGA	TGCTGTATCCTTTGCCCAAAGGA	-5.03	-4.19
## 1723	ACTGTATCCTTTGCCCAAAGGAG	GCTGTATCCTTTGCCCAAAGGAG	5.84	4.84
## 1724	ACTGTATCCTTTGCCCAAAGGAG	GCTGTATCCTTTGCCCAAAGGAG	5.84	4.84
## 1725	ACTGTATCCTTTGCCCAAAGGAG	GCTGTATCCTTTGCCCAAAGGAG	5.84	4.84
## 1726	TTTTTTTTCTATCCTCACAGAAAG	TTTTTTTTCTATCCTCACAAAAG	10.05	1.30
## 1727	GTTTCTCACTTTGATTTTCAAGAT	GTTTCTGACTTTGATTTTCAAGAT	8.05	7.73
## 1728	TTTCTAACTTTTTCTTCCAGATT	TTTCTAACTTTTTCTTACAGATT	10.48	10.97
## 1729	TCTCATTTTCTTGTTAACAGATT	TCTCATTTTCTTGTTAACCGATT	9.11	1.07
## 1730	TTATTTTACATATTAAGGACA	TTATTTCTACATATTAAGGACA	-5.05	-6.11
## 1731	CTGATCGTCTGTTGTCCAGCCC	CTGATAGTCTGTTGTCCAGCCC	5.63	2.53
## 1732	GGGGTGTGCTCTTCTTCTGATG	GGGGTGTGCTCTTCTTCTGATG	1.22	0.55
## 1733	GGGGTGTGCTCTTCTTCTGATG	GGGGTGTGCTCTTCTTCTGATG	1.22	0.55
## 1734	TGCTCTTCTTCTGATGGAGACT	TGCTCTTCTTCTGATGGAGACT	-4.33	-4.85
## 1735	TGCTCTTCTTCTGATGGAGACT	TGCTCTTCTTCTGATGGAGACT	-4.33	-4.85
## 1736	GAGGGCGACCCGTCACAGCCTC	GAGGGCGACCCCATCACAGCCTC	-18.51	-18.62
## 1737	CGGTTTCTGCTTGCCTCGCCTCT	CGGTTTCTGGTTGCCTCGCCTCT	-18.72	-19.27
## 1738	TTTCTGCTTGCCTCGCCTCTTCC	TTTCTGGTTGCCTCGCCTCTTCC	-10.35	-12.04
## 1739	TTCTGCTTGCCTCGCCTCTTCCC	TTCTGGTTGCCTCGCCTCTTCCC	-11.30	-12.51
## 1740	CTGCTTGCCTCGCCTCTTCCCCC	CTGTTTGCCTCGCCTCTTCCCCC	-9.58	-10.17

## 1741	GCCCCAACCCACTCTGGCCTCAG	GCCCCAACTCACTCTGGCCTCAG	-13.72	-12.73
## 1742	TTATCCTCACCTCCATATAGAGA	TTATCCTCACCTCCGTATAGAGA	6.00	5.05
## 1743	GGACGCAGGAGGCAGGCCCTGCC	GGAAGCAGGAGGCAGGCCCTGCC	-33.70	-35.80
## 1744	GCTCCTGGCCCTGCCCTAGGTC	GCACCTGGCCCTGCCCTAGGTC	10.40	10.09
## 1745	CCCTGCCCTGCCCTGCCAGGCT	CCCCGCCCTGCCCTGCCAGGCT	7.80	7.79
## 1746	CCCTGCCCTGCCCTGCCAGGCT	CCCCGCCCTGCCCTGCCAGGCT	7.80	7.79
## 1747	GAAGGGCGAGGGCAGCCGCGCA	GAAGGGCGAGGGCAGCCGAGCA	-27.78	-36.53
## 1748	GGATATGCGCCTTCCCACAGGTG	GGATATACGCCTTCCCACAGGTG	9.17	7.70
## 1749	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1750	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1751	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1752	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1753	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1754	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1755	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1756	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1757	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1758	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1759	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1760	GTGACCTGCATCATCTTCAGTTC	GTGACCTGCATCATCTTCAGTTT	6.74	6.60
## 1761	TGCATCATCTTCAGTTCCAGGGT	TGCATCATCTTCAGTTTCAGGGT	2.68	3.95
## 1762	TGCATCATCTTCAGTTCCAGGGT	TGCATCATCTTCAGTTTCAGGGT	2.68	3.95
## 1763	TTCAGTTCCAGGGTCTCCCTCCA	TTCAGTTTCAGGGTCTCCCTCCA	-21.28	-21.04
## 1764	TTCAGTTCCAGGGTCTCCCTCCA	TTCAGTTTCAGGGTCTCCCTCCA	-21.28	-21.04
## 1765	TCAGTTCCAGGGTCTCCCTCCAC	TCAGTTTCAGGGTCTCCCTCCAC	-17.75	-17.66
## 1766	TCAGTTCCAGGGTCTCCCTCCAC	TCAGTTTCAGGGTCTCCCTCCAC	-17.75	-17.66
## 1767	TTCCAGGGTCTCCCTCCACTGCT	TTTCAGGGTCTCCCTCCACTGCT	-13.70	-13.20
## 1768	TTCCAGGGTCTCCCTCCACTGCT	TTTCAGGGTCTCCCTCCACTGCT	-13.70	-13.20
## 1769	TGGGCCACAACCTGCCAACTTAG	TGGGCCACAACCTGCCACCTTAG	-22.29	-17.66
## 1770	TTCAGAGGGCTCTAATTACAGCTG	TTCAGAGGGCTCTAATTACAGCTG	4.02	2.04
## 1771	GCGCCCCCTCCGCCCTCCAGGTG	GCACCCCTCCGCCCTCCAGGTG	10.14	9.80
## 1772	CTAAACCTTTTCTGTTCTCAGCTT	CTAAACCTTTTCTATTCTCAGCTT	7.55	6.38
## 1773	GTGACCCCCCTTTTATATAGGAG	GTGACCCCCCTTTTATATAGGGG	7.10	6.88
## 1774	GATCGTCACCCGTCCCACAGTGG	GATCGTCACCCATCCCACAGTGG	7.14	6.88
## 1775	CCTGACCTCACAACCCACAGCGA	CCTGACCCCAACAACCCACAGCGA	5.80	5.49
## 1776	CCTGACCTCACAACCCACAGCGA	CCTGACCCCAACAACCCACAGCGA	5.80	5.49
## 1777	CTCGCTCTCTCTCCCTTTGGCTT	CTCACTCTCTCTCCCTTTGGCTT	3.87	3.82
## 1778	CCTCGAGCGCATGGGCCCTGCCA	CCTCGAGCGCATGGGCCCGGCCA	-11.90	-11.57
## 1779	CGAGCGCATGGGCCCTGCCATGG	CGAGCGCATGGGCCCGGCCATGG	-15.49	-14.71
## 1780	GCATGGGCCCTGCCATGGGCCG	GCATGGGCCCGGCCATGGGCCG	-25.85	-25.98
## 1781	TCCCCTTCCCCCATTGACAGATG	TACCCTTCCCCCATTGACAGATG	10.30	9.36
## 1782	CGACCGCACTGCTCACCCGCCAG	CGACCGCACCCTCACCCGCCAG	-13.93	-13.93
## 1783	CCGCACTGCTCACCCGCCAGGCA	CCGCAACCGCTCACCCGCCAGGCA	4.46	5.36
## 1784	CCGCACTGCTCACCCGCCAGGCA	CCGCAACCGCTCACCCGCCAGGCA	4.46	5.36
## 1785	GCCTCCTCTCTCGCCACAGAGC	GCCTCCTCTCTCGCCACAGAGC	9.47	10.30
## 1786	CTGTCTCCTTCCTTTCCAGTCC	ATGTCTCCTTCCTTTCCAGTCC	11.25	10.54
## 1787	GCAACCGATCGCCAGGACCAGGA	GCAACCGATCGCCAGGCCAGGA	-19.54	-20.04
## 1788	GCTGGGGCCCGCACTGCACGGCC	GCCGGGGCCCGCACTGCACGGCC	-9.11	-8.42
## 1789	TGCTTCCTGTCCCCCTCAGCCC	TGCTTCCTGTCCCCGCTCAGCCC	8.95	6.83
## 1790	TGCTTCCTGTCCCCCTCAGCCC	TGCTTCCTGTCCCCGCTCAGCCC	8.95	6.83
## 1791	TCCTGTTTCTACCTCCCCAGGTG	TCCTGTCCCTACCTCCCCAGGTG	11.02	11.11
## 1792	TCCTGTTTCTACCTCCCCAGGTG	TCCTGTCCCTACCTCCCCAGGTG	11.02	11.11
## 1793	ACTCACATTGGTTCCACAGCTA	ACTCACATTGGTTCCACAGCTG	6.88	7.40
## 1794	ACTCACATTGGTTCCACAGCTA	ACTCACATTGGTTCCACAGCTG	6.88	7.40

## 1795	ACTCACATTGGTTCCCACAGCTA	ACTCACATTGGTTCCCACAGCTG	6.88	7.40
## 1796	CCCGAAACCACTGGCTGGTCCCT	CCCGAAACCACTGGCTGGCCCT	-27.43	-27.10
## 1797	CCCAAAGCCCCATCTGGCAGCTC	CTCAAAGCCCCATCTGGCAGCTC	1.69	1.65
## 1798	GACGTCACTAGATCCCGCAGTTC	GACGTCACTAGATCCCACAGTTC	-0.30	-0.21
## 1799	TGAGTTTTTGTCTCCCAAAGCCC	TGAGTTTTTGTCTCCCACAGCCC	6.28	10.29
## 1800	CTGATCTCTTGTGTCCCCAGATG	CTGATCTCTTGTGTCTCAGATG	12.05	11.49
## 1801	CTGATCTCTTGTGTCCCCAGATG	CTGATCTCTTGTGTCTCAGATG	12.05	11.49
## 1802	CTGATCTCTTGTGTCCCCAGATG	CTGATCTCTTGTGTCTCAGATG	12.05	11.49
## 1803	TTAATTTTCTTCTTGCTAGTAA	TTAATTTTCTTCTTGATAGTAA	6.75	6.60
## 1804	TTAATTTTCTTCTTGCTAGTAA	TTAATTTTCTTCTTGATAGTAA	6.75	6.60
## 1805	GCTACGTCTCCACCCACAGGGA	GCTATGTCTCCACCCACAGGGA	7.96	8.59
## 1806	GCTACGTCTCCACCCACAGGGA	GCTATGTCTCCACCCACAGGGA	7.96	8.59
## 1807	CTTCTAGTGTCTGAAGAAGTAGG	CTTCTAGTGTCTGAAAAAGTAGG	-25.51	-19.86
## 1808	CGGCTCTCCTCTGTCTCCAGCGG	CGGCTCTCCTCTGTCTCCAGCAG	8.84	7.88
## 1809	CGGCTCTCCTCTGTCTCCAGCGG	CGGCTCTCCTCTGTCTCCAGCAG	8.84	7.88
## 1810	CGGCTCTCCTCTGTCTCCAGCGG	CGGCTCTCCTCTGTCTCCAGCAG	8.84	7.88
## 1811	CGGCTCTCCTCTGTCTCCAGCGG	CGGCTCTCCTCTGTCTCCAGCAG	8.84	7.88
## 1812	CGGCTCTCCTCTGTCTCCAGCGG	CGGCTCTCCTCTGTCTCCAGCAG	8.84	7.88
## 1813	GCTCTCCTCTGTCTCCAGCGGAC	GCTCTCCTCTGTCTCCAGCAGAC	-7.18	-15.93
## 1814	CTCTCCTCTGTCTCCAGCGGACT	CTCTCCTCTGTCTCCAGCAGACT	0.41	8.37
## 1815	CTCTCCTCTGTCTCCAGCGGACT	CTCTCCTCTGTCTCCAGCAGACT	0.41	8.37
## 1816	TGAATCATTTCTTTCACCCACAG	TGAACCATTTCTTTCACCCACAG	-11.46	-11.70
## 1817	ATCATTTCTTTCACCCACAGGTG	ACCATTTCTTTCACCCACAGGTG	11.44	12.08
## 1818	ATCATTTCTTTCACCCACAGGTG	ACCATTTCTTTCACCCACAGGTG	11.44	12.08
## 1819	ATCATTTCTTTCACCCACAGGTG	ACCATTTCTTTCACCCACAGGTG	11.44	12.08
## 1820	CAACCTGCTGGGCACCCGAAGAC	CAACCCGCTGGGCACCCGAAGAC	-11.67	-12.63
## 1821	TGCTGGGCACCCGAAGACCAAGC	CGTGGGCACCCGAAGACCAAGC	-21.69	-21.63
## 1822	GATTTCCCCGAAAAGTGTAGCAG	GATTTCCCTGAAAAGTGTAGCAG	-4.46	-3.96
## 1823	GATTTCCCCGAAAAGTGTAGCAG	GATTTCCCTGAAAAGTGTAGCAG	-4.46	-3.96
## 1824	GATTTCCCCGAAAAGTGTAGCAG	GATTTCCCTGAAAAGTGTAGCAG	-4.46	-3.96
## 1825	GATTTCCCCGAAAAGTGTAGCAG	GATTTCCCTGAAAAGTGTAGCAG	-4.46	-3.96
## 1826	GATTTCCCCGAAAAGTGTAGCAG	GATTTCCCTGAAAAGTGTAGCAG	-4.46	-3.96
## 1827	GATTTCCCCGAAAAGTGTAGCAG	GATTTCCCTGAAAAGTGTAGCAG	-4.46	-3.96
## 1828	GATTTCCCCGAAAAGTGTAGCAG	GATTTCCCTGAAAAGTGTAGCAG	-4.46	-3.96
## 1829	TGCCCATTTCCTCGGAAAAGTGT	TGCCCATTTCCTGAAAAGTGT	2.91	3.96
## 1830	TGCCCATTTCCTCGGAAAAGTGT	TGCCCATTTCCTGAAAAGTGT	2.91	3.96
## 1831	TGCCCATTTCCTCGGAAAAGTGT	TGCCCATTTCCTGAAAAGTGT	2.91	3.96
## 1832	TGCCCATTTCCTCGGAAAAGTGT	TGCCCATTTCCTGAAAAGTGT	2.91	3.96
## 1833	TCCACCTTCTTTCTCTTCCACA	TCCACCTTCTTTCTCTCTCCACA	-5.73	-5.15
## 1834	ACCTTCTTTCTCTTCCACAGTG	ACCTTCTTTCTCTCTCCACAGTG	-5.99	-6.21
## 1835	CCTTCTTTCTCTTCCACAGTGG	CCTTCTTTCTCTCTCCACAGTGG	11.81	13.01
## 1836	CCTTCTTTCTCTTCCACAGTGG	CCTTCTTTCTCTCTCCACAGTGG	11.81	13.01
## 1837	CCTTCTTTCTCTTCCACAGTGG	CCTTCTTTCTCTCTCCACAGTGG	11.81	13.01
## 1838	CCTTCTTTCTCTTCCACAGTGG	CCTTCTTTCTCTCTCCACAGTGG	11.81	13.01
## 1839	CCTTCTTTCTCTTCCACAGTGG	CCTTCTTTCTCTCTCCACAGTGG	11.81	13.01
## 1840	CCTTCTTTCTCTTCCACAGTGG	CCTTCTTTCTCTCTCCACAGTGG	11.81	13.01
## 1841	CCTTCTTTCTCTTCCACAGTGG	CCTTCTTTCTCTCTCCACAGTGG	11.81	13.01
## 1842	CCTTCTTTCTCTTCCACAGTGG	CCTTCTTTCTCTCTCCACAGTGG	11.81	13.01
## 1843	GCGGACCTCCCGGAGCGTCGGC	GCGGACGCTCCCGGAGCGTCGGC	-31.97	-32.82
## 1844	CCTTGTTTTTGTGCCACCAGATC	CCTTGTTTTTGTGCCACCAGATC	10.30	10.84
## 1845	CCTTGTTTTTGTGCCACCAGATC	CCTTGTTTTTGTGCCACCAGATC	10.30	10.84
## 1846	GCTGCCTACCTTGCTCCCGAGA	GCCGCTACCTTGCTCCCGAGA	-0.67	-0.41
## 1847	GCTGCCTACCTTGCTCCCGAGA	GCCGCTACCTTGCTCCCGAGA	-0.67	-0.41
## 1848	TGCCTACCTTGCTCCCGAGACC	CGCCTACCTTGCTCCCGAGACC	0.76	0.45

## 1849	TGCCTACCTTGCTCCCGAGACC	CGCCTACCTTGCTCCCGAGACC	0.76	0.45
## 1850	TGCCTACCTTGCTCCCGAGACC	CGCCTACCTTGCTCCCGAGACC	0.76	0.45
## 1851	TGCCTACCTTGCTCCCGAGACC	CGCCTACCTTGCTCCCGAGACC	0.76	0.45
## 1852	TGCCTACCTTGCTCCCGAGACC	CGCCTACCTTGCTCCCGAGACC	0.76	0.45
## 1853	TGCCTACCTTGCTCCCGAGACC	CGCCTACCTTGCTCCCGAGACC	0.76	0.45
## 1854	CCCCAACCTACTCTTCTCAGACG	CCCCAACCTGCTCTTCTCAGACG	5.27	5.84
## 1855	CCCCAACCTACTCTTCTCAGACG	CCCCAACCTGCTCTTCTCAGACG	5.27	5.84
## 1856	GGGGCTAAGGGCCGGGTGGGGG	GGTGCTAAGGGCCGGGTGGGGG	-14.93	-14.04
## 1857	GGCAGCCGACAGGCACATTTCTTG	GGCAGCCACAGGCACATTTCTTG	-26.71	-27.13
## 1858	CCCCTACCCCTGCGCACAGATA	CCGCTACCCCTGCGCACAGATA	7.68	6.47
## 1859	GGAAAAATGCCACTCCCTACCCA	GGAAAAATGCCACTCCCCACCCA	-8.40	-8.49
## 1860	ACCTGTGTGCTCTCTTTTAGCAG	AACTGTGTGCTCTCTTTTAGCAG	9.95	8.52
## 1861	GAGTTTGGTGTGCGCCGCAAGGT	GAGTTTGGTGTGCGCCGCAAGGT	9.10	0.35
## 1862	CGATGACATGTGTGAGCTGCTGC	CGATTACATGTGTGAGCTGCTGC	-18.54	-18.15
## 1863	CCACCTTTCCCGCCTGCAGCTC	CCACCTTTCCCTGGCCTGCAGCTC	8.92	9.34
## 1864	CCACCTTTCCCGCCTGCAGCTC	CCACCTTTCCCTGGCCTGCAGCTC	8.92	9.34
## 1865	CCACCTTTCCCGCCTGCAGCTC	CCACCTTTCCCTGGCCTGCAGCTC	8.92	9.34
## 1866	CCACCTTTCCCGCCTGCAGCTC	CCACCTTTCCCTGGCCTGCAGCTC	8.92	9.34
## 1867	CCACCTTTCCCGCCTGCAGCTC	CCACCTTTCCCTGGCCTGCAGCTC	8.92	9.34
## 1868	CCACCTTTCCCGCCTGCAGCTC	CCACCTTTCCCTGGCCTGCAGCTC	8.92	9.34
## 1869	TGGGCCTCTCTTCCCCCAGCGC	CGGGCCTCTCTTCCCCCAGCGC	9.59	9.96
## 1870	ACCAGACTGCCCTCCACCAGGAA	ACCAGGCTGCCCTCCACCAGGAA	6.11	6.32
## 1871	ATGGGCCTCCTCAGCCGCGCTG	ATGGGCCTCCTCAGCCACGCTG	-15.54	-16.04
## 1872	CTCCTCAGCCGCGCTGGAGCCG	CTCCTCAGCCACGCTGGAGCCG	-8.95	-9.56
## 1873	ACGATGAAGAAGCTGTAAAGAAA	ACGATGAAGAAGCTGCAAAGAAA	-15.04	-15.25
## 1874	TGAAGAAGCTGTAAAGAAAGAA	TGAAGAAGCTGCAAAGAAAGAA	-16.30	-17.23
## 1875	TCCGTGTCCCCCGATCTTCAGG	TCCGTGTCCCCCGATCTTCAGG	-8.94	-7.99
## 1876	TTCGCACGCCGCATCACCAGGC	TTCGCACGCCGCATCGCCAGGC	-13.30	-14.42
## 1877	ATCACCAGGCCAGGAGGAGCT	ATCGCCAGGCCAGGAGGAGCT	-27.04	-27.30
## 1878	CACCCAGGCCAGGAGGAGCTGA	CGCCAGGCCAGGAGGAGCTGA	-35.68	-35.44
## 1879	CACCCAGGCCAGGAGGAGCTGA	CGCCAGGCCAGGAGGAGCTGA	-35.68	-35.44
## 1880	GAAGTGGGGGGGTCCCTAGGAA	GAAGTGGGGGAGGTCCCTAGGAA	2.75	-3.25
## 1881	GAAGTGGGGGGGTCCCTAGGAA	GAAGTGGGGGAGGTCCCTAGGAA	2.75	-3.25
## 1882	TGGGGGGGGTCCCTAGGAAGGGC	TGGGGGAGGTCCCTAGGAAGGGC	-5.29	-8.78
## 1883	GAAGTGGGGGGGTCCCTAGGAA	GAAGTGGGGGCGTCCCTAGGAA	2.75	4.00
## 1884	GAAGTGGGGGGGTCCCTAGGAA	GAAGTGGGGGCGTCCCTAGGAA	2.75	4.00
## 1885	TGGGGGGGGTCCCTAGGAAGGGC	TGGGGGGCGTCCCTAGGAAGGGC	-5.29	-4.39
## 1886	AACTGTGTGCACTATTACCGGT	AACTGTGTGCACTATTACCTGGT	-9.60	-10.14
## 1887	GCCGGGAGACCAGGGCCTTCCT	GCCGGGAGACCAGGGCCTTCCT	-32.76	-33.57
## 1888	GCCGGGAGACCAGGGCCTTCCT	GCCGGGAGACCAGGGCCTTCCT	-32.76	-33.57
## 1889	GATCGTGGAGACGTGCGGGACG	GATCGTGGAGGATGTGCGGGACG	-20.55	-19.16
## 1890	ACTTAACCTTTGGCCTGCCTGCC	ACTTAACCTTTGGCCTACCTGCC	-9.36	-9.89
## 1891	TTGTTTATTTATTTTTGAGACA	TTGTTTATTTATTTTTGAGACG	-0.20	1.47
## 1892	TTGTTTATTTATTTTTGAGACA	TTGTTTATTTATTTTTGAGACG	-0.20	1.47
## 1893	TCATATCCCCCTTCTCTTAGAA	TCATATCCCCCTTCTCTTAGAA	-7.96	-8.41
## 1894	TCATATCCCCCTTCTCTTAGAA	TCATATCCCCCTTCTCTTAGAA	-7.96	-8.41
## 1895	CATATCCCCCTTCTCTTAGAAC	CATATCCCCCTTCTCTTAGAAC	9.27	10.56
## 1896	CATATCCCCCTTCTCTTAGAAC	CATATCCCCCTTCTCTTAGAAC	9.27	10.56
## 1897	CATATCCCCCTTCTCTTAGAAC	CATATCCCCCTTCTCTTAGAAC	9.27	10.56
## 1898	GGTGGTGATCAGAGCAGGGCCC	GGTGGTGACAGAGCAGGGCCC	-28.29	-29.77
## 1899	TACAGTCGTCTTTTTACAGGGA	TACAGTGGTCTTTTTACAGGGA	6.81	7.01
## 1900	TACAGTCGTCTTTTTACAGGGA	TACAGTGGTCTTTTTACAGGGA	6.81	7.01
## 1901	TACAGTCGTCTTTTTACAGGGA	TACAGTGGTCTTTTTACAGGGA	6.81	7.01
## 1902	TACAGTCGTCTTTTTACAGGGA	TACAGTGGTCTTTTTACAGGGA	6.81	7.01

## 1903	TACAGTCGTCTTTTTACAGGGA	TACAGTGGTCTTTTTACAGGGA	6.81	7.01
## 1904	TACAGTCGTCTTTTTACAGGGA	TACAGTGGTCTTTTTACAGGGA	6.81	7.01
## 1905	TCACCAACTCCCTTCCCCAGCGG	TCACCAACTCCCTTCCCCAGCGG	7.52	7.80
## 1906	TCACCAACTCCCTTCCCCAGCGG	TCACCAACTCCCTTCCCCAGCGG	7.52	7.80
## 1907	TATCTGCATATTAGCCCCCTCTCC	TATCTGCATATCAGCCCCCTCTCC	-18.08	-18.29
## 1908	AAAACCTTTTTGTCTTCAAAGTTA	AAAACCTTTTTGTCTTTAAAGTTA	5.30	6.00
## 1909	TATGGCCTCTCATCTACAGCAC	TATGGCCTCTCATTCTACAGCAC	9.84	9.54
## 1910	CACGCATTTCTTATCTCTAGTCC	CATGCATTTCTTATCTCTAGTCC	7.60	8.08
## 1911	AGTGTGCCCTTCATGTACAGGGG	AGTGTGCCCTTCATGTATAGGGG	7.18	6.86
## 1912	TCCCATCTCCCCACTGCAGAGT	TCCCATCTCCCTCACTGCAGAGT	9.02	9.78
## 1913	TCCCATCTCCCCACTGCAGAGT	TCCCATCTCCCTCACTGCAGAGT	9.02	9.78
## 1914	TCCCATCTCCCCACTGCAGAGT	TCCCATCTCCCTCACTGCAGAGT	9.02	9.78
## 1915	TCCCATCTCCCCACTGCAGAGT	TCCCATCTCCCTCACTGCAGAGT	9.02	9.78
## 1916	TCCCATCTCCCCACTGCAGAGT	TCCCATCTCCCTCACTGCAGAGT	9.02	9.78
## 1917	TCCCATCTCCCCACTGCAGAGT	TCCCATCTCCCTCACTGCAGAGT	9.02	9.78
## 1918	TCCCATCTCCCCACTGCAGAGT	TCCCATCTCCCTCACTGCAGAGT	9.02	9.78
## 1919	CAACTGTGTTTTCTTTCTAGGTT	CAACTGCGTTTTCTTTCTAGGTT	11.59	10.86
## 1920	CTTTCTCACACCCCATTTCCGGT	CTTTCTCACACCCCATTTCCAGT	-6.62	-8.36
## 1921	TATTACTTTCTCTTTGTCTAGC	TATCACTTTCTCTTTGTCTAGC	-6.67	-6.36
## 1922	TTACTTTCTCTTTGTCTAGCAA	TCACTTTCTCTTTGTCTAGCAA	7.67	7.54
## 1923	TTACTTTCTCTTTGTCTAGCAA	TCACTTTCTCTTTGTCTAGCAA	7.67	7.54
## 1924	TTACTTTCTCTTTGTCTAGCAA	TCACTTTCTCTTTGTCTAGCAA	7.67	7.54
## 1925	TTACTTTCTCTTTGTCTAGCAA	TCACTTTCTCTTTGTCTAGCAA	7.67	7.54
## 1926	GGAAGTGATTCCTTTTCAGGCC	GGAAGTATATTCCTTTTCAGGCC	6.32	5.04
## 1927	ACAATGCCATACTTTTTCAGCTT	ACAGTGCCATACTTTTTCAGCTT	7.00	7.12
## 1928	ACAATGCCATACTTTTTCAGCTT	ACAGTGCCATACTTTTTCAGCTT	7.00	7.12
## 1929	ACAATGCCATACTTTTTCAGCTT	ACAGTGCCATACTTTTTCAGCTT	7.00	7.12
## 1930	CTGTCTCCCACTCAGCAGACA	CTGTCTCCCACTCAGCAGACT	5.40	5.28
## 1931	TCTGTGTATTTCCCTTCCAGGTA	TCTGTGTATTTCCCTTCCAGGTA	12.39	12.26
## 1932	TGCTCTGCTTGGCCCCACAGGCT	CGTCTGCTTGGCCCCACAGGCT	9.61	9.75
## 1933	TGCTCTGCTTGGCCCCACAGGCT	CGTCTGCTTGGCCCCACAGGCT	9.61	9.75
## 1934	TGCTCTGCTTGGCCCCACAGGCT	CGTCTGCTTGGCCCCACAGGCT	9.61	9.75
## 1935	TGCTCTGCTTGGCCCCACAGGCT	CGTCTGCTTGGCCCCACAGGCT	9.61	9.75
## 1936	AACAACCTCGGATTTCTTAAGCCT	AACAACCTCGGGTTTCTTAAGCCT	0.08	0.88
## 1937	AACAACCTCGGATTTCTTAAGCCT	AACAACCTCGGGTTTCTTAAGCCT	0.08	0.88
## 1938	GGGGACCTGGGGAGGGACTCCAA	GGGGACGTGGGGAGGGACTCCAA	-27.59	-28.76
## 1939	GGGGACCTGGGGAGGGACTCCAA	GGGGACGTGGGGAGGGACTCCAA	-27.59	-28.76
## 1940	GGGACCTGGGGAGGGACTCCAAG	GGGACGTGGGGAGGGACTCCAAG	-28.29	-29.04
## 1941	GGGACCTGGGGAGGGACTCCAAG	GGGACGTGGGGAGGGACTCCAAG	-28.29	-29.04
## 1942	CCCCAGGTCCGTGCAGGGCACC	CCCCAGGTCCCGTGCAGGGCACC	-31.86	-32.82
## 1943	TCCATTTACTCCAAGTGC	TCCATTTACTTCACTGGAAGTGC	0.44	0.96
## 1944	TTTGCGAAACCCCTTTTCCCTT	TTTGCAAAACCCCTTTTCCCTT	-11.20	-11.34
## 1945	AACCCTCCATCTCCTTTTCAAGTT	AACCCTCCGTCTCCTTTTCAAGTT	11.96	12.85
## 1946	AACCCTCCATCTCCTTTTCAAGTT	AACCCTCCGTCTCCTTTTCAAGTT	11.96	12.85
## 1947	AACCCTCCATCTCCTTTTCAAGTT	AACCCTCCGTCTCCTTTTCAAGTT	11.96	12.85
## 1948	CTTCTTCCCTCCTGTTGAGGGGA	CTTCTTCTTCTCCTGTTGAGGGGA	0.21	0.68
## 1949	TCGTATTCTCTCATCCCAGTCT	TTGTATTCTCTCATCCCAGTCT	5.92	6.53
## 1950	ACCCACCCCTAGCCAGCAGTCC	ACCCATCCCTAGCCAGCAGTCC	-27.16	-26.80
## 1951	TATTTATCATTTCTGTTTCAAGGA	TATTTATCGTTCTGTTTCAAGGA	10.27	10.42
## 1952	TTTTTCCCCAAAAAAGTCAAGTGC	TTTTTCCCCAAAAAAGTCAAGTGC	3.20	2.85
## 1953	TTATATTGAAGTTGCTTTTAGTTT	TTGTATTGAAGTTGCTTTTAGTTT	-1.26	-1.14
## 1954	TTCCCTTTGTCTGCTCCCGGGT	TTCCCTTTGTCTGCTCCCGGGT	0.10	-8.65
## 1955	CCGTACACTCACTCCACAGAGC	CCACTACACTCACTCCACAGAGC	8.52	8.66
## 1956	CAGCACAGGGGAGGATACCTGAG	CAGCACAGGGGAGGAGACCTGAG	-31.06	-37.54

## 1957	ATGATTTCACTCCTATGCAGATG	ATGATTTCACTCTTATGCAGATG	8.09	8.37
## 1958	CCGTGCAGGTTCTTCCCCAGTGT	CCGTGCAGGTCTTCCCCAGTGT	3.49	3.11
## 1959	GTGTGGTGTCTTACTTTATAGCTC	GCGTGGTGTCTTACTTTATAGCTC	7.94	7.07
## 1960	GATGGTGACTGCGTCTGCAGGCA	GATGGTGACGGCGTCTGCAGGCA	5.01	3.53
## 1961	GATGGTGACTGCGTCTGCAGGCA	GATGGTGACTGCATCTGCAGGCA	5.01	4.64
## 1962	TCCCGTGTCCCTGTTACAGTCA	TCCCATGTCCCTGTTACAGTCA	8.35	8.00
## 1963	TTCTTTTTTCTGGGTCGACAGA	TTCTTTTTTCTGTGTCGACAGA	-14.29	-12.44
## 1964	TCCTTTTTTCTGGGTCGACAGAC	TCCTTTTTTCTGTGTCGACAGAC	-11.45	-9.40
## 1965	CCTTTTTTCTGGGTCGACAGACT	CCTTTTTTCTGTGTCGACAGACT	5.74	8.22
## 1966	CCTTTTTTCTGGGTCGACAGACT	CCTTTTTTCTGTGTCGACAGACT	5.74	8.22
## 1967	TTCTCTGTTCTCATTGCAGAAC	TTCTCTGTTTTCTATTGCAGAAC	11.50	11.45
## 1968	CGCCCCCTGCCCTGAACACAGATT	CGCCCCCTGCCCCGAACACAGATT	4.87	4.69
## 1969	CGCCCCCTGCCCTGAACACAGATT	CGCCCCCTGCCCCGAACACAGATT	4.87	4.69
## 1970	CGCCCCCTGCCCTGAACACAGATT	CGCCCCCTGCCCCGAACACAGATT	4.87	4.69
## 1971	CGCCCCCTGCCCTGAACACAGATT	CGCCCCCTGCCCCGAACACAGATT	4.87	4.69
## 1972	CGCCCCCTGCCCTGAACACAGATT	CGCCCCCTGCCCCGAACACAGATT	4.87	4.69
## 1973	CTGCCCCCTTCCCTCTGCCAGATC	CTGCCCCCTTCCCTCTGCCAGATC	10.79	10.67
## 1974	CTGCCCCCTTCCCTCTGCCAGATC	CTGCCCCCTTCCCTCTGCCAGATC	10.79	10.67
## 1975	CTGCCCCCTTCCCTCTGCCAGATC	CTGCCCCCTTCCCTCTGCCAGATC	10.79	10.67
## 1976	CATGTGTCTCCCTCTTCAGGTT	CACGTGTCTCCCTCTTCAGGTT	12.55	12.06
## 1977	GTGCAGTGGCCCTGCCACAGCCC	GTGCAGCGGCCCTGCCACAGCCC	1.70	2.05
## 1978	CCCAGCTCGTCTACCTGCAGGTA	CCCAGCTCATCTACCTGCAGGTA	8.83	9.00
## 1979	CCCAGCTCGTCTACCTGCAGGTA	CCCAGCTCATCTACCTGCAGGTA	8.83	9.00
## 1980	CCCAGCTCGTCTACCTGCAGGTA	CCCAGCTCATCTACCTGCAGGTA	8.83	9.00
## 1981	CGGGCTCAGGTGATTCTCCCACC	CGGGCTCGGGTGATTCTCCCACC	-15.69	-11.76
## 1982	CGGGCTCAGGTGATTCTCCCACC	CGGGCTCGGGTGATTCTCCCACC	-15.69	-11.76
## 1983	GGTTGTGTTCTTTCTCCCAGATC	GGTTGTGTTCTTTCTCCTAGATC	9.95	9.49
## 1984	ATTTCTCTCCACACCCTCAGGCC	ATTTCTCTCCACACCCGCAGGCC	8.19	9.97
## 1985	ATTTCTCTCCACACCCTCAGGCC	ATTTCTCTCCACAGCCTCAGGCC	8.19	0.49
## 1986	CCTTCCGCCTCTCCCCCAGGGA	CCTTCCGCCCCCTCCCCCAGGGA	11.63	11.26
## 1987	CCTTCCGCCTCTCCCCCAGGGA	CCTTCCGCCCCCTCCCCCAGGGA	11.63	11.26
## 1988	CATGCTTCCCTAGGTGGAGGGCA	CAGGCTTCCCTAGGTGGAGGGCA	-12.97	-15.29
## 1989	CATGCTTCCCTAGGTGGAGGGCA	CAGGCTTCCCTAGGTGGAGGGCA	-12.97	-15.29
## 1990	CATGCTTCCCTAGGTGGAGGGCA	CAGGCTTCCCTAGGTGGAGGGCA	-12.97	-15.29
## 1991	CACTGCCTCTCTCCCCACAGGGA	TACTGCCTCTCTCCCCACAGGGA	13.12	12.67
## 1992	ATCTGTTCTTTATTTTCAGAGT	ATCTGTTCTTTATTTTCAGAGT	9.80	10.99
## 1993	GTGGTCACCATGGTTCTCTGGGC	GTGGTCACCATGTTCTCTGGGC	-3.91	-2.54
## 1994	TGGTTCTCTGGGCCTCCTAGGGG	TTGTTCTCTGGGCCTCCTAGGGG	5.77	6.98
## 1995	TGACCCCTTTCTCCTACAGTGA	TGACCCCTTTCTCCTACAGTGA	10.21	8.60
## 1996	GGCGGGACAACCATGGCTGGCGT	GGCGGGACAACCATGGCTGGCAT	-12.10	-12.74
## 1997	AACCATGGCTGGCGTGGGGACG	AACCATGGCTGGCATGGGGACG	-14.52	-13.15
## 1998	CTGGCGTGGGGACGGCGGCTGC	CTGGCATGGGGACGGCGGCTGC	-34.80	-35.61
## 1999	TTCCATGTGATTGTCTCCAGTTC	TTCCATGTGACTGTCTCCAGTTC	7.07	6.52
## 2000	CATCTGCCTGCCCTTCTCAGCTC	CATCTGCCTGCCCTTCTCAGCTC	7.94	7.34
## 2001	GGCCACGCTTTGCCTTTTCAGTAC	AGCCACGCTTTGCCTTTTCAGTAC	6.47	6.03
## 2002	TCCCTAAACGTTTGGCGCCTGCC	TCCCTAAATGTTTGGCGCCTGCC	-11.44	-10.71
## 2003	ACTCCCACCATGAATCCCAGGTC	ACTCCCACCAAGATCCCAGGTC	3.79	2.30
## 2004	ACTCCCACCATGAATCCCAGGTC	ACTCCCACCAAGATCCCAGGTC	3.79	2.30
## 2005	TCCCCCTCTGTGTCTGCAGACC	TCCACCTCTGTGTCTGCAGACC	10.56	9.70
## 2006	TCCCCCTCTGTGTCTGCAGACC	TCCACCTCTGTGTCTGCAGACC	10.56	9.70
## 2007	TCCCCCTCTGTGTCTGCAGACC	TCCACCTCTGTGTCTGCAGACC	10.56	9.70
## 2008	TCCCCCTCTGTGTCTGCAGACC	TCCACCTCTGTGTCTGCAGACC	10.56	9.70
## 2009	TGCCTTTCTCTGCCTACCAGGGA	CGCCTTTCTCTGCCTACCAGGGA	9.30	8.99
## 2010	TCATCGAGAGTTCCTACCAGGTG	TCATCAAGAGTTCCTACCAGGTG	-2.45	-1.71

##	2011	TCATCGAGAGTTCCTACCAGGTG	TCATCAAGAGTTCCTACCAGGTG	-2.45	-1.71
##	2012	TTTCTTTCTCCTCACATTAGAAT	TTTCTTTCTCCTTACATTAGAAT	8.08	7.80
##	2013	TTTCTTTCTCCTCACATTAGAAT	TTTCTTTCTCCTTACATTAGAAT	8.08	7.80
##	2014	TTTCTTTCTCCTCACATTAGAAT	TTTCTTTCTCCTTACATTAGAAT	8.08	7.80
##	2015	CATGTATTTTATTTTCTTAGTTT	CATGTATTTTCTTTCTTAGTTT	7.04	8.11
##	2016	CATGTATTTTATTTTCTTAGTTT	CATGTATTTTCTTTCTTAGTTT	7.04	8.11
##	2017	CATGTATTTTATTTTCTTAGTTT	CATGTATTTTCTTTCTTAGTTT	7.04	8.11
##	2018	CATGTATTTTATTTTCTTAGTTT	CATGTATTTTACTTTCTTAGTTT	7.04	7.44
##	2019	CATGTATTTTATTTTCTTAGTTT	CATGTATTTTACTTTCTTAGTTT	7.04	7.44
##	2020	CATGTATTTTATTTTCTTAGTTT	CATGTATTTTACTTTCTTAGTTT	7.04	7.44
##	2021	TTTGTGTGTTTTTTTCCCCCCC	TTTGTGTGTTTTTCTTCCCCCCC	-5.97	-5.57
##	2022	TGTGTGTTTTTTTCCCCCCCAG	TGTGTGTTTTTCTTCCCCCCCAG	-6.78	-6.45
##	2023	GTGTGTTTTTTTCCCCCCCAGA	GTGTGTTTTTCTTCCCCCCCAGA	-5.07	-5.27
##	2024	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTCTTCCCCCCCAGAAA	11.85	11.72
##	2025	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTCTTCCCCCCCAGAAA	11.85	11.72
##	2026	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTCTTCCCCCCCAGAAA	11.85	11.72
##	2027	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTCTTCCCCCCCAGAAA	11.85	11.72
##	2028	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTCTTCCCCCCCAGAAA	11.85	11.72
##	2029	TTTTCCCCCCCAGAAACCAGGGT	TCTTCCCCCCCAGAAACCAGGGT	-1.79	-2.34
##	2030	TTTGTGTGTTTTTTTCCCCCCC	TTTGTGTGTTTTTTTCCCCCCC	-5.97	-5.72
##	2031	TGTGTGTTTTTTTCCCCCCCAG	TGTGTGTTTTTTTCCCCCCCAG	-6.78	-7.87
##	2032	GTGTGTTTTTTTCCCCCCCAGA	GTGTGTTTTTTTCCCCCCCAGA	-5.07	-5.45
##	2033	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTTTCCCCCCCAGAAA	11.85	12.15
##	2034	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTTTCCCCCCCAGAAA	11.85	12.15
##	2035	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTTTCCCCCCCAGAAA	11.85	12.15
##	2036	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTTTCCCCCCCAGAAA	11.85	12.15
##	2037	GTGTTTTTTTTCCCCCCCAGAAA	GTGTTTTTTTTCCCCCCCAGAAA	11.85	12.15
##	2038	TTTTCCCCCCCAGAAACCAGGGT	TTTTTCCCCCCCAGAAACCAGGGT	-1.79	-1.95
##	2039	TACCTGTCATCTCTCTCTAAAG	TACCTGTCATCTCCTCTCTAAAG	-9.62	-9.77
##	2040	CTGTCATCTCTCTCTCTAAAGGG	CTGTCATCTCCTCTCTCTAAAGGG	7.61	7.96
##	2041	CTGTCATCTCTCTCTCTAAAGGG	CTGTCATCTCCTCTCTCTAAAGGG	7.61	7.96
##	2042	TACCGGCTGGCTCCATCAAAGA	TACCTGGCTGGCTCCATCAAAGA	-5.46	-5.55
##	2043	TCAGAGAGCCAGGTATACAGGA	TCAGAGAGCCACGTTATACAGGA	-28.72	-22.12
##	2044	CCTTCGTCTTGCCTCCCCAGGCT	CCTTCGTCTTGCCTCCCTAGGCT	10.38	11.29
##	2045	CCTTCGTCTTGCCTCCCCAGGCT	CCTTCGTCTTGCCTCCCTAGGCT	10.38	11.29
##	2046	CCTTCGTCTTGCCTCCCCAGGCT	CCTTCGTCTTGCCTCCCTAGGCT	10.38	11.29
##	2047	TCTTCCCGACTCCTTCCCAGCTG	TCTTCCCGACTCCTGCCAGCTG	5.59	3.88
##	2048	TCCCCTCCGTCTCTCTGCAGACA	TCCCCTCTGTCTCTCTGCAGACA	13.15	14.02
##	2049	TCCCCTCCGTCTCTCTGCAGACA	TCCCCTCTGTCTCTCTGCAGACA	13.15	14.02
##	2050	GCCATACCATGTCCCCTCAGCGA	GCCATACTATGTCCCCTCAGCGA	7.20	7.50
##		score_diff			
##	1	0.57			
##	2	0.43			
##	3	8.18			
##	4	0.58			
##	5	2.13			
##	6	0.26			
##	7	7.76			
##	8	1.21			
##	9	0.71			
##	10	8.18			
##	11	8.18			
##	12	6.23			
##	13	0.53			

## 14	2.28
## 15	7.64
## 16	6.25
## 17	2.10
## 18	2.10
## 19	2.57
## 20	2.57
## 21	13.17
## 22	0.03
## 23	0.03
## 24	0.03
## 25	0.54
## 26	8.19
## 27	8.27
## 28	3.24
## 29	6.42
## 30	3.95
## 31	4.56
## 32	4.71
## 33	1.77
## 34	0.80
## 35	16.41
## 36	8.27
## 37	8.18
## 38	0.19
## 39	0.19
## 40	8.19
## 41	1.19
## 42	3.04
## 43	8.18
## 44	1.93
## 45	8.18
## 46	4.09
## 47	7.76
## 48	1.06
## 49	0.43
## 50	0.43
## 51	7.64
## 52	10.37
## 53	8.19
## 54	8.18
## 55	7.76
## 56	2.45
## 57	0.43
## 58	0.54
## 59	2.36
## 60	2.36
## 61	7.64
## 62	0.41
## 63	0.41
## 64	0.41
## 65	8.27
## 66	5.13
## 67	8.51



## 68	8.18
## 69	8.18
## 70	8.18
## 71	15.05
## 72	5.27
## 73	4.80
## 74	1.17
## 75	7.75
## 76	8.19
## 77	8.19
## 78	1.99
## 79	1.99
## 80	7.76
## 81	0.23
## 82	11.60
## 83	1.04
## 84	1.04
## 85	8.19
## 86	2.11
## 87	2.92
## 88	8.18
## 89	0.71
## 90	1.06
## 91	6.74
## 92	6.74
## 93	8.50
## 94	8.50
## 95	0.48
## 96	0.48
## 97	0.48
## 98	8.92
## 99	1.03
## 100	0.69
## 101	0.93
## 102	7.65
## 103	1.43
## 104	1.06
## 105	1.07
## 106	9.82
## 107	3.24
## 108	8.18
## 109	2.05
## 110	8.18
## 111	8.18
## 112	0.80
## 113	5.66
## 114	0.47
## 115	0.71
## 116	10.73
## 117	7.15
## 118	0.43
## 119	6.57
## 120	0.85
## 121	1.71

## 122	8.28
## 123	8.18
## 124	8.18
## 125	8.18
## 126	8.18
## 127	8.18
## 128	8.18
## 129	8.18
## 130	8.18
## 131	1.36
## 132	8.27
## 133	8.27
## 134	8.18
## 135	0.44
## 136	7.64
## 137	0.55
## 138	0.55
## 139	0.55
## 140	7.76
## 141	7.76
## 142	1.09
## 143	0.93
## 144	8.18
## 145	8.18
## 146	2.13
## 147	1.24
## 148	1.24
## 149	2.20
## 150	8.51
## 151	8.51
## 152	7.76
## 153	7.76
## 154	1.18
## 155	1.18
## 156	8.18
## 157	0.24
## 158	2.36
## 159	7.65
## 160	7.65
## 161	5.62
## 162	3.64
## 163	2.17
## 164	1.31
## 165	7.65
## 166	7.65
## 167	7.65
## 168	0.28
## 169	8.18
## 170	2.45
## 171	0.80
## 172	3.50
## 173	3.50
## 174	1.56
## 175	8.18

## 176	7.08
## 177	5.38
## 178	2.94
## 179	8.50
## 180	0.89
## 181	0.89
## 182	1.08
## 183	2.81
## 184	7.76
## 185	7.76
## 186	0.78
## 187	0.78
## 188	0.78
## 189	0.78
## 190	2.83
## 191	2.83
## 192	2.83
## 193	2.83
## 194	0.09
## 195	10.61
## 196	10.46
## 197	6.51
## 198	4.26
## 199	4.26
## 200	4.26
## 201	3.26
## 202	0.41
## 203	0.41
## 204	8.18
## 205	8.19
## 206	8.19
## 207	8.19
## 208	8.19
## 209	7.84
## 210	7.84
## 211	2.43
## 212	1.56
## 213	0.65
## 214	0.65
## 215	0.65
## 216	0.65
## 217	0.65
## 218	0.92
## 219	0.13
## 220	8.18
## 221	3.06
## 222	4.04
## 223	8.51
## 224	0.60
## 225	7.65
## 226	4.96
## 227	4.96
## 228	7.60
## 229	2.42

## 230	5.42
## 231	1.82
## 232	1.73
## 233	2.10
## 234	2.33
## 235	4.91
## 236	0.64
## 237	4.01
## 238	4.01
## 239	0.09
## 240	1.28
## 241	0.40
## 242	0.76
## 243	2.22
## 244	2.22
## 245	0.23
## 246	2.31
## 247	2.76
## 248	2.76
## 249	5.69
## 250	1.22
## 251	1.22
## 252	1.22
## 253	1.22
## 254	1.22
## 255	1.22
## 256	1.41
## 257	1.41
## 258	0.64
## 259	1.86
## 260	0.86
## 261	2.18
## 262	0.43
## 263	0.43
## 264	0.43
## 265	0.43
## 266	1.59
## 267	1.59
## 268	8.19
## 269	8.19
## 270	8.19
## 271	8.19
## 272	8.19
## 273	7.76
## 274	7.76
## 275	7.76
## 276	0.75
## 277	3.94
## 278	0.31
## 279	0.62
## 280	0.62
## 281	8.30
## 282	8.30
## 283	5.76

## 284	0.54
## 285	7.75
## 286	7.76
## 287	7.76
## 288	0.07
## 289	0.44
## 290	0.54
## 291	0.35
## 292	7.64
## 293	5.89
## 294	0.60
## 295	1.42
## 296	10.79
## 297	0.15
## 298	5.67
## 299	7.65
## 300	0.85
## 301	6.60
## 302	6.60
## 303	4.71
## 304	4.71
## 305	8.19
## 306	8.19
## 307	1.33
## 308	1.33
## 309	1.54
## 310	8.27
## 311	1.79
## 312	12.88
## 313	7.75
## 314	8.18
## 315	3.95
## 316	3.95
## 317	1.96
## 318	1.96
## 319	7.75
## 320	7.75
## 321	8.18
## 322	1.75
## 323	1.75
## 324	1.75
## 325	1.75
## 326	7.65
## 327	7.65
## 328	7.65
## 329	7.65
## 330	7.65
## 331	4.58
## 332	4.58
## 333	4.58
## 334	4.58
## 335	4.58
## 336	4.58
## 337	4.58

## 338	4.58
## 339	4.58
## 340	1.28
## 341	8.76
## 342	8.18
## 343	0.44
## 344	1.68
## 345	0.51
## 346	7.08
## 347	7.75
## 348	0.53
## 349	7.75
## 350	7.75
## 351	4.76
## 352	4.76
## 353	3.60
## 354	3.60
## 355	3.79
## 356	3.79
## 357	2.15
## 358	2.15
## 359	0.23
## 360	3.18
## 361	3.18
## 362	3.18
## 363	0.05
## 364	0.06
## 365	7.32
## 366	7.32
## 367	7.32
## 368	2.01
## 369	3.09
## 370	2.49
## 371	2.17
## 372	4.75
## 373	0.54
## 374	0.54
## 375	7.14
## 376	1.17
## 377	1.17
## 378	1.17
## 379	1.17
## 380	7.65
## 381	1.03
## 382	1.03
## 383	1.03
## 384	0.39
## 385	7.76
## 386	0.11
## 387	3.00
## 388	0.28
## 389	1.22
## 390	2.53
## 391	7.76

## 392	0.75
## 393	4.38
## 394	3.61
## 395	0.42
## 396	3.11
## 397	8.51
## 398	8.51
## 399	0.42
## 400	0.42
## 401	4.85
## 402	12.66
## 403	12.66
## 404	2.32
## 405	7.75
## 406	1.17
## 407	5.62
## 408	1.22
## 409	2.24
## 410	2.27
## 411	3.28
## 412	8.18
## 413	8.18
## 414	2.56
## 415	3.85
## 416	7.75
## 417	1.10
## 418	0.11
## 419	8.27
## 420	0.16
## 421	1.22
## 422	0.56
## 423	1.35
## 424	0.22
## 425	0.80
## 426	7.96
## 427	8.75
## 428	0.29
## 429	5.75
## 430	0.81
## 431	7.95
## 432	4.56
## 433	1.56
## 434	0.26
## 435	1.49
## 436	1.49
## 437	1.49
## 438	1.49
## 439	1.49
## 440	1.49
## 441	1.49
## 442	1.49
## 443	0.23
## 444	0.23
## 445	0.39

## 446	0.56
## 447	0.08
## 448	0.38
## 449	0.17
## 450	0.17
## 451	0.23
## 452	0.10
## 453	17.73
## 454	0.33
## 455	1.34
## 456	1.34
## 457	0.01
## 458	0.01
## 459	3.46
## 460	0.48
## 461	0.48
## 462	0.48
## 463	1.15
## 464	0.41
## 465	0.41
## 466	1.05
## 467	1.05
## 468	1.05
## 469	0.30
## 470	8.75
## 471	0.27
## 472	0.32
## 473	0.72
## 474	0.72
## 475	8.07
## 476	1.60
## 477	0.52
## 478	8.06
## 479	8.06
## 480	0.35
## 481	0.23
## 482	0.70
## 483	0.70
## 484	0.70
## 485	0.60
## 486	7.95
## 487	7.95
## 488	7.95
## 489	0.58
## 490	0.60
## 491	0.28
## 492	0.28
## 493	0.28
## 494	0.28
## 495	0.28
## 496	0.28
## 497	1.01
## 498	0.58
## 499	0.58



## 500	0.58
## 501	0.58
## 502	8.75
## 503	0.35
## 504	0.78
## 505	0.38
## 506	0.38
## 507	0.38
## 508	0.38
## 509	0.38
## 510	0.38
## 511	0.85
## 512	0.14
## 513	0.48
## 514	0.60
## 515	0.60
## 516	0.60
## 517	1.59
## 518	1.59
## 519	0.25
## 520	8.75
## 521	5.11
## 522	5.39
## 523	1.33
## 524	1.16
## 525	8.75
## 526	8.75
## 527	2.91
## 528	2.91
## 529	8.06
## 530	0.74
## 531	0.74
## 532	0.74
## 533	0.74
## 534	0.60
## 535	8.06
## 536	7.95
## 537	0.38
## 538	0.38
## 539	0.38
## 540	1.56
## 541	0.21
## 542	0.20
## 543	0.20
## 544	0.12
## 545	0.21
## 546	0.55
## 547	0.13
## 548	0.53
## 549	1.41
## 550	0.63
## 551	0.94
## 552	1.43
## 553	1.43

## 554	8.04
## 555	0.62
## 556	1.06
## 557	1.06
## 558	0.34
## 559	1.85
## 560	0.69
## 561	0.16
## 562	6.46
## 563	0.70
## 564	0.41
## 565	0.41
## 566	0.20
## 567	8.75
## 568	0.11
## 569	0.94
## 570	0.94
## 571	8.07
## 572	0.52
## 573	0.58
## 574	0.89
## 575	0.18
## 576	0.62
## 577	0.62
## 578	2.29
## 579	0.29
## 580	0.69
## 581	1.91
## 582	0.35
## 583	0.09
## 584	0.39
## 585	1.02
## 586	0.62
## 587	0.02
## 588	0.67
## 589	0.46
## 590	0.46
## 591	0.46
## 592	0.46
## 593	0.46
## 594	0.94
## 595	2.38
## 596	1.45
## 597	2.01
## 598	1.07
## 599	0.51
## 600	1.71
## 601	1.63
## 602	8.75
## 603	2.28
## 604	6.11
## 605	7.32
## 606	6.16
## 607	0.02

## 608	0.12
## 609	0.32
## 610	0.78
## 611	1.30
## 612	0.24
## 613	1.11
## 614	0.19
## 615	0.19
## 616	0.54
## 617	0.15
## 618	0.81
## 619	0.81
## 620	0.13
## 621	0.06
## 622	0.72
## 623	0.13
## 624	0.13
## 625	0.13
## 626	0.13
## 627	0.24
## 628	0.24
## 629	0.41
## 630	0.41
## 631	0.43
## 632	0.69
## 633	0.69
## 634	0.09
## 635	0.09
## 636	0.73
## 637	0.87
## 638	1.42
## 639	5.41
## 640	1.63
## 641	0.03
## 642	0.03
## 643	0.03
## 644	0.49
## 645	0.48
## 646	0.28
## 647	0.28
## 648	0.70
## 649	1.80
## 650	1.80
## 651	0.31
## 652	0.00
## 653	0.00
## 654	0.00
## 655	0.15
## 656	1.73
## 657	1.73
## 658	1.73
## 659	1.73
## 660	1.73
## 661	2.63

## 662	0.79
## 663	1.25
## 664	0.08
## 665	0.42
## 666	0.42
## 667	0.07
## 668	0.45
## 669	0.32
## 670	2.19
## 671	8.75
## 672	7.95
## 673	4.78
## 674	4.78
## 675	3.13
## 676	0.52
## 677	0.28
## 678	1.53
## 679	0.73
## 680	2.30
## 681	0.17
## 682	1.45
## 683	2.09
## 684	7.61
## 685	1.37
## 686	4.30
## 687	0.69
## 688	0.29
## 689	0.29
## 690	0.29
## 691	0.41
## 692	0.41
## 693	0.41
## 694	0.37
## 695	0.37
## 696	1.27
## 697	0.12
## 698	0.52
## 699	0.52
## 700	0.30
## 701	0.30
## 702	0.30
## 703	0.33
## 704	0.33
## 705	0.38
## 706	0.19
## 707	1.75
## 708	0.99
## 709	0.39
## 710	0.37
## 711	0.88
## 712	0.10
## 713	0.73
## 714	0.49
## 715	0.49

## 716	0.49
## 717	0.03
## 718	0.28
## 719	0.28
## 720	0.04
## 721	0.04
## 722	0.09
## 723	0.39
## 724	0.39
## 725	0.39
## 726	0.39
## 727	0.03
## 728	0.50
## 729	8.06
## 730	0.33
## 731	1.28
## 732	8.75
## 733	8.75
## 734	0.26
## 735	0.49
## 736	0.49
## 737	0.49
## 738	0.49
## 739	0.49
## 740	0.49
## 741	0.67
## 742	0.85
## 743	0.85
## 744	0.85
## 745	0.69
## 746	0.17
## 747	0.55
## 748	0.14
## 749	3.96
## 750	0.28
## 751	0.75
## 752	0.81
## 753	0.12
## 754	0.12
## 755	0.33
## 756	0.01
## 757	0.57
## 758	0.03
## 759	0.03
## 760	0.85
## 761	0.26
## 762	0.44
## 763	0.44
## 764	2.56
## 765	2.56
## 766	2.56
## 767	2.56
## 768	0.94
## 769	0.85

## 770	1.28
## 771	0.14
## 772	0.17
## 773	5.45
## 774	4.16
## 775	8.76
## 776	0.62
## 777	7.92
## 778	1.49
## 779	0.25
## 780	0.94
## 781	13.41
## 782	0.61
## 783	0.48
## 784	1.47
## 785	0.24
## 786	0.24
## 787	0.71
## 788	0.54
## 789	0.45
## 790	0.44
## 791	0.31
## 792	0.52
## 793	1.66
## 794	1.66
## 795	4.44
## 796	0.74
## 797	0.48
## 798	0.02
## 799	0.10
## 800	0.58
## 801	0.37
## 802	0.72
## 803	0.74
## 804	0.74
## 805	0.16
## 806	0.39
## 807	0.39
## 808	0.39
## 809	0.68
## 810	0.68
## 811	0.42
## 812	0.39
## 813	0.39
## 814	0.10
## 815	1.05
## 816	0.04
## 817	1.49
## 818	3.38
## 819	0.61
## 820	0.61
## 821	0.85
## 822	0.85
## 823	0.33

## 824	0.95
## 825	0.79
## 826	0.85
## 827	0.85
## 828	1.08
## 829	0.56
## 830	0.56
## 831	0.79
## 832	0.99
## 833	1.01
## 834	1.01
## 835	1.01
## 836	1.01
## 837	1.01
## 838	1.01
## 839	2.01
## 840	0.46
## 841	0.46
## 842	0.06
## 843	1.62
## 844	0.41
## 845	0.58
## 846	1.10
## 847	1.10
## 848	1.81
## 849	1.81
## 850	0.48
## 851	0.48
## 852	0.48
## 853	0.96
## 854	1.25
## 855	0.63
## 856	0.63
## 857	0.13
## 858	0.29
## 859	0.37
## 860	0.37
## 861	0.37
## 862	0.60
## 863	0.31
## 864	0.31
## 865	0.31
## 866	0.31
## 867	0.31
## 868	0.31
## 869	0.31
## 870	0.26
## 871	0.26
## 872	0.26
## 873	0.26
## 874	0.26
## 875	0.26
## 876	0.68
## 877	0.40

## 878	0.72
## 879	0.37
## 880	0.37
## 881	2.03
## 882	0.58
## 883	1.56
## 884	1.56
## 885	0.09
## 886	0.09
## 887	1.62
## 888	1.62
## 889	1.62
## 890	1.62
## 891	0.00
## 892	0.05
## 893	0.05
## 894	7.95
## 895	0.00
## 896	0.52
## 897	0.28
## 898	0.27
## 899	0.24
## 900	0.42
## 901	0.37
## 902	0.42
## 903	1.10
## 904	0.92
## 905	1.14
## 906	1.14
## 907	1.14
## 908	0.81
## 909	0.33
## 910	0.09
## 911	10.47
## 912	0.44
## 913	0.44
## 914	0.80
## 915	1.70
## 916	0.84
## 917	1.30
## 918	0.77
## 919	1.09
## 920	1.09
## 921	0.32
## 922	0.27
## 923	1.34
## 924	0.35
## 925	0.51
## 926	0.51
## 927	0.99
## 928	2.41
## 929	0.63
## 930	0.37
## 931	0.90



## 932	0.16
## 933	0.55
## 934	0.14
## 935	0.14
## 936	0.99
## 937	0.99
## 938	0.41
## 939	0.51
## 940	0.11
## 941	0.11
## 942	0.26
## 943	0.26
## 944	1.28
## 945	1.28
## 946	1.28
## 947	0.11
## 948	0.03
## 949	0.03
## 950	0.31
## 951	1.23
## 952	0.29
## 953	1.03
## 954	0.61
## 955	0.61
## 956	0.61
## 957	0.61
## 958	0.61
## 959	0.21
## 960	0.21
## 961	0.18
## 962	0.18
## 963	0.18
## 964	0.18
## 965	1.04
## 966	1.04
## 967	0.79
## 968	0.00
## 969	1.26
## 970	0.50
## 971	0.50
## 972	0.50
## 973	8.76
## 974	1.70
## 975	6.30
## 976	0.14
## 977	0.60
## 978	0.26
## 979	0.26
## 980	0.08
## 981	0.68
## 982	0.68
## 983	0.67
## 984	0.67
## 985	0.67

## 986	0.18
## 987	0.18
## 988	0.18
## 989	0.22
## 990	0.66
## 991	0.15
## 992	0.15
## 993	1.19
## 994	1.19
## 995	0.63
## 996	0.63
## 997	2.47
## 998	1.02
## 999	1.02
## 1000	0.80
## 1001	0.80
## 1002	0.32
## 1003	0.32
## 1004	1.17
## 1005	0.50
## 1006	0.65
## 1007	0.80
## 1008	1.92
## 1009	1.04
## 1010	1.04
## 1011	1.04
## 1012	1.51
## 1013	0.65
## 1014	0.27
## 1015	0.20
## 1016	0.23
## 1017	0.23
## 1018	0.23
## 1019	1.47
## 1020	0.32
## 1021	0.27
## 1022	0.27
## 1023	0.27
## 1024	2.04
## 1025	2.06
## 1026	1.61
## 1027	0.22
## 1028	0.43
## 1029	2.17
## 1030	0.69
## 1031	0.15
## 1032	0.67
## 1033	1.18
## 1034	0.33
## 1035	0.33
## 1036	0.33
## 1037	0.33
## 1038	0.33
## 1039	0.33

## 1040	0.80
## 1041	0.79
## 1042	0.70
## 1043	0.93
## 1044	0.10
## 1045	0.10
## 1046	0.10
## 1047	0.10
## 1048	0.10
## 1049	0.10
## 1050	2.37
## 1051	8.75
## 1052	0.63
## 1053	0.17
## 1054	0.17
## 1055	0.10
## 1056	0.79
## 1057	0.06
## 1058	0.06
## 1059	0.71
## 1060	0.67
## 1061	0.11
## 1062	0.07
## 1063	0.07
## 1064	0.21
## 1065	1.01
## 1066	1.89
## 1067	0.74
## 1068	6.89
## 1069	0.53
## 1070	0.11
## 1071	0.35
## 1072	0.70
## 1073	0.91
## 1074	0.91
## 1075	0.68
## 1076	0.44
## 1077	0.14
## 1078	0.14
## 1079	0.12
## 1080	0.12
## 1081	0.12
## 1082	0.12
## 1083	0.12
## 1084	0.12
## 1085	0.12
## 1086	0.28
## 1087	0.28
## 1088	0.28
## 1089	0.28
## 1090	0.28
## 1091	5.59
## 1092	0.06
## 1093	0.78

## 1094	0.78
## 1095	0.78
## 1096	0.78
## 1097	0.78
## 1098	0.78
## 1099	0.78
## 1100	0.53
## 1101	0.53
## 1102	0.72
## 1103	0.72
## 1104	0.57
## 1105	1.50
## 1106	0.53
## 1107	1.19
## 1108	8.75
## 1109	0.93
## 1110	0.93
## 1111	0.77
## 1112	1.27
## 1113	0.88
## 1114	1.30
## 1115	0.70
## 1116	0.28
## 1117	1.22
## 1118	0.37
## 1119	2.40
## 1120	0.19
## 1121	0.19
## 1122	1.23
## 1123	1.23
## 1124	2.78
## 1125	1.07
## 1126	1.04
## 1127	1.11
## 1128	1.21
## 1129	1.21
## 1130	0.96
## 1131	0.96
## 1132	1.14
## 1133	1.14
## 1134	1.29
## 1135	0.75
## 1136	0.48
## 1137	0.48
## 1138	0.48
## 1139	1.90
## 1140	0.83
## 1141	0.83
## 1142	0.33
## 1143	0.34
## 1144	0.34
## 1145	1.59
## 1146	1.59
## 1147	1.59

## 1148	1.86
## 1149	0.53
## 1150	0.53
## 1151	0.69
## 1152	0.05
## 1153	0.05
## 1154	0.28
## 1155	0.41
## 1156	0.62
## 1157	1.05
## 1158	1.29
## 1159	1.29
## 1160	1.29
## 1161	0.33
## 1162	0.33
## 1163	0.01
## 1164	0.54
## 1165	0.09
## 1166	1.89
## 1167	0.12
## 1168	0.58
## 1169	0.29
## 1170	0.85
## 1171	1.08
## 1172	3.81
## 1173	0.71
## 1174	0.09
## 1175	0.22
## 1176	0.29
## 1177	0.29
## 1178	0.29
## 1179	0.52
## 1180	0.29
## 1181	0.55
## 1182	0.55
## 1183	0.55
## 1184	0.55
## 1185	0.55
## 1186	0.55
## 1187	0.47
## 1188	0.47
## 1189	0.47
## 1190	0.47
## 1191	0.47
## 1192	0.47
## 1193	0.21
## 1194	0.21
## 1195	1.00
## 1196	1.00
## 1197	0.14
## 1198	0.65
## 1199	8.04
## 1200	8.04
## 1201	8.04

## 1202	8.04
## 1203	0.60
## 1204	0.69
## 1205	0.69
## 1206	0.69
## 1207	0.00
## 1208	0.00
## 1209	0.00
## 1210	0.00
## 1211	0.00
## 1212	0.26
## 1213	0.83
## 1214	1.31
## 1215	3.47
## 1216	3.47
## 1217	1.21
## 1218	7.95
## 1219	7.95
## 1220	4.16
## 1221	4.16
## 1222	0.20
## 1223	0.20
## 1224	0.20
## 1225	0.67
## 1226	0.32
## 1227	1.49
## 1228	7.79
## 1229	0.29
## 1230	0.24
## 1231	0.55
## 1232	0.09
## 1233	0.47
## 1234	8.75
## 1235	0.54
## 1236	0.20
## 1237	0.33
## 1238	2.27
## 1239	8.75
## 1240	2.74
## 1241	0.47
## 1242	0.70
## 1243	0.20
## 1244	0.53
## 1245	0.59
## 1246	0.61
## 1247	0.32
## 1248	0.21
## 1249	0.22
## 1250	0.22
## 1251	0.26
## 1252	1.13
## 1253	1.16
## 1254	0.51
## 1255	0.60

## 1256	0.56
## 1257	1.10
## 1258	1.10
## 1259	0.27
## 1260	0.27
## 1261	0.44
## 1262	0.44
## 1263	0.44
## 1264	0.44
## 1265	1.01
## 1266	0.11
## 1267	0.11
## 1268	3.54
## 1269	8.75
## 1270	0.76
## 1271	0.06
## 1272	8.75
## 1273	0.40
## 1274	0.65
## 1275	0.65
## 1276	0.55
## 1277	0.98
## 1278	0.98
## 1279	0.27
## 1280	0.27
## 1281	0.14
## 1282	0.36
## 1283	0.36
## 1284	0.50
## 1285	1.42
## 1286	0.44
## 1287	0.44
## 1288	0.83
## 1289	0.15
## 1290	0.48
## 1291	0.15
## 1292	0.15
## 1293	0.15
## 1294	0.46
## 1295	0.46
## 1296	0.63
## 1297	0.63
## 1298	11.84
## 1299	0.30
## 1300	0.25
## 1301	0.22
## 1302	0.22
## 1303	0.09
## 1304	8.75
## 1305	1.99
## 1306	1.99
## 1307	1.99
## 1308	3.20
## 1309	0.13

## 1310	2.93
## 1311	0.92
## 1312	0.42
## 1313	0.66
## 1314	6.09
## 1315	1.98
## 1316	1.72
## 1317	1.72
## 1318	0.70
## 1319	0.47
## 1320	0.07
## 1321	0.17
## 1322	0.17
## 1323	0.59
## 1324	0.61
## 1325	0.54
## 1326	0.37
## 1327	0.37
## 1328	0.37
## 1329	0.95
## 1330	8.75
## 1331	1.29
## 1332	1.21
## 1333	0.59
## 1334	0.59
## 1335	0.59
## 1336	0.10
## 1337	0.10
## 1338	0.53
## 1339	0.42
## 1340	0.42
## 1341	0.57
## 1342	1.79
## 1343	0.68
## 1344	0.68
## 1345	0.60
## 1346	0.24
## 1347	0.56
## 1348	1.97
## 1349	4.43
## 1350	1.57
## 1351	6.13
## 1352	8.06
## 1353	0.83
## 1354	0.36
## 1355	1.85
## 1356	0.25
## 1357	0.25
## 1358	0.25
## 1359	0.50
## 1360	0.50
## 1361	0.50
## 1362	1.22
## 1363	1.22



## 1364	1.22
## 1365	1.35
## 1366	1.35
## 1367	1.35
## 1368	8.37
## 1369	8.37
## 1370	0.22
## 1371	0.49
## 1372	0.13
## 1373	7.95
## 1374	1.13
## 1375	1.13
## 1376	1.13
## 1377	0.09
## 1378	0.01
## 1379	3.86
## 1380	1.47
## 1381	1.47
## 1382	0.22
## 1383	1.46
## 1384	1.46
## 1385	1.46
## 1386	0.49
## 1387	0.92
## 1388	0.01
## 1389	0.09
## 1390	0.09
## 1391	0.09
## 1392	0.09
## 1393	0.13
## 1394	0.07
## 1395	10.92
## 1396	1.27
## 1397	0.42
## 1398	0.76
## 1399	0.62
## 1400	0.90
## 1401	1.01
## 1402	1.01
## 1403	0.43
## 1404	6.80
## 1405	0.04
## 1406	0.60
## 1407	0.19
## 1408	2.43
## 1409	0.65
## 1410	1.90
## 1411	3.84
## 1412	7.96
## 1413	0.36
## 1414	0.36
## 1415	1.10
## 1416	1.10
## 1417	0.05

## 1418	0.62
## 1419	0.97
## 1420	0.17
## 1421	0.70
## 1422	0.70
## 1423	0.58
## 1424	8.60
## 1425	9.27
## 1426	0.32
## 1427	1.03
## 1428	0.71
## 1429	2.69
## 1430	2.69
## 1431	0.15
## 1432	0.83
## 1433	0.76
## 1434	0.60
## 1435	0.60
## 1436	2.92
## 1437	0.50
## 1438	0.50
## 1439	0.50
## 1440	0.50
## 1441	0.53
## 1442	2.78
## 1443	1.01
## 1444	8.75
## 1445	0.75
## 1446	0.50
## 1447	1.09
## 1448	0.90
## 1449	0.53
## 1450	0.74
## 1451	0.74
## 1452	0.74
## 1453	0.74
## 1454	2.95
## 1455	2.95
## 1456	0.04
## 1457	0.46
## 1458	0.46
## 1459	0.46
## 1460	0.46
## 1461	0.46
## 1462	0.46
## 1463	0.22
## 1464	3.54
## 1465	1.62
## 1466	0.57
## 1467	0.91
## 1468	0.99
## 1469	0.51
## 1470	0.51
## 1471	1.36

## 1472	0.27
## 1473	0.19
## 1474	0.19
## 1475	0.19
## 1476	0.42
## 1477	0.21
## 1478	0.14
## 1479	0.14
## 1480	0.75
## 1481	0.00
## 1482	0.00
## 1483	0.00
## 1484	0.01
## 1485	0.15
## 1486	0.53
## 1487	0.53
## 1488	0.22
## 1489	0.22
## 1490	0.12
## 1491	0.12
## 1492	0.12
## 1493	0.12
## 1494	0.12
## 1495	0.12
## 1496	0.12
## 1497	0.12
## 1498	0.12
## 1499	0.57
## 1500	0.57
## 1501	8.75
## 1502	8.75
## 1503	8.75
## 1504	0.87
## 1505	0.87
## 1506	0.07
## 1507	0.70
## 1508	1.02
## 1509	0.43
## 1510	0.43
## 1511	0.60
## 1512	0.15
## 1513	0.85
## 1514	0.37
## 1515	1.29
## 1516	1.29
## 1517	8.06
## 1518	0.10
## 1519	0.71
## 1520	1.46
## 1521	1.46
## 1522	1.46
## 1523	0.58
## 1524	0.58
## 1525	0.87

## 1526	0.87
## 1527	0.05
## 1528	1.26
## 1529	0.70
## 1530	0.71
## 1531	0.93
## 1532	0.93
## 1533	0.37
## 1534	0.55
## 1535	0.38
## 1536	0.81
## 1537	8.60
## 1538	0.40
## 1539	0.44
## 1540	0.44
## 1541	0.44
## 1542	0.44
## 1543	0.44
## 1544	0.44
## 1545	0.44
## 1546	0.44
## 1547	0.73
## 1548	0.73
## 1549	0.73
## 1550	0.22
## 1551	0.30
## 1552	0.30
## 1553	0.26
## 1554	0.26
## 1555	0.56
## 1556	0.91
## 1557	0.91
## 1558	0.25
## 1559	0.25
## 1560	7.95
## 1561	0.64
## 1562	1.56
## 1563	0.60
## 1564	0.24
## 1565	0.76
## 1566	0.76
## 1567	0.70
## 1568	0.70
## 1569	0.70
## 1570	0.25
## 1571	0.25
## 1572	1.09
## 1573	2.64
## 1574	2.64
## 1575	2.64
## 1576	2.64
## 1577	0.03
## 1578	0.03
## 1579	0.31

## 1580	0.31
## 1581	0.35
## 1582	0.35
## 1583	0.35
## 1584	0.35
## 1585	0.53
## 1586	0.53
## 1587	0.32
## 1588	0.32
## 1589	0.49
## 1590	0.49
## 1591	0.18
## 1592	0.04
## 1593	0.71
## 1594	0.71
## 1595	0.33
## 1596	0.33
## 1597	13.74
## 1598	0.03
## 1599	0.09
## 1600	0.49
## 1601	0.49
## 1602	0.49
## 1603	0.49
## 1604	0.49
## 1605	0.49
## 1606	0.49
## 1607	0.18
## 1608	0.46
## 1609	0.46
## 1610	0.46
## 1611	0.88
## 1612	0.30
## 1613	0.30
## 1614	0.26
## 1615	0.66
## 1616	0.16
## 1617	0.16
## 1618	8.75
## 1619	7.96
## 1620	15.05
## 1621	0.91
## 1622	8.07
## 1623	8.07
## 1624	8.07
## 1625	1.35
## 1626	0.57
## 1627	4.15
## 1628	0.78
## 1629	0.78
## 1630	0.69
## 1631	0.69
## 1632	0.69
## 1633	0.25

## 1634	0.71
## 1635	0.73
## 1636	1.06
## 1637	1.06
## 1638	0.20
## 1639	0.34
## 1640	1.03
## 1641	1.03
## 1642	0.44
## 1643	0.41
## 1644	1.55
## 1645	0.73
## 1646	0.59
## 1647	0.59
## 1648	0.59
## 1649	0.59
## 1650	0.59
## 1651	2.07
## 1652	2.07
## 1653	0.29
## 1654	0.98
## 1655	0.98
## 1656	3.39
## 1657	8.75
## 1658	0.37
## 1659	0.33
## 1660	0.73
## 1661	0.73
## 1662	0.86
## 1663	0.03
## 1664	2.43
## 1665	0.16
## 1666	0.16
## 1667	2.43
## 1668	2.43
## 1669	0.15
## 1670	0.32
## 1671	0.19
## 1672	0.19
## 1673	1.67
## 1674	7.24
## 1675	0.77
## 1676	0.10
## 1677	1.10
## 1678	1.10
## 1679	1.10
## 1680	1.90
## 1681	2.14
## 1682	1.57
## 1683	1.57
## 1684	0.09
## 1685	0.29
## 1686	0.21
## 1687	1.29

## 1688	1.29
## 1689	0.53
## 1690	1.36
## 1691	0.12
## 1692	4.41
## 1693	0.96
## 1694	0.17
## 1695	0.24
## 1696	0.95
## 1697	0.30
## 1698	4.99
## 1699	0.61
## 1700	0.78
## 1701	0.79
## 1702	0.59
## 1703	8.75
## 1704	0.53
## 1705	0.60
## 1706	0.60
## 1707	1.45
## 1708	0.18
## 1709	0.18
## 1710	0.18
## 1711	0.18
## 1712	1.31
## 1713	8.75
## 1714	0.68
## 1715	0.68
## 1716	0.68
## 1717	0.68
## 1718	0.69
## 1719	8.04
## 1720	8.04
## 1721	0.28
## 1722	0.84
## 1723	1.00
## 1724	1.00
## 1725	1.00
## 1726	8.75
## 1727	0.32
## 1728	0.49
## 1729	8.04
## 1730	1.06
## 1731	3.10
## 1732	0.67
## 1733	0.67
## 1734	0.52
## 1735	0.52
## 1736	0.11
## 1737	0.55
## 1738	1.69
## 1739	1.21
## 1740	0.59
## 1741	0.99

## 1742	0.95
## 1743	2.10
## 1744	0.31
## 1745	0.01
## 1746	0.01
## 1747	8.75
## 1748	1.47
## 1749	0.14
## 1750	0.14
## 1751	0.14
## 1752	0.14
## 1753	0.14
## 1754	0.14
## 1755	0.14
## 1756	0.14
## 1757	0.14
## 1758	0.14
## 1759	0.14
## 1760	0.14
## 1761	1.27
## 1762	1.27
## 1763	0.24
## 1764	0.24
## 1765	0.09
## 1766	0.09
## 1767	0.50
## 1768	0.50
## 1769	4.63
## 1770	1.98
## 1771	0.34
## 1772	1.17
## 1773	0.22
## 1774	0.26
## 1775	0.31
## 1776	0.31
## 1777	0.05
## 1778	0.33
## 1779	0.78
## 1780	0.13
## 1781	0.94
## 1782	0.00
## 1783	0.90
## 1784	0.90
## 1785	0.83
## 1786	0.71
## 1787	0.50
## 1788	0.69
## 1789	2.12
## 1790	2.12
## 1791	0.09
## 1792	0.09
## 1793	0.52
## 1794	0.52
## 1795	0.52



## 1796	0.33
## 1797	0.04
## 1798	0.09
## 1799	4.01
## 1800	0.56
## 1801	0.56
## 1802	0.56
## 1803	0.15
## 1804	0.15
## 1805	0.63
## 1806	0.63
## 1807	5.65
## 1808	0.96
## 1809	0.96
## 1810	0.96
## 1811	0.96
## 1812	0.96
## 1813	8.75
## 1814	7.96
## 1815	7.96
## 1816	0.24
## 1817	0.64
## 1818	0.64
## 1819	0.64
## 1820	0.96
## 1821	0.06
## 1822	0.50
## 1823	0.50
## 1824	0.50
## 1825	0.50
## 1826	0.50
## 1827	0.50
## 1828	0.50
## 1829	1.05
## 1830	1.05
## 1831	1.05
## 1832	1.05
## 1833	0.58
## 1834	0.22
## 1835	1.20
## 1836	1.20
## 1837	1.20
## 1838	1.20
## 1839	1.20
## 1840	1.20
## 1841	1.20
## 1842	1.20
## 1843	0.85
## 1844	0.54
## 1845	0.54
## 1846	0.26
## 1847	0.26
## 1848	0.31
## 1849	0.31

## 1850	0.31
## 1851	0.31
## 1852	0.31
## 1853	0.31
## 1854	0.57
## 1855	0.57
## 1856	0.89
## 1857	0.42
## 1858	1.21
## 1859	0.09
## 1860	1.43
## 1861	8.75
## 1862	0.39
## 1863	0.42
## 1864	0.42
## 1865	0.42
## 1866	0.42
## 1867	0.42
## 1868	0.42
## 1869	0.37
## 1870	0.21
## 1871	0.50
## 1872	0.61
## 1873	0.21
## 1874	0.93
## 1875	0.95
## 1876	1.12
## 1877	0.26
## 1878	0.24
## 1879	0.24
## 1880	6.00
## 1881	6.00
## 1882	3.49
## 1883	1.25
## 1884	1.25
## 1885	0.90
## 1886	0.54
## 1887	0.81
## 1888	0.81
## 1889	1.39
## 1890	0.53
## 1891	1.67
## 1892	1.67
## 1893	0.45
## 1894	0.45
## 1895	1.29
## 1896	1.29
## 1897	1.29
## 1898	1.48
## 1899	0.20
## 1900	0.20
## 1901	0.20
## 1902	0.20
## 1903	0.20

## 1904	0.20
## 1905	0.28
## 1906	0.28
## 1907	0.21
## 1908	0.70
## 1909	0.30
## 1910	0.48
## 1911	0.32
## 1912	0.76
## 1913	0.76
## 1914	0.76
## 1915	0.76
## 1916	0.76
## 1917	0.76
## 1918	0.76
## 1919	0.73
## 1920	1.74
## 1921	0.31
## 1922	0.13
## 1923	0.13
## 1924	0.13
## 1925	0.13
## 1926	1.28
## 1927	0.12
## 1928	0.12
## 1929	0.12
## 1930	0.12
## 1931	0.13
## 1932	0.14
## 1933	0.14
## 1934	0.14
## 1935	0.14
## 1936	0.80
## 1937	0.80
## 1938	1.17
## 1939	1.17
## 1940	0.75
## 1941	0.75
## 1942	0.96
## 1943	0.52
## 1944	0.14
## 1945	0.89
## 1946	0.89
## 1947	0.89
## 1948	0.47
## 1949	0.61
## 1950	0.36
## 1951	0.15
## 1952	0.35
## 1953	0.12
## 1954	8.75
## 1955	0.14
## 1956	6.48
## 1957	0.28

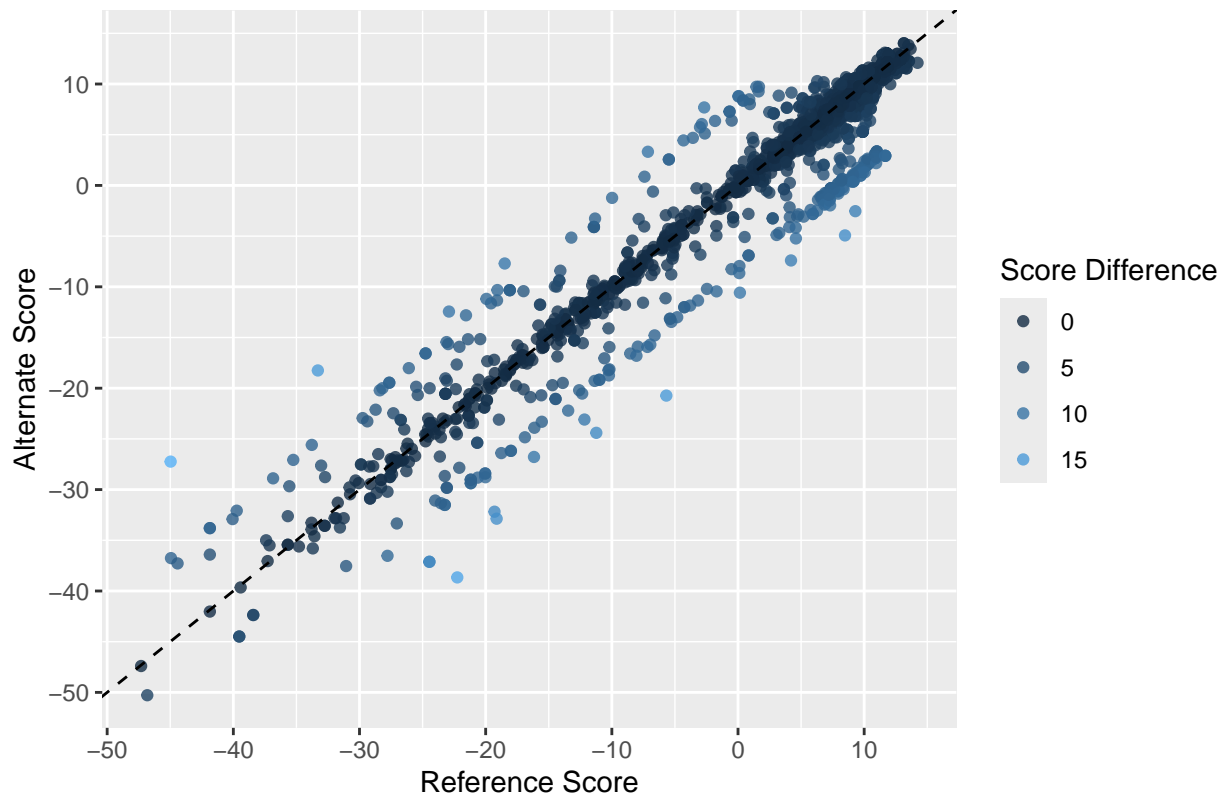
## 1958	0.38
## 1959	0.87
## 1960	1.48
## 1961	0.37
## 1962	0.35
## 1963	1.85
## 1964	2.05
## 1965	2.48
## 1966	2.48
## 1967	0.05
## 1968	0.18
## 1969	0.18
## 1970	0.18
## 1971	0.18
## 1972	0.18
## 1973	0.12
## 1974	0.12
## 1975	0.12
## 1976	0.49
## 1977	0.35
## 1978	0.17
## 1979	0.17
## 1980	0.17
## 1981	3.93
## 1982	3.93
## 1983	0.46
## 1984	1.78
## 1985	7.70
## 1986	0.37
## 1987	0.37
## 1988	2.32
## 1989	2.32
## 1990	2.32
## 1991	0.45
## 1992	1.19
## 1993	1.37
## 1994	1.21
## 1995	1.61
## 1996	0.64
## 1997	1.37
## 1998	0.81
## 1999	0.55
## 2000	0.60
## 2001	0.44
## 2002	0.73
## 2003	1.49
## 2004	1.49
## 2005	0.86
## 2006	0.86
## 2007	0.86
## 2008	0.86
## 2009	0.31
## 2010	0.74
## 2011	0.74

```
## 2012      0.28
## 2013      0.28
## 2014      0.28
## 2015      1.07
## 2016      1.07
## 2017      1.07
## 2018      0.40
## 2019      0.40
## 2020      0.40
## 2021      0.40
## 2022      0.33
## 2023      0.20
## 2024      0.13
## 2025      0.13
## 2026      0.13
## 2027      0.13
## 2028      0.13
## 2029      0.55
## 2030      0.25
## 2031      1.09
## 2032      0.38
## 2033      0.30
## 2034      0.30
## 2035      0.30
## 2036      0.30
## 2037      0.30
## 2038      0.16
## 2039      0.15
## 2040      0.35
## 2041      0.35
## 2042      0.09
## 2043      6.60
## 2044      0.91
## 2045      0.91
## 2046      0.91
## 2047      1.71
## 2048      0.87
## 2049      0.87
## 2050      0.30
```

```
eejs_dinucl <- eejs[(eejs$ss == 5 & (eejs$snp_pos_in_ss == 4 | eejs$snp_pos_in_ss == 5)) |
                    (eejs$ss == 3 & (eejs$snp_pos_in_ss == 19 | eejs$snp_pos_in_ss == 20)),]
```

```
ggplot(eejs, aes(x = as.numeric(ref_score),
                 y = as.numeric(alt_score),
                 color = abs(as.numeric(alt_score) - as.numeric(ref_score)))) +
  geom_point(alpha = 0.8) +
  geom_abline(slope = 1, intercept = 0, linetype = "dashed") +
  scale_x_continuous(breaks = seq(-50, 20, by = 10)) +
  scale_y_continuous(breaks = seq(-50, 20, by = 10)) +
  labs(title = "Splice Site Score Changes",
       x = "Reference Score",
       y = "Alternate Score") +
  guides(color = guide_legend(title = "Score Difference"))
```

## Splice Site Score Changes



```
eejs_5ss <- eejs[eejs$ss == 5,]

ss5_counts <- eejs_5ss %>%
  group_by(snp_pos_in_ss) %>%
  summarise(n = n())

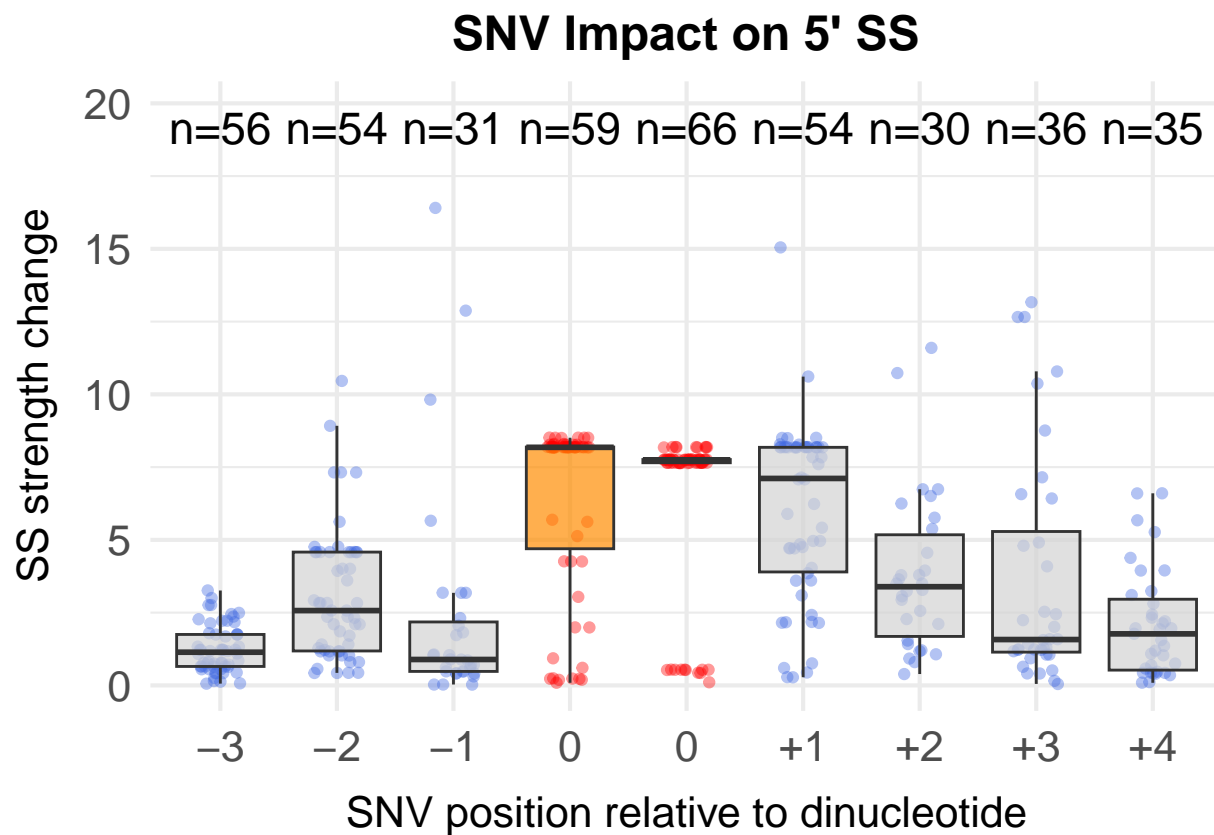
eejs_5ss <- eejs_5ss %>%
  mutate(box_color = case_when(
    snp_pos_in_ss %in% c(3, 4) ~ "highlight",
    TRUE ~ "normal"
  ))

ss5_labels <- c("-3", "-2", "-1", "0", "0", "+1", "+2", "+3", "+4")

ggplot(eejs_5ss, aes(x = factor(snp_pos_in_ss), y = score_diff)) +
  geom_jitter(aes(color = box_color), width = 0.2, alpha = 0.4) +
  geom_boxplot(aes(fill = box_color), outlier.shape = NA, alpha = 0.7) +
  geom_text(data = ss5_counts,
    aes(x = factor(snp_pos_in_ss), y = max(eejs_5ss$score_diff, na.rm = TRUE) * 1.1,
      label = paste0("n=", ss5_counts$n)),
    vjust = -0.5, size = 6) +
  scale_color_manual(values = c("highlight" = "red", "normal" = "royalblue")) +
  scale_fill_manual(values = c("highlight" = "darkorange", "normal" = "lightgray")) +
  scale_x_discrete(labels = ss5_labels) +
```

```
labs(title = "SNV Impact on 5' SS",
     x = "SNV position relative to dinucleotide",
     y = "SS strength change") +
theme_minimal(base_size = 16) +
theme(
  axis.text.x = element_text(size = 16, angle = 0, hjust = 0.5),
  axis.text.y = element_text(size = 16),
  axis.title.x = element_text(size = 16, margin = margin(t = 10)),
  axis.title.y = element_text(size = 16, margin = margin(r = 10)),
  plot.title = element_text(size = 18, face = "bold", hjust = 0.5),
  legend.position = "none"
) +
scale_y_continuous(expand = expansion(mult = c(0.05, 0.15)))
```

```
## Warning: Use of 'ss5_counts$n' is discouraged.
## i Use 'n' instead.
```



```
eejs_3ss <- eejs[eejs$ss == 3,]

ss3_counts <- eejs_3ss %>%
  group_by(snp_pos_in_ss) %>%
  summarise(n = n())

eejs_3ss <- eejs_3ss %>%
  mutate(box_color = case_when(
```

```

    snp_pos_in_ss %in% c(18, 19) ~ "highlight",
    TRUE ~ "normal"
  ))

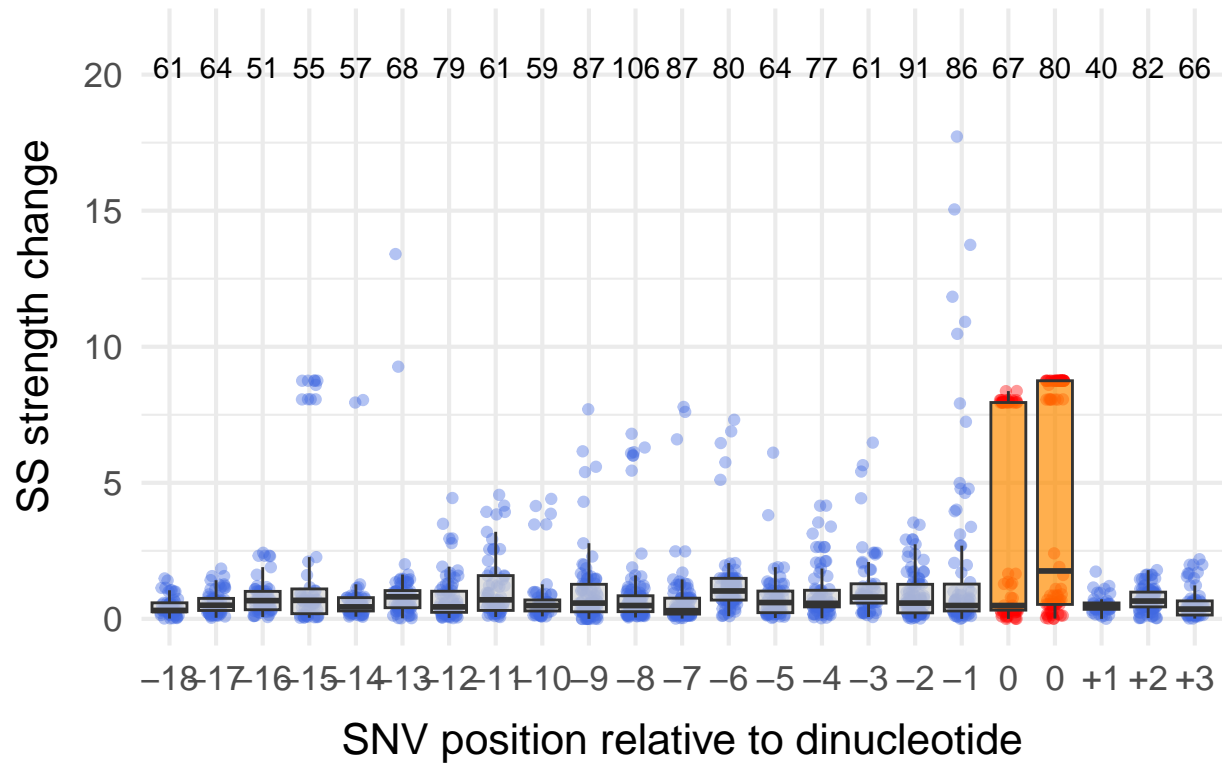
ss3_labels <- c("-18", "-17", "-16", "-15", "-14", "-13", "-12", "-11", "-10", "-9",
               "-8", "-7", "-6", "-5", "-4", "-3", "-2", "-1",
               "0", "0", "+1", "+2", "+3")

ggplot(eejs_3ss, aes(x = factor(snp_pos_in_ss), y = score_diff)) +
  geom_jitter(aes(color = box_color), width = 0.2, alpha = 0.4) +
  geom_boxplot(aes(fill = box_color), outlier.shape = NA, alpha = 0.7) +
  geom_text(data = ss3_counts,
            aes(x = factor(snp_pos_in_ss), y = max(eejs_3ss$score_diff, na.rm = TRUE) * 1.1,
              label = n),
            vjust = -0.5, size = 4) +
  scale_color_manual(values = c("highlight" = "red", "normal" = "royalblue")) +
  scale_fill_manual(values = c("highlight" = "darkorange", "normal" = "lightgray")) +
  scale_x_discrete(labels = ss3_labels) +
  labs(title = "SNV Impact on 3' SS",
       x = "SNV position relative to dinucleotide",
       y = "SS strength change") +
  theme_minimal(base_size = 16) +
  theme(
    axis.text.x = element_text(size = 13, angle = 0, hjust = 0.5),
    axis.text.y = element_text(size = 13),
    axis.title.x = element_text(size = 16, margin = margin(t = 10)),
    axis.title.y = element_text(size = 16, margin = margin(r = 10)),
    plot.title = element_text(size = 18, face = "bold", hjust = 0.5),
    legend.position = "none"
  ) +
  scale_y_continuous(expand = expansion(mult = c(0.05, 0.15)))

```



## SNV Impact on 3' SS



```
eejs$snp_pos_in_ss[(eejs$ss == 3 & eejs$strand == "-")] <- 22 - eejs$snp_pos_in_ss[(eejs$ss == 3 & eejs$
eejs$snp_pos_in_ss[(eejs$ss == 5 & eejs$strand == "-")] <- 8 - eejs$snp_pos_in_ss[(eejs$ss == 5 & eejs$
```

```
eejs_dinucl <- eejs[(eejs$ss == 5 & (eejs$snp_pos_in_ss == 3 | eejs$snp_pos_in_ss == 4)) |
                    (eejs$ss == 3 & (eejs$snp_pos_in_ss == 18 | eejs$snp_pos_in_ss == 19)),]
nrow(eejs_dinucl)
```

```
## [1] 237
```

```
nrow(eejs)
```

```
## [1] 2050
```

```
expressed_genes <- readTxt(file.path(fd, "RUNX1-RUNX1T1 project, list of expressed genes"))
expressed_genes
```

```
##      gene_id seqnames      start      end strand  width
## 1  ENSG00000000419   chr20  50934867  50958555     -   23689
## 2  ENSG00000000457   chr1  169849631  169894267     -   44637
## 3  ENSG00000000460   chr1  169662007  169854080     +  192074
## 4  ENSG00000000938   chr1   27612064  27635277     -   23214
## 5  ENSG00000001036   chr6  143494811  143511690     -   16880
## 6  ENSG00000001084   chr6   53497341  53616970     -  119630
```

## 7	ENSG000000001167	chr6	41072945	41099976	+	27032
## 8	ENSG000000001460	chr1	24356999	24416934	-	59936
## 9	ENSG000000001461	chr1	24415794	24472976	+	57183
## 10	ENSG000000001497	chrX	65512582	65534775	-	22194
## 11	ENSG000000001561	chr6	46129993	46146699	+	16707
## 12	ENSG000000001617	chr3	50155045	50189075	+	34031
## 13	ENSG000000001629	chr7	92246234	92401384	+	155151
## 14	ENSG000000001630	chr7	92112151	92142952	-	30802
## 15	ENSG000000001631	chr7	92198969	92246166	-	47198
## 16	ENSG000000002016	chr12	912077	990053	-	77977
## 17	ENSG000000002330	chr11	64269830	64284704	-	14875
## 18	ENSG000000002549	chr4	17577192	17607972	+	30781
## 19	ENSG000000002586	chrX	2691179	2741309	+	50131
## 20	ENSG000000002587	chr4	11393150	11429765	-	36616
## 21	ENSG000000002822	chr7	1815793	2233243	-	417451
## 22	ENSG000000002834	chr17	38869859	38921770	+	51912
## 23	ENSG000000002919	chr17	48103357	48123074	+	19718
## 24	ENSG000000003056	chr12	8940363	8949955	-	9593
## 25	ENSG000000003096	chrX	117897813	118117340	-	219528
## 26	ENSG000000003147	chr7	8113184	8262687	-	149504
## 27	ENSG000000003393	chr2	201700554	201781189	-	80636
## 28	ENSG000000003400	chr2	201182881	201229406	+	46526
## 29	ENSG000000003402	chr2	201116104	201176687	+	60584
## 30	ENSG000000003436	chr2	187464230	187565760	-	101531
## 31	ENSG000000003509	chr2	37231631	37253403	+	21773
## 32	ENSG000000003756	chr3	50088908	50119021	+	30114
## 33	ENSG000000003987	chr8	17298030	17413528	-	115499
## 34	ENSG000000003989	chr8	17497088	17570573	+	73486
## 35	ENSG000000004059	chr7	127588345	127591705	+	3361
## 36	ENSG000000004139	chr17	28364356	28404049	+	39694
## 37	ENSG000000004142	chr17	28347177	28357522	-	10346
## 38	ENSG000000004399	chr3	129555175	129606818	-	51644
## 39	ENSG000000004455	chr1	33007940	33080996	-	73057
## 40	ENSG000000004468	chr4	15778275	15853230	+	74956
## 41	ENSG000000004478	chr12	2794953	2805423	+	10471
## 42	ENSG000000004487	chr1	23019448	23083689	+	64242
## 43	ENSG000000004534	chr3	49940007	50100045	+	160039
## 44	ENSG000000004660	chr17	3860315	3894891	-	34577
## 45	ENSG000000004700	chr12	21468911	21501669	-	32759
## 46	ENSG000000004766	chr7	93232340	93361121	+	128782
## 47	ENSG000000004777	chr19	35774532	35788822	+	14291
## 48	ENSG000000004779	chr16	23581002	23596356	-	15355
## 49	ENSG000000004809	chr6	110424687	110476641	-	51955
## 50	ENSG000000004838	chr3	50341110	50346852	-	5743
## 51	ENSG000000004864	chr7	96120220	96322147	-	201928
## 52	ENSG000000004866	chr7	116953238	117230103	+	276866
## 53	ENSG000000004897	chr17	47117703	47189422	-	71720
## 54	ENSG000000004961	chrX	11111301	11123078	+	11778
## 55	ENSG000000004975	chr17	7225341	7234545	-	9205
## 56	ENSG000000005007	chr19	18831938	18868236	+	36299
## 57	ENSG000000005020	chr7	26667062	26995239	-	328178
## 58	ENSG000000005022	chrX	119468400	119471319	+	2920
## 59	ENSG000000005059	chr4	109560205	109688726	+	128522
## 60	ENSG000000005073	chr7	27181510	27185223	-	3714

## 61	ENSG00000005075	chr7	102473118	102478907	-	5790
## 62	ENSG00000005100	chr17	5440912	5469060	-	28149
## 63	ENSG00000005156	chr17	34980494	35009743	+	29250
## 64	ENSG00000005175	chr12	47661249	47706061	-	44813
## 65	ENSG00000005187	chr16	20610243	20797581	+	187339
## 66	ENSG00000005189	chr16	20806429	20849668	+	43240
## 67	ENSG00000005194	chr16	57428169	57447528	-	19360
## 68	ENSG00000005206	chr19	2328615	2354806	+	26192
## 69	ENSG00000005238	chr9	35104112	35116341	-	12230
## 70	ENSG00000005302	chrX	11758159	11775753	+	17595
## 71	ENSG00000005339	chr16	3725054	3880726	-	155673
## 72	ENSG00000005379	chr17	58301228	58328760	-	27533
## 73	ENSG00000005381	chr17	58269856	58280935	-	11080
## 74	ENSG00000005436	chr2	75652000	75710989	-	58990
## 75	ENSG00000005448	chr2	74421678	74425755	+	4078
## 76	ENSG00000005469	chr7	87345681	87399795	+	54115
## 77	ENSG00000005483	chr7	105014179	105114361	+	100183
## 78	ENSG00000005486	chr7	75842602	75888926	+	46325
## 79	ENSG00000005700	chr6	82169983	82247754	-	77772
## 80	ENSG00000005801	chr11	3339261	3379222	-	39962
## 81	ENSG00000005810	chr13	77044655	77327050	-	282396
## 82	ENSG00000005812	chr13	76992598	77027195	-	34598
## 83	ENSG00000005844	chr16	30472658	30523185	+	50528
## 84	ENSG00000005882	chr17	50094737	50112152	+	17416
## 85	ENSG00000005889	chrX	24149173	24216255	+	67083
## 86	ENSG00000005893	chrX	120427827	120469365	-	41539
## 87	ENSG00000005961	chr17	44372180	44389505	-	17326
## 88	ENSG00000006007	chr16	19501689	19522145	-	20457
## 89	ENSG00000006015	chr19	18588685	18592336	+	3652
## 90	ENSG00000006016	chr19	18572220	18607741	-	35522
## 91	ENSG00000006025	chr17	47807372	47821834	-	14463
## 92	ENSG00000006047	chr17	7288252	7294615	-	6364
## 93	ENSG00000006062	chr17	45263121	45317040	-	53920
## 94	ENSG00000006125	chr17	35578046	35726409	+	148364
## 95	ENSG00000006194	chr16	3263800	3301401	+	37602
## 96	ENSG00000006282	chr17	50543058	50555852	+	12795
## 97	ENSG00000006327	chr16	3018445	3022383	+	3939
## 98	ENSG00000006432	chr14	70722526	70809534	-	87009
## 99	ENSG00000006451	chr7	39623483	39708124	+	84642
## 100	ENSG00000006459	chr7	140084746	140177035	-	92290
## 101	ENSG00000006530	chr7	141551189	141655244	+	104056
## 102	ENSG00000006534	chr11	68008578	68029282	+	20705
## 103	ENSG00000006576	chr7	77798792	77957503	+	158712
## 104	ENSG00000006607	chr2	241356243	241494841	+	138599
## 105	ENSG00000006625	chr7	30496621	30504844	-	8224
## 106	ENSG00000006634	chr7	87876216	87909541	+	33326
## 107	ENSG00000006638	chr19	3594506	3606840	-	12335
## 108	ENSG00000006652	chr7	112422968	112481017	+	58050
## 109	ENSG00000006695	chr17	14069496	14208677	+	139182
## 110	ENSG00000006704	chr7	74453790	74602604	+	148815
## 111	ENSG00000006712	chr19	39385852	39391195	-	5344
## 112	ENSG00000006715	chr7	38722963	38932394	-	209432
## 113	ENSG00000006740	chr17	12789539	12991643	+	202105
## 114	ENSG00000006744	chr17	12992391	13018187	-	25797

## 115	ENSG00000006756	chrX	2903970	2929351	-	25382
## 116	ENSG00000006757	chrX	7898247	7927739	-	29493
## 117	ENSG00000006831	chr12	1688574	1788678	+	100105
## 118	ENSG00000007038	chr16	2817180	2826304	+	9125
## 119	ENSG00000007047	chr19	45079288	45305283	+	225996
## 120	ENSG00000007080	chr19	17933016	17943991	+	10976
## 121	ENSG00000007168	chr17	2593210	2685615	+	92406
## 122	ENSG00000007171	chr17	27756766	27800499	-	43734
## 123	ENSG00000007202	chr17	28614440	28645454	-	31015
## 124	ENSG00000007237	chr17	9910609	10198551	-	287943
## 125	ENSG00000007255	chr19	45162928	45178237	-	15310
## 126	ENSG00000007264	chr19	3777970	3802129	-	24160
## 127	ENSG00000007312	chr17	63928740	63932354	-	3615
## 128	ENSG00000007341	chr1	112523518	112620825	-	97308
## 129	ENSG00000007372	chr11	31784792	31817961	-	33170
## 130	ENSG00000007376	chr16	784974	788397	-	3424
## 131	ENSG00000007392	chr16	188969	229463	-	40495
## 132	ENSG00000007516	chr16	1333601	1349441	+	15841
## 133	ENSG00000007520	chr16	1349240	1351911	-	2672
## 134	ENSG00000007541	chr16	566995	584136	+	17142
## 135	ENSG00000007545	chr16	1612325	1677908	+	65584
## 136	ENSG00000007923	chr1	6634168	6701924	-	67757
## 137	ENSG00000007944	chr6	16129125	16148248	+	19124
## 138	ENSG00000007968	chr1	23506430	23531220	-	24791
## 139	ENSG00000008018	chr6	170535117	170553341	-	18225
## 140	ENSG00000008083	chr6	15246296	15522040	+	275745
## 141	ENSG00000008128	chr1	1702730	1724324	-	21595
## 142	ENSG00000008130	chr1	1751232	1780457	-	29226
## 143	ENSG00000008226	chr3	38039205	38124025	+	84821
## 144	ENSG00000008256	chr7	6161776	6272644	-	110869
## 145	ENSG00000008277	chr7	87934143	88202889	+	268747
## 146	ENSG00000008282	chr7	106090503	106112576	-	22074
## 147	ENSG00000008283	chr17	63432304	63446378	-	14075
## 148	ENSG00000008294	chr17	50962174	51120865	-	158692
## 149	ENSG00000008300	chr3	48636469	48662915	-	26447
## 150	ENSG00000008323	chr12	6310436	6328506	+	18071
## 151	ENSG00000008324	chr3	42581840	42595114	+	13275
## 152	ENSG00000008382	chr19	4343527	4360086	+	16560
## 153	ENSG00000008394	chr12	16347142	16609259	+	262118
## 154	ENSG00000008405	chr12	106991364	107093829	-	102466
## 155	ENSG00000008441	chr19	12995608	13098796	+	103189
## 156	ENSG00000008513	chr8	133454848	133571940	-	117093
## 157	ENSG00000008516	chr16	3046681	3060726	+	14046
## 158	ENSG00000008710	chr16	2088710	2135898	-	47189
## 159	ENSG00000008838	chr17	40019097	40061215	-	42119
## 160	ENSG00000008853	chr8	22987417	23020199	+	32783
## 161	ENSG00000008869	chr2	36968383	37084342	-	115960
## 162	ENSG00000008952	chr3	169966635	169998373	+	31739
## 163	ENSG00000008988	chr8	56067295	56074581	-	7287
## 164	ENSG00000009307	chr1	114716913	114758676	-	41764
## 165	ENSG00000009335	chr7	157138913	157269372	+	130460
## 166	ENSG00000009413	chr6	111299028	111483715	-	184688
## 167	ENSG00000009724	chr1	11026523	11047233	-	20711
## 168	ENSG00000009780	chr1	27725979	27763122	+	37144

## 169	ENSG00000009790	chr1	209756032	209782320	+	26289
## 170	ENSG00000009830	chr14	77274956	77320884	-	45929
## 171	ENSG00000009844	chr6	142147162	142224689	+	77528
## 172	ENSG00000009954	chr7	73440398	73522278	-	81881
## 173	ENSG00000010017	chr6	13621498	13711564	-	90067
## 174	ENSG00000010072	chr1	231337104	231355023	+	17920
## 175	ENSG00000010165	chr1	171781664	171814023	+	32360
## 176	ENSG00000010219	chr12	4562204	4615302	+	53099
## 177	ENSG00000010244	chr17	32350109	32381886	+	31778
## 178	ENSG00000010256	chr3	48599002	48610976	-	11975
## 179	ENSG00000010270	chr7	38178222	38230671	+	52450
## 180	ENSG00000010292	chr12	6493356	6531955	+	38600
## 181	ENSG00000010295	chr12	6538375	6556083	-	17709
## 182	ENSG00000010318	chr3	52410657	52423641	+	12985
## 183	ENSG00000010319	chr3	52433053	52445085	-	12033
## 184	ENSG00000010322	chr3	52455118	52493071	+	37954
## 185	ENSG00000010327	chr3	52495338	52524495	+	29158
## 186	ENSG00000010361	chr19	49806869	49817376	-	10508
## 187	ENSG00000010404	chrX	149476990	149521096	-	44107
## 188	ENSG00000010539	chr16	3222325	3236221	-	13897
## 189	ENSG00000010610	chr12	6786858	6820808	+	33951
## 190	ENSG00000010626	chr12	6873569	6914243	+	40675
## 191	ENSG00000010671	chrX	101349447	101390796	-	41350
## 192	ENSG00000010803	chr1	41027200	41242154	-	214955
## 193	ENSG00000010810	chr6	111660332	111873452	-	213121
## 194	ENSG00000010818	chr6	142751467	142945201	-	193735
## 195	ENSG00000011007	chr1	23743155	23762059	+	18905
## 196	ENSG00000011009	chr1	23790970	23795539	+	4570
## 197	ENSG00000011021	chr1	11806096	11843144	+	37049
## 198	ENSG00000011028	chr17	62627401	62693597	+	66197
## 199	ENSG00000011052	chr17	51153590	51171744	+	18155
## 200	ENSG00000011105	chr12	3077355	3286564	+	209210
## 201	ENSG00000011132	chr19	3750819	3761699	-	10881
## 202	ENSG00000011143	chr17	58205437	58219605	-	14169
## 203	ENSG00000011198	chr3	43690113	43734371	+	44259
## 204	ENSG00000011243	chr19	15380048	15419141	-	39094
## 205	ENSG00000011258	chr17	51177425	51260163	-	82739
## 206	ENSG00000011260	chr17	51260528	51297936	+	37409
## 207	ENSG00000011275	chr7	5620047	5781739	-	161693
## 208	ENSG00000011295	chr17	15999380	16045015	+	45636
## 209	ENSG00000011304	chr19	797075	812327	+	15253
## 210	ENSG00000011332	chr19	38211006	38229714	-	18709
## 211	ENSG00000011376	chr3	45388506	45549421	+	160916
## 212	ENSG00000011405	chr11	17077730	17207983	-	130254
## 213	ENSG00000011422	chr19	43646095	43670547	-	24453
## 214	ENSG00000011426	chr7	36389806	36453791	+	63986
## 215	ENSG00000011451	chr19	15419980	15449951	-	29972
## 216	ENSG00000011454	chr9	122940833	123104866	+	164034
## 217	ENSG00000011478	chr19	45692483	45703989	+	11507
## 218	ENSG00000011485	chr19	46346994	46392981	+	45988
## 219	ENSG00000011523	chr2	65056366	65087004	+	30639
## 220	ENSG00000011566	chr2	39249266	39437312	-	188047
## 221	ENSG00000011600	chr19	35904401	35908295	-	3895
## 222	ENSG00000011638	chr16	21158377	21180616	+	22240

## 223	ENSG00000012048	chr17	43044295	43170245	-	125951
## 224	ENSG00000012061	chr19	45407333	45478828	-	71496
## 225	ENSG00000012174	chrX	21839636	21885424	+	45789
## 226	ENSG00000012211	chrX	49175264	49186528	-	11265
## 227	ENSG00000012232	chr8	28600469	28755599	+	155131
## 228	ENSG00000012660	chr6	53267398	53349179	-	81782
## 229	ENSG00000012822	chr12	53708517	53727745	-	19229
## 230	ENSG00000012963	chr14	93207056	93229215	+	22160
## 231	ENSG00000012983	chr14	50418501	50561126	-	142626
## 232	ENSG00000013275	chr19	39971005	39981441	+	10437
## 233	ENSG00000013288	chr4	6575175	6623362	+	48188
## 234	ENSG00000013306	chr17	44319625	44324870	-	5246
## 235	ENSG00000013364	chr16	29820394	29848039	+	27646
## 236	ENSG00000013374	chr7	151341699	151378449	+	36751
## 237	ENSG00000013375	chr6	83161150	83193936	-	32787
## 238	ENSG00000013392	chr6	83193379	83198932	+	5554
## 239	ENSG00000013441	chr2	200853009	200864744	-	11736
## 240	ENSG00000013503	chr12	106357658	106510198	+	152541
## 241	ENSG00000013523	chr14	76786178	76826246	-	40069
## 242	ENSG00000013561	chr5	141958328	141990291	+	31964
## 243	ENSG00000013563	chrX	154401238	154412112	-	10875
## 244	ENSG00000013573	chr12	31073845	31104791	+	30947
## 245	ENSG00000013583	chr12	12974864	13000273	-	25410
## 246	ENSG00000013810	chr4	1721490	1745176	+	23687
## 247	ENSG00000014123	chr6	96521595	96555276	+	33682
## 248	ENSG00000014138	chr11	65261762	65305589	+	43828
## 249	ENSG00000014164	chr8	143437655	143541453	-	103799
## 250	ENSG00000014216	chr11	65180566	65212006	+	31441
## 251	ENSG00000014257	chr3	132317367	132368298	+	50932
## 252	ENSG00000014641	chr2	63588609	63607197	+	18589
## 253	ENSG00000014824	chr4	41990472	42090457	+	99986
## 254	ENSG00000014919	chr10	99711844	99732100	-	20257
## 255	ENSG00000015133	chr14	91271323	91417844	-	146522
## 256	ENSG00000015153	chr12	42157104	42238349	-	81246
## 257	ENSG00000015171	chr10	134465	254637	+	120173
## 258	ENSG00000015285	chrX	48676596	48691427	+	14832
## 259	ENSG00000015475	chr22	17734138	17774770	-	40633
## 260	ENSG00000015479	chr5	139293648	139331359	+	37712
## 261	ENSG00000015532	chr17	50346092	50363138	+	17047
## 262	ENSG00000015568	chr2	109792758	109857695	+	64938
## 263	ENSG00000015676	chr7	44379121	44490880	-	111760
## 264	ENSG00000016864	chr3	52694485	52706083	-	11599
## 265	ENSG00000017260	chr3	130850595	131016712	+	166118
## 266	ENSG00000017483	chrX	48458537	48470256	-	11720
## 267	ENSG00000017797	chr18	9475009	9538116	+	63108
## 268	ENSG00000018189	chr4	70704204	70807315	+	103112
## 269	ENSG00000018510	chr2	177392644	177559299	+	166656
## 270	ENSG00000018610	chrX	119538149	119565408	-	27260
## 271	ENSG00000018699	chr2	32628032	32821051	+	193020
## 272	ENSG00000018869	chr19	56375846	56393545	-	17700
## 273	ENSG00000019102	chr11	124747472	124752238	-	4767
## 274	ENSG00000019144	chr11	118606440	118658038	+	51599
## 275	ENSG00000019485	chr11	45095806	45235124	+	139319
## 276	ENSG00000019582	chr5	150401637	150412929	-	11293

## 277	ENSG00000019991	chr7	81699006	81770438	-	71433
## 278	ENSG00000019995	chr10	124942123	124988189	+	46067
## 279	ENSG00000020129	chr1	35557473	35567274	+	9802
## 280	ENSG00000020181	chr8	37784191	37844896	+	60706
## 281	ENSG00000020256	chr20	52051663	52204308	-	152646
## 282	ENSG00000020426	chr14	60734742	60969953	+	235212
## 283	ENSG00000020633	chr1	24899511	24965121	-	65611
## 284	ENSG00000020922	chr11	94415578	94493908	-	78331
## 285	ENSG00000021355	chr6	2832332	2842006	-	9675
## 286	ENSG00000021574	chr2	32063611	32157637	+	94027
## 287	ENSG00000021776	chr15	34851782	34969839	-	118058
## 288	ENSG00000022267	chrX	136146702	136211359	+	64658
## 289	ENSG00000022277	chr20	56468585	56519449	+	50865
## 290	ENSG00000022567	chr8	141207166	141308305	-	101140
## 291	ENSG00000022840	chr12	120533480	120577594	+	44115
## 292	ENSG00000022976	chr14	102317377	102342702	+	25326
## 293	ENSG00000023041	chr10	112424428	112446917	-	22490
## 294	ENSG00000023191	chr11	494512	507300	-	12789
## 295	ENSG00000023228	chr2	206114817	206159603	-	44787
## 296	ENSG00000023287	chr8	52622456	52745843	-	123388
## 297	ENSG00000023318	chr9	99979179	100099040	-	119862
## 298	ENSG00000023330	chr3	52198086	52214327	+	16242
## 299	ENSG00000023516	chr13	42272153	42323267	+	51115
## 300	ENSG00000023572	chr1	193096468	193106114	-	9647
## 301	ENSG00000023608	chr14	61762357	61796428	+	34072
## 302	ENSG00000023697	chr12	15911172	16037282	+	126111
## 303	ENSG00000023734	chr12	15882391	15903478	+	21088
## 304	ENSG00000023839	chr10	99782732	99852192	+	69461
## 305	ENSG00000023892	chr6	35297852	35321771	+	23920
## 306	ENSG00000023902	chr1	150149183	150164720	+	15538
## 307	ENSG00000023909	chr1	93885205	93909456	-	24252
## 308	ENSG00000024048	chr6	42564062	42693504	+	129443
## 309	ENSG00000024526	chr1	68474152	68497221	-	23070
## 310	ENSG00000024862	chr6	138773509	138793319	+	19811
## 311	ENSG00000025039	chr6	89364636	89412270	-	47635
## 312	ENSG00000025156	chr6	122399546	122433119	+	33574
## 313	ENSG00000025293	chr20	35771974	35950381	+	178408
## 314	ENSG00000025423	chr12	56752161	56787790	+	35630
## 315	ENSG00000025434	chr11	47248300	47269032	+	20733
## 316	ENSG00000025708	chr22	50525752	50530056	-	4305
## 317	ENSG00000025770	chr22	50508216	50523472	+	15257
## 318	ENSG00000025772	chr20	44942130	44960486	-	18357
## 319	ENSG00000025796	chr6	107867756	107958189	-	90434
## 320	ENSG00000025800	chr1	32108038	32176568	+	68531
## 321	ENSG00000026036	chr20	63659300	63698684	+	39385
## 322	ENSG00000026297	chr6	166929504	166957191	-	27688
## 323	ENSG00000026508	chr11	35138870	35232402	+	93533
## 324	ENSG00000026950	chr6	26402237	26415216	+	12980
## 325	ENSG00000027001	chr13	23730189	23889419	-	159231
## 326	ENSG00000027075	chr14	61187559	61550976	+	363418
## 327	ENSG00000027697	chr6	137197484	137219449	-	21966
## 328	ENSG00000027847	chr5	177600100	177610347	+	10248
## 329	ENSG00000027869	chr1	156806243	156816862	-	10620
## 330	ENSG00000028116	chr2	57907651	58159920	+	252270

## 331	ENSG00000028137	chr1	12166943	12209228	+	42286
## 332	ENSG00000028203	chr12	95217746	95302790	+	85045
## 333	ENSG00000028277	chr19	42086110	42196585	-	110476
## 334	ENSG00000028310	chr5	850291	892824	-	42534
## 335	ENSG00000028528	chr15	64094123	64146090	+	51968
## 336	ENSG00000028839	chr6	133952170	133990432	+	38263
## 337	ENSG00000029153	chr12	27332854	27425289	+	92436
## 338	ENSG00000029363	chr6	136256863	136289851	-	32989
## 339	ENSG00000029364	chr14	69398015	69462388	+	64374
## 340	ENSG00000029639	chr6	155257509	155314493	-	56985
## 341	ENSG00000029725	chr17	5282265	5385812	+	103548
## 342	ENSG00000029993	chrX	150980509	150990775	+	10267
## 343	ENSG00000030066	chr11	47778087	47848555	-	70469
## 344	ENSG00000030110	chr6	33572547	33580293	-	7747
## 345	ENSG00000030419	chr2	212999691	213152427	-	152737
## 346	ENSG00000030582	chr17	44345086	44353102	+	8017
## 347	ENSG00000031003	chr5	137937960	138051961	-	114002
## 348	ENSG00000031691	chr6	49463378	49493107	+	29730
## 349	ENSG00000031698	chr1	109213918	109238169	+	24252
## 350	ENSG00000031823	chr19	5916139	5978142	-	62004
## 351	ENSG00000032219	chr14	58298385	58373887	+	75503
## 352	ENSG00000032389	chr2	3188925	3377882	-	188958
## 353	ENSG00000032444	chr19	7534004	7561764	+	27761
## 354	ENSG00000032742	chr13	20567069	20691437	+	124369
## 355	ENSG00000033011	chr16	5033960	5087379	+	53420
## 356	ENSG00000033030	chr12	122471600	122501073	-	29474
## 357	ENSG00000033050	chr7	151207837	151227230	-	19394
## 358	ENSG00000033100	chr7	151232489	151238827	+	6339
## 359	ENSG00000033122	chr1	69568398	70151945	+	583548
## 360	ENSG00000033170	chr14	65410592	65744121	+	333530
## 361	ENSG00000033178	chr4	67612652	67701179	-	88528
## 362	ENSG00000033327	chr11	78215297	78418348	-	203052
## 363	ENSG00000033800	chr15	68054179	68198603	+	144425
## 364	ENSG00000033867	chr3	27372721	27484420	-	111700
## 365	ENSG00000034152	chr17	21284672	21315240	+	30569
## 366	ENSG00000034510	chr2	84905625	84906675	+	1051
## 367	ENSG00000034533	chr3	131013875	131027649	-	13775
## 368	ENSG00000034677	chr8	100257060	100336218	-	79159
## 369	ENSG00000034693	chr6	143450807	143490010	+	39204
## 370	ENSG00000034713	chr16	75566351	75577881	+	11531
## 371	ENSG00000035115	chr2	217730	266398	-	48669
## 372	ENSG00000035141	chr2	70295975	70302090	-	6116
## 373	ENSG00000035403	chr10	73995193	74121363	+	126171
## 374	ENSG00000035499	chr5	60596912	60700190	-	103279
## 375	ENSG00000035664	chr15	63907036	64072033	-	164998
## 376	ENSG00000035681	chr8	58583504	58659844	-	76341
## 377	ENSG00000035687	chr1	244408494	244452134	-	43641
## 378	ENSG00000035720	chr4	67558728	67607337	+	48610
## 379	ENSG00000035862	chr17	78852977	78925387	-	72411
## 380	ENSG00000035928	chr4	39287456	39366375	-	78920
## 381	ENSG00000036054	chr3	100261000	100325251	+	64252
## 382	ENSG00000036257	chr2	224470150	224585397	-	115248
## 383	ENSG00000036530	chr14	99684304	99727301	+	42998
## 384	ENSG00000036549	chr1	77562416	77683419	-	121004



## 385	ENSG00000036672	chr11	119355215	119381726	-	26512
## 386	ENSG00000037042	chr17	42659305	42667006	+	7702
## 387	ENSG00000037241	chr5	172958729	172969771	+	11043
## 388	ENSG00000037474	chr5	6599239	6633291	-	34053
## 389	ENSG00000037637	chr1	16246839	16352454	-	105616
## 390	ENSG00000037749	chr5	154038906	154220478	+	181573
## 391	ENSG00000037757	chr19	13764532	13774282	+	9751
## 392	ENSG00000037897	chr12	57768471	57772793	-	4323
## 393	ENSG00000038002	chr4	177430770	177442503	-	11734
## 394	ENSG00000038210	chr4	25233975	25279092	+	45118
## 395	ENSG00000038219	chr4	13568738	13627723	-	58986
## 396	ENSG00000038274	chr5	163503114	163519336	+	16223
## 397	ENSG00000038358	chr16	67873023	67884503	+	11481
## 398	ENSG00000038382	chr5	14143702	14532128	+	388427
## 399	ENSG00000038532	chr16	10944488	11182189	+	237702
## 400	ENSG00000039123	chr5	55307760	55425581	+	117822
## 401	ENSG00000039319	chr5	80408013	80479350	+	71338
## 402	ENSG00000039523	chr16	67518418	67546788	+	28371
## 403	ENSG00000039650	chr19	49859882	49878351	-	18470
## 404	ENSG00000040199	chr16	71637835	71724701	-	86867
## 405	ENSG00000040275	chr5	169583634	169604778	+	21145
## 406	ENSG00000040341	chr8	73420369	73747708	-	327340
## 407	ENSG00000040487	chr1	19312326	19329300	+	16975
## 408	ENSG00000040531	chr17	3636468	3661542	+	25075
## 409	ENSG00000040608	chr22	20241415	20283246	-	41832
## 410	ENSG00000040633	chr17	7235028	7239722	-	4695
## 411	ENSG00000040933	chr2	98444854	98594390	+	149537
## 412	ENSG00000041353	chr18	54717860	54895516	+	177657
## 413	ENSG00000041357	chr15	78540405	78552419	+	12015
## 414	ENSG00000041802	chr3	194640788	194672477	-	31690
## 415	ENSG00000041880	chr3	51942345	51948867	+	6523
## 416	ENSG00000041988	chr1	6624866	6635586	+	10721
## 417	ENSG00000042088	chr14	89954939	90044768	+	89830
## 418	ENSG00000042317	chr14	88384924	88470350	+	85427
## 419	ENSG00000042429	chr11	93784227	93814695	+	30469
## 420	ENSG00000042445	chr2	85342088	85354620	-	12533
## 421	ENSG00000042493	chr2	85394748	85418432	-	23685
## 422	ENSG00000042753	chr19	46838136	46850992	-	12857
## 423	ENSG00000043093	chr3	182938074	182985953	-	47880
## 424	ENSG00000043143	chr5	134524312	134583230	+	58919
## 425	ENSG00000043462	chr5	170246237	170298227	-	51991
## 426	ENSG00000043514	chr1	39841022	39883511	-	42490
## 427	ENSG00000044090	chr6	43037617	43053945	-	16329
## 428	ENSG00000044115	chr5	138610967	138935034	+	324068
## 429	ENSG00000044446	chrX	18892300	18984598	-	92299
## 430	ENSG00000044459	chr9	17134982	17503923	+	368942
## 431	ENSG00000044574	chr9	125234853	125241330	-	6478
## 432	ENSG00000046604	chr18	31498043	31549008	+	50966
## 433	ENSG00000046647	chrX	14008279	14029893	-	21615
## 434	ENSG00000046651	chrX	13734745	13769353	+	34609
## 435	ENSG00000047056	chr10	1049538	1132297	+	82760
## 436	ENSG00000047188	chr5	113513683	113595285	+	81603
## 437	ENSG00000047230	chrX	16588003	16712936	-	124934
## 438	ENSG00000047249	chr8	53715557	53843558	-	128002

## 439	ENSG000000047315	chr4	56977722	57031168	+	53447
## 440	ENSG000000047346	chr15	52581317	52709817	-	128501
## 441	ENSG000000047365	chr4	35948221	36244509	-	296289
## 442	ENSG000000047410	chr1	186311652	186375693	-	64042
## 443	ENSG000000047457	chr3	149162410	149222055	-	59646
## 444	ENSG000000047578	chr16	27550133	27780369	+	230237
## 445	ENSG000000047579	chr6	15522801	15663058	-	140258
## 446	ENSG000000047597	chrX	37685759	37732130	+	46372
## 447	ENSG000000047621	chr12	4487728	4538508	-	50781
## 448	ENSG000000047644	chrX	10015562	10144478	+	128917
## 449	ENSG000000047662	chr4	17629306	17781512	-	152207
## 450	ENSG000000047849	chr3	47850690	48089272	-	238583
## 451	ENSG000000047932	chr6	117560269	117602542	-	42274
## 452	ENSG000000048028	chr11	113797874	113875570	-	77697
## 453	ENSG000000048052	chr7	18086949	19002416	+	915468
## 454	ENSG000000048140	chr5	176647387	176659054	+	11668
## 455	ENSG000000048162	chr5	176383938	176388975	-	5038
## 456	ENSG000000048342	chr4	15469865	15601557	+	131693
## 457	ENSG000000048392	chr8	102204502	102239118	-	34617
## 458	ENSG000000048405	chr7	127346790	127431924	-	85135
## 459	ENSG000000048471	chr16	11976737	12574289	+	597553
## 460	ENSG000000048544	chr6	42206801	42217865	-	11065
## 461	ENSG000000048649	chr11	77659996	77821017	-	161022
## 462	ENSG000000048707	chr1	12230067	12512047	+	281981
## 463	ENSG000000048740	chr10	10798397	11336675	+	538279
## 464	ENSG000000048828	chr9	93451722	93566107	+	114386
## 465	ENSG000000048991	chr2	135531455	135725270	+	193816
## 466	ENSG000000049089	chr1	40300487	40317816	-	17330
## 467	ENSG000000049167	chr5	60873831	60945073	-	71243
## 468	ENSG000000049239	chr1	9234775	9271337	+	36563
## 469	ENSG000000049245	chr1	7771269	7781432	+	10164
## 470	ENSG000000049246	chr1	7784320	7845177	+	60858
## 471	ENSG000000049247	chr1	7843083	7853512	-	10430
## 472	ENSG000000049449	chr11	31812391	32105755	+	293365
## 473	ENSG000000049540	chr7	74027789	74069907	+	42119
## 474	ENSG000000049541	chr7	74231499	74254458	-	22960
## 475	ENSG000000049618	chr6	156777374	157210779	+	433406
## 476	ENSG000000049656	chr5	1317744	1345099	-	27356
## 477	ENSG000000049759	chr18	58044367	58401540	+	357174
## 478	ENSG000000049769	chrX	49269843	49301461	+	31619
## 479	ENSG000000049860	chr5	74640023	74722647	+	82625
## 480	ENSG000000049883	chr5	72320367	72368395	+	48029
## 481	ENSG000000050030	chrX	74732849	74925485	-	192637
## 482	ENSG000000050130	chr14	59484443	59505410	+	20968
## 483	ENSG000000050344	chr7	26152240	26187125	+	34886
## 484	ENSG000000050393	chr6	13786557	13814568	-	28012
## 485	ENSG000000050405	chr12	50175788	50283546	-	107759
## 486	ENSG000000050426	chr12	51047962	51060424	+	12463
## 487	ENSG000000050555	chr9	131009082	131094473	+	85392
## 488	ENSG000000050748	chr5	180233143	180292099	-	58957
## 489	ENSG000000050767	chr5	178237618	178590555	-	352938
## 490	ENSG000000051009	chr11	6211335	6234711	-	23377
## 491	ENSG000000051108	chr16	56932048	56944863	+	12816
## 492	ENSG000000051128	chr19	18929201	18941261	-	12061

## 493	ENSG000000051180	chr15	40694774	40732339	+	37566
## 494	ENSG000000051341	chr3	121431427	121546641	-	115215
## 495	ENSG000000051382	chr3	138652699	138834938	-	182240
## 496	ENSG000000051523	chr16	88643283	88651152	-	7870
## 497	ENSG000000051596	chr5	175917873	176034680	-	116808
## 498	ENSG000000051620	chr6	138403531	138422197	+	18667
## 499	ENSG000000051825	chr12	123152320	123244014	-	91695
## 500	ENSG000000052126	chr12	19129752	19376400	+	246649
## 501	ENSG000000052723	chr1	114769479	114780685	-	11207
## 502	ENSG000000052749	chr10	97356358	97426076	-	69719
## 503	ENSG000000052795	chr4	158769138	158908049	+	138912
## 504	ENSG000000052802	chr4	165327623	165343160	+	15538
## 505	ENSG000000052841	chr11	43358932	43494933	+	136002
## 506	ENSG000000053254	chr14	89124871	89619149	-	494279
## 507	ENSG000000053371	chr1	19303965	19312146	-	8182
## 508	ENSG000000053372	chr1	19251539	19260128	+	8590
## 509	ENSG000000053501	chr19	17215346	17219829	+	4484
## 510	ENSG000000053524	chr3	183178043	183428778	-	250736
## 511	ENSG000000053702	chr12	2825348	2835544	-	10197
## 512	ENSG000000053770	chr14	57268909	57298742	+	29834
## 513	ENSG000000053900	chr4	25377213	25418498	+	41286
## 514	ENSG000000054116	chr1	36136570	36156053	-	19484
## 515	ENSG000000054118	chr1	36224416	36305357	+	80942
## 516	ENSG000000054148	chr9	136848724	136851027	+	2304
## 517	ENSG000000054219	chr2	159803355	159904749	-	101395
## 518	ENSG000000054267	chr1	235131634	235328219	-	196586
## 519	ENSG000000054277	chr1	241590102	241677376	-	87275
## 520	ENSG000000054282	chr1	243256034	243500092	+	244059
## 521	ENSG000000054523	chr1	10210805	10381603	+	170799
## 522	ENSG000000054598	chr6	1609972	1613897	+	3926
## 523	ENSG000000054611	chr22	46762617	47175699	+	413083
## 524	ENSG000000054965	chr11	73400487	73598189	-	197703
## 525	ENSG000000054967	chr11	73376264	73397474	+	21211
## 526	ENSG000000054983	chr14	87837820	87993665	-	155846
## 527	ENSG000000055044	chr2	202265716	202303666	+	37951
## 528	ENSG000000055070	chr1	16352575	16398145	+	45571
## 529	ENSG000000055130	chr7	148697914	148801036	+	103123
## 530	ENSG000000055147	chr5	153990128	154038936	-	48809
## 531	ENSG000000055208	chr6	149218641	149411613	+	192973
## 532	ENSG000000055211	chr6	149566294	149591748	+	25455
## 533	ENSG000000055332	chr2	37099210	37157065	-	57856
## 534	ENSG000000055483	chr17	78787381	78841441	-	54061
## 535	ENSG000000055609	chr7	152134922	152436005	-	301084
## 536	ENSG000000055917	chr2	20248691	20352234	-	103544
## 537	ENSG000000055950	chr10	100969458	100987515	-	18058
## 538	ENSG000000055955	chr3	52812975	52831479	-	18505
## 539	ENSG000000056050	chr4	169729465	169757953	-	28489
## 540	ENSG000000056097	chr5	32354350	32444761	-	90412
## 541	ENSG000000056277	chrX	130202711	130268899	-	66189
## 542	ENSG000000056558	chr9	120902393	120929173	-	26781
## 543	ENSG000000056586	chr9	122844556	122905341	-	60786
## 544	ENSG000000056736	chr3	53846580	53865800	+	19221
## 545	ENSG000000056972	chr6	111556454	111606278	-	49825
## 546	ENSG000000057019	chr3	98795941	98901689	-	105749

## 547	ENSG00000057252	chr1	179293714	179358680	+	64967
## 548	ENSG00000057294	chr12	32790745	32896840	-	106096
## 549	ENSG00000057608	chr10	5765223	5842132	-	76910
## 550	ENSG00000057657	chr6	106086320	106109939	+	23620
## 551	ENSG00000057663	chr6	106045423	106325820	-	280398
## 552	ENSG00000057757	chr1	23778405	23788232	+	9828
## 553	ENSG00000058056	chr3	179652755	179789401	+	136647
## 554	ENSG00000058063	chr3	182793500	182921635	+	128136
## 555	ENSG00000058091	chr7	90466424	91210590	+	744167
## 556	ENSG00000058262	chr3	128051641	128071683	+	20043
## 557	ENSG00000058272	chr12	79773563	79935460	-	161898
## 558	ENSG00000058453	chr1	16740273	16972979	+	232707
## 559	ENSG00000058600	chr16	22297375	22335103	+	37729
## 560	ENSG00000058668	chr1	203626561	203744081	+	117521
## 561	ENSG00000058673	chr1	203795654	203854124	+	58471
## 562	ENSG00000058729	chr5	97160867	97183260	-	22394
## 563	ENSG00000058799	chr1	53851719	53889834	-	38116
## 564	ENSG00000058804	chr1	53765460	53838860	-	73401
## 565	ENSG00000058866	chr3	186105668	186362237	-	256570
## 566	ENSG00000059122	chr16	2911937	2951208	+	39272
## 567	ENSG00000059145	chr16	1363205	1414751	-	51547
## 568	ENSG00000059377	chr7	139777051	140020325	+	243275
## 569	ENSG00000059378	chr7	140023744	140063721	-	39978
## 570	ENSG00000059573	chr10	95605929	95656706	-	50778
## 571	ENSG00000059588	chr1	234391313	234479103	-	87791
## 572	ENSG00000059691	chr4	151670504	151761023	-	90520
## 573	ENSG00000059728	chr2	69897688	69942945	+	45258
## 574	ENSG00000059758	chr12	96278261	96400560	-	122300
## 575	ENSG00000059769	chr9	111631352	111654351	+	23000
## 576	ENSG00000059804	chr12	7919230	7936275	-	17046
## 577	ENSG00000059915	chr10	102402617	102421539	-	18923
## 578	ENSG00000060069	chr18	79679801	79756623	+	76823
## 579	ENSG00000060138	chr12	10699089	10723312	-	24224
## 580	ENSG00000060140	chr12	10618939	10674318	-	55380
## 581	ENSG00000060237	chr12	752593	911452	+	158860
## 582	ENSG00000060339	chr10	68721012	68792377	+	71366
## 583	ENSG00000060491	chr20	62804835	62814000	+	9166
## 584	ENSG00000060558	chr19	3136193	3163769	+	27577
## 585	ENSG00000060642	chr1	26787472	26798398	+	10927
## 586	ENSG00000060688	chr1	31259568	31296782	-	37215
## 587	ENSG00000060749	chr11	32893178	32993316	+	100139
## 588	ENSG00000060762	chr6	166364919	166383013	-	18095
## 589	ENSG00000060971	chr3	38103129	38137242	-	34114
## 590	ENSG00000060982	chr12	24810022	24949459	-	139438
## 591	ENSG00000061273	chr12	47782722	47833132	-	50411
## 592	ENSG00000061656	chr20	35615892	35621049	+	5158
## 593	ENSG00000061676	chr2	182909115	183038858	-	129744
## 594	ENSG00000061794	chr12	27710773	27756295	+	45523
## 595	ENSG00000061918	chr4	155758992	155807591	+	48600
## 596	ENSG00000061936	chr12	131711081	131799737	+	88657
## 597	ENSG00000061938	chr3	195863364	195911945	-	48582
## 598	ENSG00000061987	chr12	62466817	62600479	+	133663
## 599	ENSG00000062194	chr5	57173948	57264679	+	90732
## 600	ENSG00000062282	chr11	75759512	75801535	+	42024

## 601	ENSG00000062485	chr12	56271699	56300392	-	28694
## 602	ENSG00000062582	chr7	43866558	43869893	-	3336
## 603	ENSG00000062598	chr20	46366049	46432985	-	66937
## 604	ENSG00000062650	chr10	86435256	86521815	-	86560
## 605	ENSG00000062716	chr17	59707192	59842255	+	135064
## 606	ENSG00000062725	chr17	60443149	60526219	-	83071
## 607	ENSG00000062822	chr19	50384204	50418018	+	33815
## 608	ENSG00000063046	chr12	53006158	53042209	+	36052
## 609	ENSG00000063127	chr19	49289638	49325225	-	35588
## 610	ENSG00000063169	chr19	47608196	47703277	+	95082
## 611	ENSG00000063176	chr19	48619291	48630717	+	11427
## 612	ENSG00000063177	chr19	48615328	48619536	-	4209
## 613	ENSG00000063180	chr19	48637942	48646312	-	8371
## 614	ENSG00000063241	chr19	55452985	55462343	-	9359
## 615	ENSG00000063244	chr19	55654146	55674715	+	20570
## 616	ENSG00000063245	chr19	55675226	55709858	+	34633
## 617	ENSG00000063322	chr19	39391303	39400637	+	9335
## 618	ENSG00000063438	chr5	304176	438291	+	134116
## 619	ENSG00000063587	chrX	153334155	153360110	+	25956
## 620	ENSG00000063601	chrX	150692971	150765103	+	72133
## 621	ENSG00000063761	chr14	77800083	77935012	+	134930
## 622	ENSG00000063854	chr16	1795620	1827194	-	31575
## 623	ENSG00000063978	chr4	2462220	2625320	+	163101
## 624	ENSG00000064012	chr2	201233443	201287711	+	54269
## 625	ENSG00000064102	chr12	26905181	26938326	-	33146
## 626	ENSG00000064115	chr12	26973195	27014434	-	41240
## 627	ENSG00000064199	chr11	124673798	124697518	+	23721
## 628	ENSG00000064201	chr11	2301997	2318200	+	16204
## 629	ENSG00000064225	chr3	98732236	98821201	+	88966
## 630	ENSG00000064313	chr8	119730775	119832863	-	102089
## 631	ENSG00000064393	chr7	139561570	139777778	-	216209
## 632	ENSG00000064419	chr7	128954180	129055173	-	100994
## 633	ENSG00000064489	chr19	19145567	19192158	-	46592
## 634	ENSG00000064490	chr19	19192229	19201869	+	9641
## 635	ENSG00000064545	chr19	19119169	19138513	-	19345
## 636	ENSG00000064547	chr19	19623668	19628930	-	5263
## 637	ENSG00000064601	chr20	45890144	45898820	+	8677
## 638	ENSG00000064607	chr19	18990888	19034023	-	43136
## 639	ENSG00000064651	chr5	128083766	128189688	+	105923
## 640	ENSG00000064666	chr19	1026581	1039068	+	12488
## 641	ENSG00000064687	chr19	1040101	1065572	+	25472
## 642	ENSG00000064703	chr1	111755245	111768016	+	12772
## 643	ENSG00000064726	chr15	83016422	83067354	-	50933
## 644	ENSG00000064763	chr12	29149103	29340980	+	191878
## 645	ENSG00000064932	chr19	1107636	1174283	-	66648
## 646	ENSG00000064933	chr2	189784085	189877629	+	93545
## 647	ENSG00000064961	chr19	3572777	3579088	+	6312
## 648	ENSG00000064995	chr6	34877778	34888089	-	10312
## 649	ENSG00000064999	chr6	34889265	35091413	+	202149
## 650	ENSG00000065000	chr19	2100988	2164465	-	63478
## 651	ENSG00000065029	chr6	35258909	35295985	+	37077
## 652	ENSG00000065054	chr16	2025356	2039026	+	13671
## 653	ENSG00000065057	chr16	2039815	2047866	-	8052
## 654	ENSG00000065060	chr6	34792015	34883138	+	91124

## 655	ENSG00000065135	chr1	109548611	109618321	+	69711
## 656	ENSG00000065150	chr13	97953658	98024297	+	70640
## 657	ENSG00000065154	chr10	124397303	124418976	-	21674
## 658	ENSG00000065183	chr1	117929720	117966542	+	36823
## 659	ENSG00000065243	chr1	88684222	88836255	+	152034
## 660	ENSG00000065268	chr19	984271	998438	+	14168
## 661	ENSG00000065308	chr6	52497402	52576915	-	79514
## 662	ENSG00000065320	chr17	9021542	9244000	+	222459
## 663	ENSG00000065328	chr10	13161554	13211104	+	49551
## 664	ENSG00000065357	chr12	55927319	55954027	+	26709
## 665	ENSG00000065413	chr2	196967017	197311173	-	344157
## 666	ENSG00000065427	chr16	75627474	75648643	-	21170
## 667	ENSG00000065457	chr16	75596981	75623300	-	26320
## 668	ENSG00000065485	chr3	123067062	123225227	+	158166
## 669	ENSG00000065491	chr6	37257772	37332970	+	75199
## 670	ENSG00000065518	chr3	120596309	120602500	+	6192
## 671	ENSG00000065526	chr1	15847864	15940460	+	92597
## 672	ENSG00000065548	chr2	186486156	186509363	+	23208
## 673	ENSG00000065559	chr17	12020824	12143830	+	123007
## 674	ENSG00000065600	chr1	212363931	212414901	-	50971
## 675	ENSG00000065613	chr10	103967201	104029233	+	62033
## 676	ENSG00000065615	chr6	83859643	83967424	+	107782
## 677	ENSG00000065621	chr10	104268873	104304945	+	36073
## 678	ENSG00000065665	chr10	12129637	12169961	+	40325
## 679	ENSG00000065675	chr10	6427143	6580301	-	153159
## 680	ENSG00000065802	chr2	238426742	238452250	+	25509
## 681	ENSG00000065809	chr10	14518557	14774897	-	256341
## 682	ENSG00000065882	chr4	37891087	38139175	+	248089
## 683	ENSG00000065883	chr7	39950037	40097134	+	147098
## 684	ENSG00000065911	chr2	74198562	74217565	+	19004
## 685	ENSG00000065923	chrX	46599252	46759172	-	159921
## 686	ENSG00000065970	chr12	8032703	8055503	+	22801
## 687	ENSG00000065978	chr1	42682427	42702349	+	19923
## 688	ENSG00000065989	chr19	10416773	10469631	+	52859
## 689	ENSG00000066027	chr1	212285537	212361863	+	76327
## 690	ENSG00000066044	chr19	7958579	8005659	-	47081
## 691	ENSG00000066084	chr12	50504985	50748667	+	243683
## 692	ENSG00000066117	chr12	50084972	50100712	+	15741
## 693	ENSG00000066135	chr1	43650158	43705515	+	55358
## 694	ENSG00000066136	chr1	40691648	40771603	+	79956
## 695	ENSG00000066230	chr5	473310	524332	-	51023
## 696	ENSG00000066279	chr1	197084128	197146694	-	62567
## 697	ENSG00000066294	chr1	160541095	160579516	-	38422
## 698	ENSG00000066322	chr1	43363397	43368074	-	4678
## 699	ENSG00000066336	chr11	47354860	47378576	-	23717
## 700	ENSG00000066422	chr3	101648889	101677495	-	28607
## 701	ENSG00000066427	chr14	92038652	92106621	-	67970
## 702	ENSG00000066455	chr14	92794231	92839963	+	45733
## 703	ENSG00000066557	chr1	70144805	70205620	-	60816
## 704	ENSG00000066583	chr5	129094751	129114028	+	19278
## 705	ENSG00000066651	chr6	125986430	126039276	+	52847
## 706	ENSG00000066654	chr16	20702816	20742084	-	39269
## 707	ENSG00000066697	chr9	100427156	100451711	+	24556
## 708	ENSG00000066739	chr14	96279202	96363870	-	84669

## 709	ENSG00000066777	chr8	67173511	67343677	-	170167
## 710	ENSG00000066827	chr8	134477788	134713049	-	235262
## 711	ENSG00000066855	chr8	65644734	65771261	+	126528
## 712	ENSG00000066923	chr7	100177563	100221488	+	43926
## 713	ENSG00000066926	chr18	57548283	57586772	-	38490
## 714	ENSG00000066933	chr15	71822289	72118577	-	296289
## 715	ENSG00000067057	chr10	3066333	3137712	+	71380
## 716	ENSG00000067064	chr10	1039908	1049170	-	9263
## 717	ENSG00000067066	chr2	230415942	230544090	+	128149
## 718	ENSG00000067082	chr10	3775996	3785281	-	9286
## 719	ENSG00000067113	chr5	55424854	55535050	-	110197
## 720	ENSG00000067167	chr8	70573442	70608387	-	34946
## 721	ENSG00000067177	chrX	72578814	72714319	-	135506
## 722	ENSG00000067182	chr12	6328757	6342114	-	13358
## 723	ENSG00000067191	chr17	39173456	39197703	-	24248
## 724	ENSG00000067208	chr1	92508696	92792404	-	283709
## 725	ENSG00000067221	chr15	73978923	73994622	-	15700
## 726	ENSG00000067225	chr15	72199029	72231822	-	32794
## 727	ENSG00000067248	chr5	55256245	55307722	-	51478
## 728	ENSG00000067334	chr1	93866283	93879918	-	13636
## 729	ENSG00000067365	chr16	8621683	8649654	+	27972
## 730	ENSG00000067369	chr15	43403061	43510728	-	107668
## 731	ENSG00000067445	chrX	54920462	54931431	+	10970
## 732	ENSG00000067533	chr1	218285287	218337983	+	52697
## 733	ENSG00000067560	chr3	49359145	49412998	-	53854
## 734	ENSG00000067596	chr17	43483865	43544463	+	60599
## 735	ENSG00000067601	chr7	67295608	67302907	-	7300
## 736	ENSG00000067704	chr1	220094102	220148041	+	53940
## 737	ENSG00000067829	chrX	153785766	153794523	-	8758
## 738	ENSG00000067836	chr16	4796968	4802950	-	5983
## 739	ENSG00000067900	chr18	20946906	21111851	-	164946
## 740	ENSG00000067955	chr16	67029116	67101058	+	71943
## 741	ENSG00000067992	chrX	24465221	24539837	+	74617
## 742	ENSG00000068001	chr3	50317790	50322906	-	5117
## 743	ENSG00000068024	chr2	239048168	239401654	-	353487
## 744	ENSG00000068028	chr3	50329782	50340980	-	11199
## 745	ENSG00000068079	chr17	43006725	43014456	+	7732
## 746	ENSG00000068097	chr17	60043194	60078931	-	35738
## 747	ENSG00000068120	chr17	42561467	42566277	+	4811
## 748	ENSG00000068137	chr17	42667914	42676994	-	9081
## 749	ENSG00000068305	chr15	99565417	99716466	+	151050
## 750	ENSG00000068308	chrX	48922028	48958386	-	36359
## 751	ENSG00000068323	chrX	49028726	49043486	-	14761
## 752	ENSG00000068354	chrX	48539457	48562609	+	23153
## 753	ENSG00000068366	chrX	109624244	109733403	-	109160
## 754	ENSG00000068383	chr10	132537820	132783480	+	245661
## 755	ENSG00000068394	chrX	49113389	49123801	-	10413
## 756	ENSG00000068400	chrX	48973720	49002264	-	28545
## 757	ENSG00000068438	chrX	48476021	48486364	+	10344
## 758	ENSG00000068489	chr17	59155499	59204705	+	49207
## 759	ENSG00000068650	chr13	112690329	112887168	+	196840
## 760	ENSG00000068654	chr2	86020216	86106155	-	85940
## 761	ENSG00000068697	chr2	20032650	20052028	-	19379
## 762	ENSG00000068724	chr2	46916157	47076137	+	159981

## 763	ENSG00000068745	chr3	48688003	48740353	-	52351
## 764	ENSG00000068784	chr2	45388680	45612165	-	223486
## 765	ENSG00000068796	chr5	62306162	62537249	+	231088
## 766	ENSG00000068831	chr11	64726911	64745456	-	18546
## 767	ENSG00000068878	chr2	53864067	53970840	-	106774
## 768	ENSG00000068885	chr3	160256986	160399880	-	142895
## 769	ENSG00000068903	chr19	38878555	38899862	-	21308
## 770	ENSG00000068912	chr2	53787044	53818819	+	31776
## 771	ENSG00000068971	chr11	64917553	64934473	+	16921
## 772	ENSG00000069020	chr5	66596361	67169595	+	573235
## 773	ENSG00000069248	chr1	229440260	229508341	-	68082
## 774	ENSG00000069275	chr1	205712819	205750276	-	37458
## 775	ENSG00000069329	chr16	46656132	46689518	-	33387
## 776	ENSG00000069345	chr16	46955362	46973788	-	18427
## 777	ENSG00000069399	chr19	44747705	44760044	+	12340
## 778	ENSG00000069424	chr1	5991466	6101193	+	109728
## 779	ENSG00000069482	chr11	68683779	68691175	+	7397
## 780	ENSG00000069493	chr12	9664969	9699555	+	34587
## 781	ENSG00000069509	chrX	44523639	44543001	-	19363
## 782	ENSG00000069849	chr3	141876124	141926514	+	50391
## 783	ENSG00000069869	chr15	55826922	55993746	-	166825
## 784	ENSG00000069943	chr15	55318960	55355648	+	36689
## 785	ENSG00000069956	chr15	51952106	52067372	+	115267
## 786	ENSG00000069974	chr15	55202966	55319113	-	116148
## 787	ENSG00000069998	chr22	17137511	17165287	-	27777
## 788	ENSG00000070010	chr22	19449910	19479215	-	29306
## 789	ENSG00000070018	chr12	12116025	12267012	-	150988
## 790	ENSG00000070047	chr11	576486	612222	+	35737
## 791	ENSG00000070061	chr9	108867517	108934116	-	66600
## 792	ENSG00000070081	chr11	17208153	17349974	+	141822
## 793	ENSG00000070087	chr3	149964904	150050788	-	85885
## 794	ENSG00000070182	chr14	64746283	64879883	-	133601
## 795	ENSG00000070190	chr4	99816833	99870154	+	53322
## 796	ENSG00000070269	chr14	56488354	56650606	+	162253
## 797	ENSG00000070366	chr17	2059839	2303771	-	243933
## 798	ENSG00000070367	chr14	57200507	57269008	-	68502
## 799	ENSG00000070371	chr22	19179473	19291716	-	112244
## 800	ENSG00000070404	chr19	676365	683399	+	7035
## 801	ENSG00000070413	chr22	19036282	19122454	-	86173
## 802	ENSG00000070423	chr19	647526	663277	-	15752
## 803	ENSG00000070444	chr17	2384060	2401118	-	17059
## 804	ENSG00000070476	chr3	126437601	126475919	-	38319
## 805	ENSG00000070495	chr17	76712832	76726799	-	13968
## 806	ENSG00000070501	chr8	42338454	42371808	+	33355
## 807	ENSG00000070540	chr17	68420948	68457513	-	36566
## 808	ENSG00000070610	chr9	35736866	35749228	-	12363
## 809	ENSG00000070614	chr5	150485818	150558211	+	72394
## 810	ENSG00000070669	chr7	97852118	97872542	-	20425
## 811	ENSG00000070718	chr8	42152946	42171673	+	18728
## 812	ENSG00000070756	chr8	100685816	100722809	-	36994
## 813	ENSG00000070759	chr1	45343883	45491166	-	147284
## 814	ENSG00000070761	chr16	58113588	58129450	-	15863
## 815	ENSG00000070770	chr16	58157907	58197920	-	40014
## 816	ENSG00000070785	chr1	44850522	44986722	-	136201



## 817	ENSG00000070814	chr5	150357639	150400308	+	42670
## 818	ENSG00000070831	chr1	22052627	22092946	+	40320
## 819	ENSG00000070882	chr7	24796539	24981634	-	185096
## 820	ENSG00000070950	chr3	8775402	8963773	-	188372
## 821	ENSG00000070961	chr12	89588049	89709300	-	121252
## 822	ENSG00000071051	chr2	105744897	105894274	+	149378
## 823	ENSG00000071054	chr2	101696850	101894689	+	197840
## 824	ENSG00000071073	chr2	98619106	98731126	-	112021
## 825	ENSG00000071082	chr2	101001715	101024032	+	22318
## 826	ENSG00000071127	chr4	10074339	10116949	-	42611
## 827	ENSG00000071189	chr7	17790761	17940501	-	149741
## 828	ENSG00000071205	chr4	147732063	148072780	+	340718
## 829	ENSG00000071242	chr6	166409364	166906451	-	497088
## 830	ENSG00000071243	chr7	120950749	120977216	+	26468
## 831	ENSG00000071246	chr14	76762189	76783015	+	20827
## 832	ENSG00000071282	chr3	8501707	8574673	+	72967
## 833	ENSG00000071462	chr7	73683025	73705161	+	22137
## 834	ENSG00000071537	chr14	81471549	81533861	-	62313
## 835	ENSG00000071539	chr5	892643	919357	+	26715
## 836	ENSG00000071553	chrX	154428632	154436516	+	7885
## 837	ENSG00000071564	chr19	1609290	1652605	-	43316
## 838	ENSG00000071575	chr2	12716889	12742734	+	25846
## 839	ENSG00000071626	chr19	1407569	1435687	+	28119
## 840	ENSG00000071655	chr19	1573596	1592801	-	19206
## 841	ENSG00000071794	chr3	149030127	149086554	-	56428
## 842	ENSG00000071859	chrX	154444126	154450654	+	6529
## 843	ENSG00000071889	chrX	154506159	154516242	-	10084
## 844	ENSG00000071894	chr8	144393229	144409349	-	16121
## 845	ENSG00000071967	chr2	171522247	171558133	+	35887
## 846	ENSG00000071994	chr6	170575295	170584692	-	9398
## 847	ENSG00000072042	chr14	67676801	67695814	-	19014
## 848	ENSG00000072062	chr19	14091688	14118084	-	26397
## 849	ENSG00000072071	chr19	14147743	14206187	-	58445
## 850	ENSG00000072110	chr14	68874143	68979440	-	105298
## 851	ENSG00000072121	chr14	67727374	67816590	-	89217
## 852	ENSG00000072134	chr17	19215615	19336715	+	121101
## 853	ENSG00000072135	chr2	130356007	130375409	+	19403
## 854	ENSG00000072201	chr4	53459301	53701405	-	242105
## 855	ENSG00000072210	chr17	19648136	19677598	+	29463
## 856	ENSG00000072274	chr3	196027183	196082189	-	55007
## 857	ENSG00000072310	chr17	17810399	17837002	-	26604
## 858	ENSG00000072364	chr5	132875379	132963634	-	88256
## 859	ENSG00000072401	chr10	58334975	58370753	+	35779
## 860	ENSG00000072415	chr14	67241109	67335819	+	94711
## 861	ENSG00000072422	chr10	60869438	61001440	-	132003
## 862	ENSG00000072501	chrX	53374149	53422728	-	48580
## 863	ENSG00000072506	chrX	53431258	53434373	-	3116
## 864	ENSG00000072518	chr11	63838928	63911019	+	72092
## 865	ENSG00000072571	chr5	163460203	163491945	+	31743
## 866	ENSG00000072609	chr12	132822187	132956304	-	134118
## 867	ENSG00000072682	chr5	132191838	132295315	-	103478
## 868	ENSG00000072736	chr16	68084751	68229259	+	144509
## 869	ENSG00000072756	chr3	3126916	3150879	+	23964
## 870	ENSG00000072778	chr17	7217125	7225273	+	8149

## 871	ENSG00000072786	chr5	172042073	172188386	-	146314
## 872	ENSG00000072803	chr5	171861549	172006873	-	145325
## 873	ENSG00000072818	chr17	7336529	7351478	+	14950
## 874	ENSG00000072832	chr4	5748084	5893058	-	144975
## 875	ENSG00000072840	chr4	5711197	5814305	+	103109
## 876	ENSG00000072849	chr17	5471251	5486811	-	15561
## 877	ENSG00000072954	chr19	16661127	16690029	+	28903
## 878	ENSG00000072958	chr19	16197578	16245907	+	48330
## 879	ENSG00000073008	chr19	44643798	44663583	+	19786
## 880	ENSG00000073050	chr19	43543040	43580473	-	37434
## 881	ENSG00000073060	chr12	124776856	124882668	-	105813
## 882	ENSG00000073111	chr3	127598223	127622436	+	24214
## 883	ENSG00000073169	chr22	50200979	50217616	+	16638
## 884	ENSG00000073331	chr4	112285509	112442620	+	157112
## 885	ENSG00000073350	chr17	75525080	75575208	+	50129
## 886	ENSG00000073417	chr15	84980440	85139145	+	158706
## 887	ENSG00000073536	chr17	35128753	35142315	-	13563
## 888	ENSG00000073578	chr5	218241	256700	+	38460
## 889	ENSG00000073584	chr17	40624962	40648508	-	23547
## 890	ENSG00000073598	chr17	35121579	35130732	+	9154
## 891	ENSG00000073605	chr17	39904595	39919854	-	15260
## 892	ENSG00000073614	chr12	280129	389454	-	109326
## 893	ENSG00000073670	chr17	44759031	44781846	+	22816
## 894	ENSG00000073737	chr2	169064789	169096167	+	31379
## 895	ENSG00000073792	chr3	185643739	185825056	-	181318
## 896	ENSG00000073803	chr3	185282941	185489097	+	206157
## 897	ENSG00000073849	chr3	186930485	187078553	+	148069
## 898	ENSG00000073905	chrX	80929500	80930347	+	848
## 899	ENSG00000073910	chr13	32031300	32299122	+	267823
## 900	ENSG00000073921	chr11	85957684	86069882	-	112199
## 901	ENSG00000073969	chr17	46590669	46757464	+	166796
## 902	ENSG00000074054	chr2	121337776	121649587	-	311812
## 903	ENSG00000074071	chr16	1771890	1773155	-	1266
## 904	ENSG00000074181	chr19	15159038	15200981	-	41944
## 905	ENSG00000074201	chr11	77514936	77637805	-	122870
## 906	ENSG00000074266	chr11	86244544	86278813	+	34270
## 907	ENSG00000074319	chr11	18468336	18527232	-	58897
## 908	ENSG00000074356	chr17	3802165	3846251	-	44087
## 909	ENSG00000074370	chr17	3923870	3964464	-	40595
## 910	ENSG00000074416	chr3	127689062	127823250	-	134189
## 911	ENSG00000074582	chr2	218658764	218663443	+	4680
## 912	ENSG00000074603	chr15	65442463	65517704	-	75242
## 913	ENSG00000074621	chr15	65611366	65660995	+	49630
## 914	ENSG00000074695	chr18	59327823	59359962	-	32140
## 915	ENSG00000074696	chr15	65530418	65578352	+	47935
## 916	ENSG00000074706	chr6	154154496	154356792	-	202297
## 917	ENSG00000074755	chr17	4004445	4143020	-	138576
## 918	ENSG00000074800	chr1	8861002	8879249	-	18248
## 919	ENSG00000074842	chr19	4641374	4670370	-	28997
## 920	ENSG00000074855	chr19	17323223	17334829	-	11607
## 921	ENSG00000074935	chr6	112070777	112087529	-	16753
## 922	ENSG00000074966	chr4	48066393	48134256	-	67864
## 923	ENSG00000075089	chr12	100199122	100241865	+	42744
## 924	ENSG00000075131	chr15	66336206	66386746	-	50541

## 925	ENSG00000075142	chr7	88205118	88226993	-	21876
## 926	ENSG00000075151	chr1	20806292	21176888	-	370597
## 927	ENSG00000075188	chr12	102073103	102120124	-	47022
## 928	ENSG00000075218	chr22	46296741	46330810	+	34070
## 929	ENSG00000075234	chr22	46267961	46294008	+	26048
## 930	ENSG00000075239	chr11	108121516	108147776	+	26261
## 931	ENSG00000075240	chr22	46576012	46679790	+	103779
## 932	ENSG00000075275	chr22	46360834	46537170	-	176337
## 933	ENSG00000075292	chr2	71276561	71435069	+	158509
## 934	ENSG00000075303	chr7	87833568	87876357	-	42790
## 935	ENSG00000075336	chr18	74148511	74160530	+	12020
## 936	ENSG00000075391	chr1	178094141	178484147	+	390007
## 937	ENSG00000075399	chr16	89707134	89720986	-	13853
## 938	ENSG00000075407	chr10	38094334	38150293	+	55960
## 939	ENSG00000075413	chr14	103385392	103503831	+	118440
## 940	ENSG00000075415	chr12	98593591	98606379	+	12789
## 941	ENSG00000075420	chr3	172039628	172401665	+	362038
## 942	ENSG00000075426	chr2	28392448	28417312	+	24865
## 943	ENSG00000075539	chr4	48497361	48780322	-	282962
## 944	ENSG00000075568	chr2	97756333	97995891	-	239559
## 945	ENSG00000075618	chr7	5592823	5606655	+	13833
## 946	ENSG00000075624	chr7	5527151	5563784	-	36634
## 947	ENSG00000075651	chr3	171600405	171810950	-	210546
## 948	ENSG00000075702	chr19	36054881	36105106	+	50226
## 949	ENSG00000075711	chr3	197042560	197299300	-	256741
## 950	ENSG00000075785	chr3	128726122	128814796	+	88675
## 951	ENSG00000075790	chr7	107579977	107629170	+	49194
## 952	ENSG00000075826	chr10	100486642	100519864	-	33223
## 953	ENSG00000075856	chr12	108522580	108561400	-	38821
## 954	ENSG00000075884	chr2	143091362	143768352	+	676991
## 955	ENSG00000075914	chr3	44975241	45036066	+	60826
## 956	ENSG00000075945	chr1	169921326	170085208	-	163883
## 957	ENSG00000075975	chr3	12557014	12583713	+	26700
## 958	ENSG00000076003	chr2	135839626	135876426	-	36801
## 959	ENSG00000076043	chr11	114439386	114450279	+	10894
## 960	ENSG00000076053	chr11	114400030	114414203	+	14174
## 961	ENSG00000076067	chr12	56521929	56596196	+	74268
## 962	ENSG00000076108	chr12	56595596	56636816	-	41221
## 963	ENSG00000076201	chr3	47381011	47413441	+	32431
## 964	ENSG00000076242	chr3	36993332	37050918	+	57587
## 965	ENSG00000076248	chr12	109097574	109110992	+	13419
## 966	ENSG00000076321	chr1	173714941	173786702	+	71762
## 967	ENSG00000076351	chr17	28394756	28407197	-	12442
## 968	ENSG00000076382	chr17	28577565	28599279	-	21715
## 969	ENSG00000076513	chr12	109999186	110039763	+	40578
## 970	ENSG00000076555	chr12	109116595	109268226	+	151632
## 971	ENSG00000076604	chr17	28743984	28750958	+	6975
## 972	ENSG00000076641	chr8	80967810	81112068	-	144259
## 973	ENSG00000076650	chr19	33080880	33130542	+	49663
## 974	ENSG00000076662	chr19	10333776	10339823	-	6048
## 975	ENSG00000076685	chr10	103088017	103193306	-	105290
## 976	ENSG00000076770	chrX	132369317	132489968	-	120652
## 977	ENSG00000076924	chr19	7619525	7629565	-	10041
## 978	ENSG00000076928	chr19	41883161	41930150	+	46990

## 979	ENSG00000076944	chr19	7636881	7647873	+	10993
## 980	ENSG00000076984	chr19	7903843	7914478	+	10636
## 981	ENSG00000077044	chr2	233354507	233472104	+	117598
## 982	ENSG00000077097	chr3	25597905	25664939	-	67035
## 983	ENSG00000077147	chr10	96518109	96587452	-	69344
## 984	ENSG00000077150	chr10	102394110	102402529	+	8420
## 985	ENSG00000077152	chr1	202331657	202341980	-	10324
## 986	ENSG00000077157	chr1	202348699	202592706	+	244008
## 987	ENSG00000077232	chr2	182716041	182794464	+	78424
## 988	ENSG00000077235	chr16	27459555	27549913	-	90359
## 989	ENSG00000077238	chr16	27313668	27364778	+	51111
## 990	ENSG00000077254	chr1	77695987	77759852	-	63866
## 991	ENSG00000077312	chr19	40750637	40765389	+	14753
## 992	ENSG00000077348	chr19	41386374	41397479	-	11106
## 993	ENSG00000077380	chr2	171687409	171748420	+	61012
## 994	ENSG00000077420	chr10	26438203	26567803	+	129601
## 995	ENSG00000077454	chr7	100574011	100586153	-	12143
## 996	ENSG00000077458	chr11	95768942	95790409	-	21468
## 997	ENSG00000077463	chr19	4174109	4182604	-	8496
## 998	ENSG00000077514	chr11	74493851	74669117	+	175267
## 999	ENSG00000077549	chr1	19338776	19485539	-	146764
## 1000	ENSG00000077585	chr1	236142505	236221865	+	79361
## 1001	ENSG00000077684	chr4	128809623	128875224	+	65602
## 1002	ENSG00000077713	chrX	119399060	119454478	+	55419
## 1003	ENSG00000077721	chrX	119574467	119591083	+	16617
## 1004	ENSG00000077782	chr8	38411138	38468834	-	57697
## 1005	ENSG00000077984	chr20	24949230	24959928	+	10699
## 1006	ENSG00000078043	chr18	46803224	46920160	-	116937
## 1007	ENSG00000078061	chrX	47561100	47571920	+	10821
## 1008	ENSG00000078070	chr3	183015218	183116075	-	100858
## 1009	ENSG00000078124	chr11	76860867	77026797	+	165931
## 1010	ENSG00000078140	chr4	39698044	39782792	+	84749
## 1011	ENSG00000078142	chr18	41955206	42087830	+	132625
## 1012	ENSG00000078177	chr4	40056826	40158252	+	101427
## 1013	ENSG00000078237	chr12	4307763	4354593	+	46831
## 1014	ENSG00000078246	chr12	2877223	2941140	+	63918
## 1015	ENSG00000078269	chr6	157981887	158099176	+	117290
## 1016	ENSG00000078304	chr14	101761798	101927989	+	166192
## 1017	ENSG00000078319	chr7	100320992	100341908	-	20917
## 1018	ENSG00000078369	chr1	1785285	1891117	-	105833
## 1019	ENSG00000078403	chr10	21524675	21743630	+	218956
## 1020	ENSG00000078487	chr7	100400826	100428992	-	28167
## 1021	ENSG00000078596	chrX	79360384	79367667	-	7284
## 1022	ENSG00000078618	chr1	51789191	51878937	-	89747
## 1023	ENSG00000078668	chr8	42391624	42405897	+	14274
## 1024	ENSG00000078674	chr8	17922840	18029944	+	107105
## 1025	ENSG00000078687	chr17	77959240	78108835	+	149596
## 1026	ENSG00000078699	chr20	33490075	33650036	+	159962
## 1027	ENSG00000078747	chr20	34363235	34511393	+	148159
## 1028	ENSG00000078795	chr5	137887968	137942747	+	54780
## 1029	ENSG00000078804	chr20	34704290	34713439	+	9150
## 1030	ENSG00000078808	chr1	1216908	1232031	-	15124
## 1031	ENSG00000078902	chr11	1274371	1309654	-	35284
## 1032	ENSG00000078967	chr7	43926438	43956136	+	29699

## 1033	ENSG00000079102	chr8	91954967	92103286	-	148320
## 1034	ENSG00000079134	chr18	214520	268050	-	53531
## 1035	ENSG00000079150	chr2	178463664	178478600	-	14937
## 1036	ENSG00000079246	chr2	216107464	216206303	+	98840
## 1037	ENSG00000079257	chr3	158645822	158672693	-	26872
## 1038	ENSG00000079277	chr1	46557408	46616843	-	59436
## 1039	ENSG00000079308	chr2	217799789	218002995	-	203207
## 1040	ENSG00000079313	chr19	1815246	1848463	-	33218
## 1041	ENSG00000079332	chr10	70147289	70170523	-	23235
## 1042	ENSG00000079335	chr1	100345025	100520277	+	175253
## 1043	ENSG00000079337	chr12	47734367	47771040	-	36674
## 1044	ENSG00000079387	chr12	48042898	48106308	-	63411
## 1045	ENSG00000079432	chr19	42268537	42295797	+	27261
## 1046	ENSG00000079435	chr19	42401507	42427426	-	25920
## 1047	ENSG00000079459	chr8	11795573	11839309	+	43737
## 1048	ENSG00000079462	chr19	42297033	42303546	-	6514
## 1049	ENSG00000079482	chrX	68042344	68433913	-	391570
## 1050	ENSG00000079616	chr16	29790719	29805385	+	14667
## 1051	ENSG00000079739	chr1	63593276	63660245	+	66970
## 1052	ENSG00000079785	chr2	15591178	15631111	+	39934
## 1053	ENSG00000079805	chr19	10718079	10833488	+	115410
## 1054	ENSG00000079819	chr6	130839347	131063322	-	223976
## 1055	ENSG00000079950	chr6	132445867	132513198	-	67332
## 1056	ENSG00000079974	chr22	50767501	50783663	-	16163
## 1057	ENSG00000079999	chr19	10486120	10503741	-	17622
## 1058	ENSG00000080189	chr20	46345980	46364458	-	18479
## 1059	ENSG00000080200	chr3	97822040	97944963	+	122924
## 1060	ENSG00000080345	chr2	151409883	151508013	+	98131
## 1061	ENSG00000080371	chr12	71754874	71800285	+	45412
## 1062	ENSG00000080503	chr9	1980290	2193624	+	213335
## 1063	ENSG00000080546	chr6	108986437	109094819	-	108383
## 1064	ENSG00000080561	chrX	107825755	107927193	+	101439
## 1065	ENSG00000080603	chr16	30698209	30741409	+	43201
## 1066	ENSG00000080608	chr9	2720469	2844241	-	123773
## 1067	ENSG00000080802	chr7	135361795	135510127	-	148333
## 1068	ENSG00000080815	chr14	73136418	73223691	+	87274
## 1069	ENSG00000080819	chr3	98521132	98593723	-	72592
## 1070	ENSG00000080822	chr3	98497912	98523066	-	25155
## 1071	ENSG00000080824	chr14	102080738	102139699	-	58962
## 1072	ENSG00000080839	chr20	36996349	37095995	-	99647
## 1073	ENSG00000080845	chr20	36306336	36528637	+	222302
## 1074	ENSG00000080947	chr1	16467436	16499257	-	31822
## 1075	ENSG00000080986	chr18	2571511	2616635	+	45125
## 1076	ENSG00000081014	chr15	50908672	51005900	+	97229
## 1077	ENSG00000081019	chr1	113761832	113812476	-	50645
## 1078	ENSG00000081026	chr1	113390749	113685923	+	295175
## 1079	ENSG00000081087	chr6	108041409	108165854	-	124446
## 1080	ENSG00000081154	chr3	101574095	101594437	+	20343
## 1081	ENSG00000081177	chr14	69191511	69244020	+	52510
## 1082	ENSG00000081181	chr14	67619798	67651720	+	31923
## 1083	ENSG00000081189	chr5	88717117	88904257	-	187141
## 1084	ENSG00000081237	chr1	198638671	198757283	+	118613
## 1085	ENSG00000081307	chr3	132654446	132678097	+	23652
## 1086	ENSG00000081320	chr2	196133566	196176503	-	42938

## 1087	ENSG00000081386	chr9	96755865	96778129	-	22265
## 1088	ENSG00000081665	chr19	19785839	19821751	-	35913
## 1089	ENSG00000081692	chr1	227730425	227735411	-	4987
## 1090	ENSG00000081721	chr1	161749758	161757238	+	7481
## 1091	ENSG00000081760	chr12	125065379	125143333	+	77955
## 1092	ENSG00000081791	chr5	141923808	141942047	+	18240
## 1093	ENSG00000081853	chr5	141338760	141512979	+	174220
## 1094	ENSG00000081870	chr1	53916574	53945929	-	29356
## 1095	ENSG00000081913	chr18	62715450	62980433	+	264984
## 1096	ENSG00000081985	chr1	67307364	67396900	+	89537
## 1097	ENSG00000082014	chr7	151238764	151277896	-	39133
## 1098	ENSG00000082068	chr5	37379212	37753435	+	374224
## 1099	ENSG00000082074	chr5	39105236	39274528	-	169293
## 1100	ENSG00000082146	chr2	201387858	201480846	+	92989
## 1101	ENSG00000082153	chr2	200810594	200827338	+	16745
## 1102	ENSG00000082196	chr5	34019448	34043832	-	24385
## 1103	ENSG00000082212	chr18	50879049	50954257	+	75209
## 1104	ENSG00000082213	chr5	31532266	31555058	+	22793
## 1105	ENSG00000082258	chr2	134918235	134959342	+	41108
## 1106	ENSG00000082269	chr6	70412941	70561174	+	148234
## 1107	ENSG00000082515	chr5	154941070	154969411	+	28342
## 1108	ENSG00000082516	chr5	154887416	154938209	-	50794
## 1109	ENSG00000082641	chr17	48048329	48061487	+	13159
## 1110	ENSG00000082701	chr3	119821323	120094417	-	273095
## 1111	ENSG00000082805	chr12	990509	1495933	+	505425
## 1112	ENSG00000082898	chr2	61477849	61538626	-	60778
## 1113	ENSG00000082996	chr3	149812708	149962139	+	149432
## 1114	ENSG00000083093	chr16	23603160	23641310	-	38151
## 1115	ENSG00000083097	chr6	83067666	83171350	+	103685
## 1116	ENSG00000083099	chr6	89568144	89638753	-	70610
## 1117	ENSG00000083123	chr6	80106647	80346270	+	239624
## 1118	ENSG00000083168	chr8	41929479	42051990	-	122512
## 1119	ENSG00000083223	chr9	86287733	86354454	-	66722
## 1120	ENSG00000083312	chr5	72816312	72916733	+	100422
## 1121	ENSG00000083444	chr1	11934205	11975538	+	41334
## 1122	ENSG00000083454	chr17	3672199	3696404	-	24206
## 1123	ENSG00000083457	chr17	3714628	3801243	-	86616
## 1124	ENSG00000083520	chr13	72752169	72782096	-	29928
## 1125	ENSG00000083535	chr13	72782059	73016461	+	234403
## 1126	ENSG00000083544	chr13	60396457	60573878	+	177422
## 1127	ENSG00000083635	chr13	44939249	44989483	-	50235
## 1128	ENSG00000083642	chr13	32586427	32778019	+	191593
## 1129	ENSG00000083720	chr5	41730065	41870519	-	140455
## 1130	ENSG00000083750	chrX	55717739	55758774	+	41036
## 1131	ENSG00000083799	chr16	50742050	50801935	+	59886
## 1132	ENSG00000083807	chr19	58479512	58512413	-	32902
## 1133	ENSG00000083812	chr19	58467045	58475436	+	8392
## 1134	ENSG00000083814	chr19	57719751	57727624	-	7874
## 1135	ENSG00000083817	chr19	57571566	57578927	-	7362
## 1136	ENSG00000083828	chr19	57769655	57819939	+	50285
## 1137	ENSG00000083838	chr19	58474017	58481230	+	7214
## 1138	ENSG00000083844	chr19	57191500	57222846	+	31347
## 1139	ENSG00000083845	chr19	58386400	58394806	+	8407
## 1140	ENSG00000083896	chr4	68310387	68350089	-	39703

## 1141	ENSG00000083937	chr3	87227271	87255548	+	28278
## 1142	ENSG00000084070	chr1	40344850	40423326	+	78477
## 1143	ENSG00000084072	chr1	39692182	39763914	+	71733
## 1144	ENSG00000084073	chr1	40258107	40294184	+	36078
## 1145	ENSG00000084090	chr2	96184859	96208825	-	23967
## 1146	ENSG00000084092	chr4	56963370	56978823	-	15454
## 1147	ENSG00000084093	chr4	56907876	56935844	+	27969
## 1148	ENSG00000084110	chr12	95972662	95996365	-	23704
## 1149	ENSG00000084112	chr12	108778192	108857590	-	79399
## 1150	ENSG00000084207	chr11	67583595	67586660	+	3066
## 1151	ENSG00000084234	chr11	130069837	130144811	+	74975
## 1152	ENSG00000084444	chr12	13044284	13142521	+	98238
## 1153	ENSG00000084463	chr12	14784579	14803540	-	18962
## 1154	ENSG00000084623	chr1	32221928	32231604	+	9677
## 1155	ENSG00000084652	chr1	32179686	32198285	+	18600
## 1156	ENSG00000084676	chr2	24491914	24770702	+	278789
## 1157	ENSG00000084693	chr2	27042364	27070622	+	28259
## 1158	ENSG00000084731	chr2	25926596	25982749	-	56154
## 1159	ENSG00000084733	chr2	26034107	26137454	+	103348
## 1160	ENSG00000084754	chr2	26190635	26244726	-	54092
## 1161	ENSG00000084774	chr2	27217390	27243943	+	26554
## 1162	ENSG00000085063	chr11	33698261	33736445	-	38185
## 1163	ENSG00000085117	chr11	44564427	44620363	+	55937
## 1164	ENSG00000085185	chrX	129981107	130058083	+	76977
## 1165	ENSG00000085224	chrX	77504878	77786269	-	281392
## 1166	ENSG00000085231	chr5	69350984	69370013	-	19030
## 1167	ENSG00000085274	chr3	169772831	169789716	+	16886
## 1168	ENSG00000085365	chr5	78360583	78479071	+	118489
## 1169	ENSG00000085377	chr6	105277565	105403084	-	125520
## 1170	ENSG00000085382	chr6	104728093	104859919	-	131827
## 1171	ENSG00000085415	chr18	12947133	12987536	+	40404
## 1172	ENSG00000085433	chr1	108970214	109042113	-	71900
## 1173	ENSG00000085449	chr2	223855716	223945387	-	89672
## 1174	ENSG00000085491	chr1	108134036	108200849	-	66814
## 1175	ENSG00000085511	chr6	160991727	161117385	+	125659
## 1176	ENSG00000085514	chr7	100367530	100400099	+	32570
## 1177	ENSG00000085563	chr7	87503633	87713323	-	209691
## 1178	ENSG00000085644	chr16	3129777	3142805	+	13029
## 1179	ENSG00000085662	chr7	134442350	134459284	-	16935
## 1180	ENSG00000085719	chr8	86514427	86561498	+	47072
## 1181	ENSG00000085721	chr16	15060022	15094317	-	34296
## 1182	ENSG00000085733	chr11	70398404	70436584	+	38181
## 1183	ENSG00000085741	chr11	76186325	76210736	-	24412
## 1184	ENSG00000085760	chr2	55236595	55269347	-	32753
## 1185	ENSG00000085788	chr8	38225218	38275558	+	50341
## 1186	ENSG00000085832	chr1	51354263	51519328	-	165066
## 1187	ENSG00000085840	chr1	52372829	52404459	-	31631
## 1188	ENSG00000085871	chr4	139665768	139740745	+	74978
## 1189	ENSG00000085872	chr19	16517889	16542530	-	24642
## 1190	ENSG00000085978	chr2	233210051	233295674	+	85624
## 1191	ENSG00000085982	chr2	233475520	233566782	-	91263
## 1192	ENSG00000085998	chr1	46188682	46220305	-	31624
## 1193	ENSG00000085999	chr1	46247688	46278473	+	30786
## 1194	ENSG00000086015	chr1	45786987	46036124	+	249138

## 1195	ENSG00000086061	chr9	33025211	33039907	+	14697
## 1196	ENSG00000086062	chr9	33104082	33167356	-	63275
## 1197	ENSG00000086065	chr9	33264879	33282069	+	17191
## 1198	ENSG00000086102	chr9	33290511	33371157	+	80647
## 1199	ENSG00000086189	chr5	62387254	62403939	-	16686
## 1200	ENSG00000086200	chr5	62403972	62628582	+	224611
## 1201	ENSG00000086232	chr7	6022244	6059230	-	36987
## 1202	ENSG00000086289	chr7	37683843	37951941	+	268099
## 1203	ENSG00000086300	chr7	26291895	26374329	+	82435
## 1204	ENSG00000086475	chr10	13317424	13348298	-	30875
## 1205	ENSG00000086504	chr16	367384	370527	-	3144
## 1206	ENSG00000086506	chr16	180453	181181	+	729
## 1207	ENSG00000086544	chr19	40717103	40740860	+	23758
## 1208	ENSG00000086548	chr19	41750977	41772208	+	21232
## 1209	ENSG00000086589	chr5	150690794	150701107	-	10314
## 1210	ENSG00000086598	chr12	123584531	123598577	+	14047
## 1211	ENSG00000086619	chr1	236215555	236281985	-	66431
## 1212	ENSG00000086666	chr15	80059568	80138393	+	78826
## 1213	ENSG00000086712	chrX	16786427	16844519	+	58093
## 1214	ENSG00000086730	chr7	74199652	74229834	+	30183
## 1215	ENSG00000086758	chrX	53532096	53686729	-	154634
## 1216	ENSG00000086827	chr11	113733187	113773811	-	40625
## 1217	ENSG00000086848	chr11	111782195	111871581	-	89387
## 1218	ENSG00000087008	chr4	8366282	8440723	-	74442
## 1219	ENSG00000087053	chr11	95832882	95925315	-	92434
## 1220	ENSG00000087074	chr19	48872392	48876057	+	3666
## 1221	ENSG00000087077	chr7	100867138	100873454	+	6317
## 1222	ENSG00000087086	chr19	48965301	48966878	+	1578
## 1223	ENSG00000087087	chr7	100875111	100888664	+	13554
## 1224	ENSG00000087088	chr19	48954815	48961798	+	6984
## 1225	ENSG00000087095	chr17	28041737	28196381	+	154645
## 1226	ENSG00000087111	chr17	28553383	28571872	-	18490
## 1227	ENSG00000087152	chr17	44191805	44200113	-	8309
## 1228	ENSG00000087157	chr17	78378640	78425114	+	46475
## 1229	ENSG00000087191	chr17	63827152	63832026	+	4875
## 1230	ENSG00000087206	chr5	176905005	177022633	-	117629
## 1231	ENSG00000087253	chr16	55508998	55586670	+	77673
## 1232	ENSG00000087263	chr16	56451490	56479100	+	27611
## 1233	ENSG00000087266	chr4	2793023	2841098	+	48076
## 1234	ENSG00000087269	chr4	2937933	2963385	-	25453
## 1235	ENSG00000087274	chr4	2843857	2930076	+	86220
## 1236	ENSG00000087299	chr14	50237563	50312548	-	74986
## 1237	ENSG00000087301	chr14	52430590	52552522	-	121933
## 1238	ENSG00000087302	chr14	51989475	52010691	+	21217
## 1239	ENSG00000087303	chr14	52004803	52069228	-	64426
## 1240	ENSG00000087338	chr2	69829642	69881396	+	51755
## 1241	ENSG00000087365	chr11	66050729	66069308	+	18580
## 1242	ENSG00000087448	chr12	27780020	27803040	+	23021
## 1243	ENSG00000087460	chr20	58839718	58911192	+	71475
## 1244	ENSG00000087470	chr12	32679200	32745650	+	66451
## 1245	ENSG00000087502	chr12	29337352	29381189	-	43838
## 1246	ENSG00000087586	chr20	56369389	56392337	-	22949
## 1247	ENSG00000087589	chr20	56412112	56460387	+	48276
## 1248	ENSG00000087842	chrX	15384799	15493564	-	108766



## 1249	ENSG00000087884	chr11	77821109	77918432	+	97324
## 1250	ENSG00000087903	chr19	5993164	6199572	-	206409
## 1251	ENSG00000087995	chr17	62423867	62450822	+	26956
## 1252	ENSG00000088035	chr1	63367590	63438562	+	70973
## 1253	ENSG00000088038	chr19	54137728	54155681	+	17954
## 1254	ENSG00000088179	chr2	119759631	119983818	+	224188
## 1255	ENSG00000088205	chr2	117814650	117832379	+	17730
## 1256	ENSG00000088247	chr19	6413348	6424794	-	11447
## 1257	ENSG00000088256	chr19	3094410	3124004	+	29595
## 1258	ENSG00000088298	chr20	35115357	35147364	-	32008
## 1259	ENSG00000088305	chr20	32762385	32809356	+	46972
## 1260	ENSG00000088325	chr20	31739271	31801805	+	62535
## 1261	ENSG00000088356	chr20	31944342	31952092	-	7751
## 1262	ENSG00000088448	chr13	110878540	110915069	-	36530
## 1263	ENSG00000088451	chr13	94574051	94596257	-	22207
## 1264	ENSG00000088543	chr3	50558025	50571027	-	13003
## 1265	ENSG00000088682	chr16	57447425	57461275	+	13851
## 1266	ENSG00000088727	chr3	47228026	47283451	-	55426
## 1267	ENSG00000088766	chr20	6006090	6040053	+	33964
## 1268	ENSG00000088812	chr20	3471040	3651122	+	180083
## 1269	ENSG00000088832	chr20	1368978	1393172	-	24195
## 1270	ENSG00000088833	chr20	1442162	1473842	-	31681
## 1271	ENSG00000088836	chr20	3227417	3239190	-	11774
## 1272	ENSG00000088854	chr20	3249305	3407625	-	158321
## 1273	ENSG00000088876	chr20	2481817	2524702	-	42886
## 1274	ENSG00000088882	chr20	2794069	2800637	-	6569
## 1275	ENSG00000088888	chr20	3846799	3876123	+	29325
## 1276	ENSG00000088899	chr20	3162617	3173592	-	10976
## 1277	ENSG00000088930	chr20	21303304	21389827	+	86524
## 1278	ENSG00000088970	chr20	21125983	21246622	+	120640
## 1279	ENSG00000088986	chr12	120469850	120498493	+	28644
## 1280	ENSG00000088992	chr12	117038923	117099479	-	60557
## 1281	ENSG00000089006	chr20	17941597	17968980	-	27384
## 1282	ENSG00000089009	chr12	112405190	112418838	-	13649
## 1283	ENSG00000089022	chr12	111841978	111902238	+	60261
## 1284	ENSG00000089041	chr12	121132819	121188032	+	55214
## 1285	ENSG00000089048	chr20	13714322	13784886	-	70565
## 1286	ENSG00000089050	chr20	18486540	18497243	-	10704
## 1287	ENSG00000089053	chr12	121308245	121399896	-	91652
## 1288	ENSG00000089057	chr20	4852356	5010293	-	157938
## 1289	ENSG00000089060	chr12	113298759	113359493	-	60735
## 1290	ENSG00000089063	chr20	5068232	5113103	-	44872
## 1291	ENSG00000089094	chr12	121429097	121581015	-	151919
## 1292	ENSG00000089123	chr20	13389392	13638940	-	249549
## 1293	ENSG00000089154	chr12	120127203	120194710	-	67508
## 1294	ENSG00000089157	chr12	120196686	120201235	-	4550
## 1295	ENSG00000089159	chr12	120210439	120265771	-	55333
## 1296	ENSG00000089177	chr20	16272104	16573434	-	301331
## 1297	ENSG00000089195	chr20	5937235	5950558	-	13324
## 1298	ENSG00000089220	chr12	118135858	118145584	+	9727
## 1299	ENSG00000089234	chr12	111642146	111685986	-	43841
## 1300	ENSG00000089248	chr12	112013316	112023451	+	10136
## 1301	ENSG00000089280	chr16	31180110	31194871	+	14762
## 1302	ENSG00000089289	chrX	70133449	70166324	+	32876

## 1303	ENSG00000089327	chr19	35154730	35169883	+	15154
## 1304	ENSG00000089335	chr19	34677639	34686397	+	8759
## 1305	ENSG00000089351	chr19	34994784	35026471	+	31688
## 1306	ENSG00000089486	chr16	4510675	4538828	-	28154
## 1307	ENSG00000089505	chr16	66566393	66579137	+	12745
## 1308	ENSG00000089558	chr17	42156891	42181278	-	24388
## 1309	ENSG00000089597	chr11	62624826	62646726	-	21901
## 1310	ENSG00000089639	chr19	19629476	19643667	-	14192
## 1311	ENSG00000089682	chrX	107064420	107118823	-	54404
## 1312	ENSG00000089685	chr17	78214186	78225636	+	11451
## 1313	ENSG00000089692	chr12	6772512	6778455	+	5944
## 1314	ENSG00000089693	chr12	6747996	6767475	-	19480
## 1315	ENSG00000089737	chr14	94048291	94081245	-	32955
## 1316	ENSG00000089775	chr14	64449106	64505213	-	56108
## 1317	ENSG00000089818	chr12	8082211	8097771	+	15561
## 1318	ENSG00000089820	chrX	153907367	153934999	-	27633
## 1319	ENSG00000089876	chr10	125836337	125896436	-	60100
## 1320	ENSG00000089902	chr14	102592661	102730576	+	137916
## 1321	ENSG00000089916	chr14	76151916	76254342	+	102427
## 1322	ENSG00000090006	chr19	40592883	40629818	+	36936
## 1323	ENSG00000090013	chr19	40447789	40465840	-	18052
## 1324	ENSG00000090020	chr1	27098815	27166981	-	68167
## 1325	ENSG00000090054	chr9	92031999	92115384	-	83386
## 1326	ENSG00000090060	chr14	96501433	96567111	+	65679
## 1327	ENSG00000090061	chr14	99481169	99535044	+	53876
## 1328	ENSG00000090097	chr3	51957454	51974016	-	16563
## 1329	ENSG00000090263	chr7	141002610	141015228	-	12619
## 1330	ENSG00000090266	chr7	140690777	140722790	+	32014
## 1331	ENSG00000090273	chr1	26900238	26946862	+	46625
## 1332	ENSG00000090316	chr4	1289851	1340147	+	50297
## 1333	ENSG00000090339	chr19	10270835	10286615	+	15781
## 1334	ENSG00000090372	chr19	46719507	46746994	-	27488
## 1335	ENSG00000090376	chr12	66188879	66254622	+	65744
## 1336	ENSG00000090382	chr12	69348341	69354234	+	5894
## 1337	ENSG00000090432	chr1	20499448	20508161	-	8714
## 1338	ENSG00000090447	chr16	4257186	4273075	-	15890
## 1339	ENSG00000090470	chr15	65117379	65133836	-	16458
## 1340	ENSG00000090487	chr15	64963021	64990310	-	27290
## 1341	ENSG00000090520	chr3	186567403	186585800	+	18398
## 1342	ENSG00000090554	chr19	49474207	49486231	+	12025
## 1343	ENSG00000090581	chr16	1351923	1364113	+	12191
## 1344	ENSG00000090612	chr12	133181409	133214831	+	33423
## 1345	ENSG00000090615	chr12	132768909	132828858	-	59950
## 1346	ENSG00000090621	chr1	39560816	39576790	-	15975
## 1347	ENSG00000090661	chr19	8206736	8262421	+	55686
## 1348	ENSG00000090674	chr19	7522626	7534009	+	11384
## 1349	ENSG00000090686	chr1	21678298	21783606	-	105309
## 1350	ENSG00000090776	chrX	68828997	68842147	+	13151
## 1351	ENSG00000090857	chr16	70113626	70162537	+	48912
## 1352	ENSG00000090861	chr16	70252295	70289543	-	37249
## 1353	ENSG00000090863	chr16	74447427	74607144	-	159718
## 1354	ENSG00000090889	chrX	70290090	70420832	+	130743
## 1355	ENSG00000090905	chr16	24610209	24827632	+	217424
## 1356	ENSG00000090924	chr19	39412585	39428415	+	15831

## 1357	ENSG00000090932	chr19	39498895	39508481	+	9587
## 1358	ENSG00000090971	chr19	55485004	55487568	+	2565
## 1359	ENSG00000090975	chr12	122983480	123150015	-	166536
## 1360	ENSG00000090989	chr4	55853616	55905034	+	51419
## 1361	ENSG00000091009	chr5	146203600	146289132	+	85533
## 1362	ENSG00000091039	chr12	76351797	76559809	-	208013
## 1363	ENSG00000091073	chr7	76461676	76505995	+	44320
## 1364	ENSG00000091106	chr2	32224453	32265854	-	41402
## 1365	ENSG00000091127	chr7	105439661	105522267	-	82607
## 1366	ENSG00000091136	chr7	107923799	108003255	-	79457
## 1367	ENSG00000091140	chr7	107890970	107931730	+	40761
## 1368	ENSG00000091157	chr18	56651343	57036606	+	385264
## 1369	ENSG00000091164	chr18	56597208	56651600	-	54393
## 1370	ENSG00000091317	chr3	32481312	32503408	-	22097
## 1371	ENSG00000091409	chr2	172427354	172506282	+	78929
## 1372	ENSG00000091436	chr2	173075435	173268010	+	192576
## 1373	ENSG00000091483	chr1	241497603	241519761	-	22159
## 1374	ENSG00000091527	chr3	133573730	133590261	+	16532
## 1375	ENSG00000091542	chr17	18183078	18209954	+	26877
## 1376	ENSG00000091640	chr17	4959226	4967872	-	8647
## 1377	ENSG00000091651	chr16	46689643	46698394	+	8752
## 1378	ENSG00000091732	chr7	130018286	130051451	-	33166
## 1379	ENSG00000091947	chr17	44011188	44023946	-	12759
## 1380	ENSG00000091972	chr3	112332347	112362812	+	30466
## 1381	ENSG00000092010	chr14	24136158	24138967	+	2810
## 1382	ENSG00000092020	chr14	35085467	35122517	-	37051
## 1383	ENSG00000092036	chr14	22946228	22957161	-	10934
## 1384	ENSG00000092067	chr14	23117304	23119616	-	2313
## 1385	ENSG00000092094	chr14	20446411	20455105	-	8695
## 1386	ENSG00000092098	chr14	24146683	24160661	+	13979
## 1387	ENSG00000092108	chr14	30622112	30735812	+	113701
## 1388	ENSG00000092140	chr14	30559123	30620063	+	60941
## 1389	ENSG00000092148	chr14	31100112	31207804	-	107693
## 1390	ENSG00000092199	chr14	21209136	21269494	-	60359
## 1391	ENSG00000092201	chr14	21351472	21384266	-	32795
## 1392	ENSG00000092203	chr14	21476597	21499175	+	22579
## 1393	ENSG00000092208	chr14	39114223	39136973	+	22751
## 1394	ENSG00000092295	chr14	24249114	24264432	-	15319
## 1395	ENSG00000092330	chr14	24239643	24242674	-	3032
## 1396	ENSG00000092439	chr15	50552473	50686815	-	134343
## 1397	ENSG00000092470	chr15	43826963	43868419	+	41457
## 1398	ENSG00000092529	chr15	42359500	42412318	+	52819
## 1399	ENSG00000092531	chr15	42491233	42545356	+	54124
## 1400	ENSG00000092621	chr1	119659798	119744215	+	84418
## 1401	ENSG00000092758	chr20	62816244	62841159	+	24916
## 1402	ENSG00000092820	chr6	158765741	158819412	-	53672
## 1403	ENSG00000092841	chr12	56158161	56163496	+	5336
## 1404	ENSG00000092847	chr1	35869808	35930528	+	60721
## 1405	ENSG00000092853	chr1	35720218	35769967	-	49750
## 1406	ENSG00000092871	chr17	35005990	35089319	-	83330
## 1407	ENSG00000092929	chr17	75827225	75844717	-	17493
## 1408	ENSG00000092931	chr17	76735865	76781449	+	45585
## 1409	ENSG00000092964	chr8	26514022	26658178	+	144157
## 1410	ENSG00000092978	chr1	217426992	217631082	-	204091

## 1411	ENSG00000093000	chr22	45163841	45188015	+	24175
## 1412	ENSG00000093009	chr22	19479459	19520612	+	41154
## 1413	ENSG00000093010	chr22	19941607	19969975	+	28369
## 1414	ENSG00000093072	chr22	17178790	17221989	-	43200
## 1415	ENSG00000093100	chr22	17787652	17811497	-	23846
## 1416	ENSG00000093144	chr6	127288710	127343609	-	54900
## 1417	ENSG00000093167	chr3	37052656	37183689	-	131034
## 1418	ENSG00000093183	chr3	42547969	42601080	-	53112
## 1419	ENSG00000093217	chr3	38346760	38421348	+	74589
## 1420	ENSG00000094631	chrX	48801377	48824982	+	23606
## 1421	ENSG00000094804	chr17	40287633	40304657	+	17025
## 1422	ENSG00000094841	chrX	75274085	75304600	+	30516
## 1423	ENSG00000094880	chr5	138187648	138213343	-	25696
## 1424	ENSG00000094914	chr12	53307456	53324864	-	17409
## 1425	ENSG00000094916	chr12	54230940	54280133	-	49194
## 1426	ENSG00000094975	chr1	172532349	172611833	+	79485
## 1427	ENSG00000095002	chr2	47402969	47562311	+	159343
## 1428	ENSG00000095015	chr5	56815574	56896152	+	80579
## 1429	ENSG00000095059	chr19	12675717	12681902	-	6186
## 1430	ENSG00000095066	chr19	12763003	12872740	-	109738
## 1431	ENSG00000095139	chr11	118572390	118603033	+	30644
## 1432	ENSG00000095209	chr9	105694544	105776612	+	82069
## 1433	ENSG00000095261	chr9	120815496	120842984	-	27489
## 1434	ENSG00000095303	chr9	122370530	122395703	+	25174
## 1435	ENSG00000095319	chr9	128947699	129007096	+	59398
## 1436	ENSG00000095321	chr9	129094810	129111189	-	16380
## 1437	ENSG00000095370	chr9	127738317	127778741	-	40425
## 1438	ENSG00000095380	chr9	98056739	98083075	+	26337
## 1439	ENSG00000095485	chr10	100232298	100267680	-	35383
## 1440	ENSG00000095539	chr10	100969518	100985871	+	16354
## 1441	ENSG00000095564	chr10	91923769	92030325	+	106557
## 1442	ENSG00000095574	chr10	122990806	123008817	-	18012
## 1443	ENSG00000095787	chr10	28532493	28623112	+	90620
## 1444	ENSG00000095794	chr10	35126791	35212958	+	86168
## 1445	ENSG00000095906	chr16	1782901	1789191	+	6291
## 1446	ENSG00000095917	chr16	1256059	1258998	+	2940
## 1447	ENSG00000095932	chr19	3473986	3480542	-	6557
## 1448	ENSG00000095951	chr6	12008762	12164999	+	156238
## 1449	ENSG00000096060	chr6	35573585	35728583	-	154999
## 1450	ENSG00000096063	chr6	35832966	35921342	-	88377
## 1451	ENSG00000096070	chr6	36196744	36232790	+	36047
## 1452	ENSG00000096080	chr6	43671303	43687791	-	16489
## 1453	ENSG00000096092	chr6	52671109	52686588	+	15480
## 1454	ENSG00000096093	chr6	52362123	52529886	+	167764
## 1455	ENSG00000096384	chr6	44246166	44253888	+	7723
## 1456	ENSG00000096401	chr6	44387525	44450426	+	62902
## 1457	ENSG00000096433	chr6	33620365	33696574	+	76210
## 1458	ENSG00000096654	chr6	27450743	27473118	-	22376
## 1459	ENSG00000096717	chr10	67884669	67918390	+	33722
## 1460	ENSG00000096746	chr10	68331174	68343191	+	12018
## 1461	ENSG00000096872	chr9	26947039	27062930	+	115892
## 1462	ENSG00000096968	chr9	4984390	5128183	+	143794
## 1463	ENSG00000097007	chr9	130713946	130887675	+	173730
## 1464	ENSG00000097021	chr1	6264269	6394391	-	130123

## 1465	ENSG00000097033	chr1	86704570	86748184	+	43615
## 1466	ENSG00000097046	chr1	91500893	91525764	+	24872
## 1467	ENSG00000097096	chr1	85156873	85201046	-	44174
## 1468	ENSG00000099194	chr10	100347124	100364834	+	17711
## 1469	ENSG00000099203	chr19	10832438	10836318	-	3881
## 1470	ENSG00000099204	chr10	114431113	114685003	-	253891
## 1471	ENSG00000099219	chr9	5765076	5833117	-	68042
## 1472	ENSG00000099246	chr10	27504174	27542237	+	38064
## 1473	ENSG00000099250	chr10	33177492	33336262	-	158771
## 1474	ENSG00000099251	chr10	38356380	38378505	+	22126
## 1475	ENSG00000099256	chr10	24848607	24952604	-	103998
## 1476	ENSG00000099282	chr10	69451473	69507669	+	56197
## 1477	ENSG00000099290	chr10	50067888	50133506	+	65619
## 1478	ENSG00000099308	chr19	18097793	18151692	+	53900
## 1479	ENSG00000099326	chr19	58561931	58573575	-	11645
## 1480	ENSG00000099330	chr19	17226204	17229219	+	3016
## 1481	ENSG00000099331	chr19	17075781	17214537	+	138757
## 1482	ENSG00000099337	chr19	38319844	38332076	+	12233
## 1483	ENSG00000099341	chr19	38374536	38383824	+	9289
## 1484	ENSG00000099364	chr16	30923055	30948783	+	25729
## 1485	ENSG00000099381	chr16	30957294	30985116	+	27823
## 1486	ENSG00000099385	chr16	30833626	30894960	-	61335
## 1487	ENSG00000099622	chr19	1259384	1274880	+	15497
## 1488	ENSG00000099624	chr19	1241746	1244826	+	3081
## 1489	ENSG00000099783	chr19	8444767	8489114	+	44348
## 1490	ENSG00000099785	chr19	8413270	8439017	+	25748
## 1491	ENSG00000099795	chr19	14566078	14572062	-	5985
## 1492	ENSG00000099797	chr19	14517085	14565980	+	48896
## 1493	ENSG00000099800	chr19	2425624	2427894	-	2271
## 1494	ENSG00000099804	chr19	531712	542092	+	10381
## 1495	ENSG00000099810	chr9	21802543	21937651	+	135109
## 1496	ENSG00000099817	chr19	1086579	1095380	-	8802
## 1497	ENSG00000099821	chr19	617224	633604	-	16381
## 1498	ENSG00000099822	chr19	589893	617159	+	27267
## 1499	ENSG00000099840	chr19	2096429	2099593	+	3165
## 1500	ENSG00000099860	chr19	2476122	2478259	+	2138
## 1501	ENSG00000099864	chr19	708939	748329	+	39391
## 1502	ENSG00000099875	chr19	2037465	2051244	-	13780
## 1503	ENSG00000099889	chr22	19969896	20016808	-	46913
## 1504	ENSG00000099899	chr22	20111866	20117392	-	5527
## 1505	ENSG00000099901	chr22	20115938	20127357	+	11420
## 1506	ENSG00000099904	chr22	20129456	20148007	+	18552
## 1507	ENSG00000099910	chr22	20441519	20495883	-	54365
## 1508	ENSG00000099917	chr22	20495913	20587632	+	91720
## 1509	ENSG00000099940	chr22	20858983	20891218	+	32236
## 1510	ENSG00000099942	chr22	20917426	20953749	+	36324
## 1511	ENSG00000099949	chr22	20979462	20999038	+	19577
## 1512	ENSG00000099954	chr22	17359949	17558149	+	198201
## 1513	ENSG00000099956	chr22	23786963	23834516	+	47554
## 1514	ENSG00000099968	chr22	17628855	17730855	+	102001
## 1515	ENSG00000099985	chr22	30262829	30266840	-	4012
## 1516	ENSG00000099991	chr22	24011192	24178628	+	167437
## 1517	ENSG00000099992	chr22	30291990	30327046	-	35057
## 1518	ENSG00000099995	chr22	30331988	30356947	-	24960

## 1519	ENSG00000099998	chr22	24219654	24245142	-	25489
## 1520	ENSG00000099999	chr22	30368811	30421771	-	52961
## 1521	ENSG00000100014	chr22	24270817	24417740	+	146924
## 1522	ENSG00000100023	chr22	21666009	21700015	+	34007
## 1523	ENSG00000100027	chr22	21697544	21735834	-	38291
## 1524	ENSG00000100028	chr22	24555503	24609980	+	54478
## 1525	ENSG00000100029	chr22	30576625	30607083	-	30459
## 1526	ENSG00000100030	chr22	21754500	21867680	-	113181
## 1527	ENSG00000100031	chr22	24583750	24629005	+	45256
## 1528	ENSG00000100034	chr22	21919420	21952837	-	33418
## 1529	ENSG00000100038	chr22	21957025	21982816	-	25792
## 1530	ENSG00000100055	chr22	37282027	37315345	+	33319
## 1531	ENSG00000100056	chr22	19130279	19144684	-	14406
## 1532	ENSG00000100058	chr22	25448105	25520854	+	72750
## 1533	ENSG00000100060	chr22	37469063	37486401	-	17339
## 1534	ENSG00000100068	chr22	25351418	25405377	-	53960
## 1535	ENSG00000100075	chr22	19175575	19178830	-	3256
## 1536	ENSG00000100077	chr22	25564849	25729294	+	164446
## 1537	ENSG00000100083	chr22	37608475	37633564	+	25090
## 1538	ENSG00000100084	chr22	19330698	19447450	-	116753
## 1539	ENSG00000100092	chr22	37634654	37666932	+	32279
## 1540	ENSG00000100097	chr22	37675608	37679806	+	4199
## 1541	ENSG00000100099	chr22	26443423	26483837	-	40415
## 1542	ENSG00000100100	chr22	31281593	31292534	-	10942
## 1543	ENSG00000100101	chr22	37686414	37726503	+	40090
## 1544	ENSG00000100104	chr22	26483877	26494658	+	10782
## 1545	ENSG00000100105	chr22	31325804	31346232	-	20429
## 1546	ENSG00000100106	chr22	37697004	37776556	+	79553
## 1547	ENSG00000100109	chr22	26491225	26512505	-	21281
## 1548	ENSG00000100116	chr22	37807905	37817176	+	9272
## 1549	ENSG00000100124	chr22	37830855	37849327	-	18473
## 1550	ENSG00000100129	chr22	37848868	37889407	+	40540
## 1551	ENSG00000100138	chr22	41673930	41690504	-	16575
## 1552	ENSG00000100139	chr22	37905657	37942822	+	37166
## 1553	ENSG00000100142	chr22	37952607	38041915	+	89309
## 1554	ENSG00000100147	chr22	41800679	41826299	+	25621
## 1555	ENSG00000100150	chr22	31753951	31907034	+	153084
## 1556	ENSG00000100154	chr22	27978014	28679865	-	701852
## 1557	ENSG00000100162	chr22	41938721	41947164	-	8444
## 1558	ENSG00000100201	chr22	38483440	38507660	-	24221
## 1559	ENSG00000100209	chr22	28742031	28757515	+	15485
## 1560	ENSG00000100211	chr22	38656636	38673854	+	17219
## 1561	ENSG00000100216	chr22	38681948	38685421	+	3474
## 1562	ENSG00000100219	chr22	28794555	28800597	-	6043
## 1563	ENSG00000100220	chr22	32387582	32412255	-	24674
## 1564	ENSG00000100221	chr22	38685543	38701556	-	16014
## 1565	ENSG00000100225	chr22	32474676	32498829	+	24154
## 1566	ENSG00000100226	chr22	38705723	38738299	+	32577
## 1567	ENSG00000100227	chr22	42583721	42614962	-	31242
## 1568	ENSG00000100239	chr22	50343304	50445090	+	101787
## 1569	ENSG00000100241	chr22	50445000	50475024	-	30025
## 1570	ENSG00000100242	chr22	38734725	38794143	-	59419
## 1571	ENSG00000100243	chr22	42617840	42649568	-	31729
## 1572	ENSG00000100246	chr22	38778508	38794198	-	15691

## 1573	ENSG00000100258	chr22	50502949	50507691	-	4743
## 1574	ENSG00000100263	chr22	29259852	29268209	-	8358
## 1575	ENSG00000100266	chr22	42835412	43015145	-	179734
## 1576	ENSG00000100271	chr22	43039644	43089428	-	49785
## 1577	ENSG00000100280	chr22	29327680	29423179	-	95500
## 1578	ENSG00000100281	chr22	35257452	35295807	+	38356
## 1579	ENSG00000100284	chr22	35299275	35347994	+	48720
## 1580	ENSG00000100288	chr22	50578949	50601455	-	22507
## 1581	ENSG00000100290	chr22	43110748	43129712	+	18965
## 1582	ENSG00000100294	chr22	43132206	43143394	-	11189
## 1583	ENSG00000100296	chr22	29505879	29555216	-	49338
## 1584	ENSG00000100297	chr22	35400063	35425430	+	25368
## 1585	ENSG00000100299	chr22	50622754	50628173	-	5420
## 1586	ENSG00000100300	chr22	43151514	43163242	+	11729
## 1587	ENSG00000100304	chr22	43166622	43187133	-	20512
## 1588	ENSG00000100307	chr22	39120167	39152674	-	32508
## 1589	ENSG00000100314	chr22	29720084	29731839	+	11756
## 1590	ENSG00000100316	chr22	39312882	39320389	-	7508
## 1591	ENSG00000100319	chr22	29730956	29767011	-	36056
## 1592	ENSG00000100320	chr22	35738736	36028425	-	289690
## 1593	ENSG00000100321	chr22	39349925	39385588	+	35664
## 1594	ENSG00000100324	chr22	39399741	39437060	+	37320
## 1595	ENSG00000100325	chr22	29788608	29838304	-	49697
## 1596	ENSG00000100330	chr22	29883155	30030866	+	147712
## 1597	ENSG00000100335	chr22	39499432	39518132	+	18701
## 1598	ENSG00000100344	chr22	43923739	43964488	+	40750
## 1599	ENSG00000100345	chr22	36281281	36388018	-	106738
## 1600	ENSG00000100347	chr22	43955421	44010531	+	55111
## 1601	ENSG00000100348	chr22	36467036	36482030	-	14995
## 1602	ENSG00000100350	chr22	36487190	36507101	-	19912
## 1603	ENSG00000100353	chr22	36510850	36529436	-	18587
## 1604	ENSG00000100354	chr22	40044817	40335808	+	290992
## 1605	ENSG00000100359	chr22	40370591	40410289	+	39699
## 1606	ENSG00000100360	chr22	36758202	36776256	-	18055
## 1607	ENSG00000100364	chr22	45190338	45240769	-	50432
## 1608	ENSG00000100365	chr22	36860988	36878015	+	17028
## 1609	ENSG00000100368	chr22	36913628	36940449	+	26822
## 1610	ENSG00000100372	chr22	40769630	40819399	-	49770
## 1611	ENSG00000100373	chr22	45284982	45295874	+	10893
## 1612	ENSG00000100376	chr22	45308968	45341955	+	32988
## 1613	ENSG00000100379	chr22	37051736	37063390	+	11655
## 1614	ENSG00000100380	chr22	40824535	40857022	-	32488
## 1615	ENSG00000100387	chr22	40951347	40973309	+	21963
## 1616	ENSG00000100393	chr22	41091786	41180079	+	88294
## 1617	ENSG00000100395	chr22	41205205	41231271	+	26067
## 1618	ENSG00000100399	chr22	41229510	41240934	-	11425
## 1619	ENSG00000100401	chr22	41245611	41286251	-	40641
## 1620	ENSG00000100403	chr22	41301522	41360147	+	58626
## 1621	ENSG00000100410	chr22	41459717	41468725	-	9009
## 1622	ENSG00000100412	chr22	41469125	41528989	+	59865
## 1623	ENSG00000100413	chr22	41525804	41544606	-	18803
## 1624	ENSG00000100416	chr22	46330875	46357340	+	26466
## 1625	ENSG00000100417	chr22	41576894	41589890	-	12997
## 1626	ENSG00000100418	chr22	41598028	41621096	-	23069

## 1627	ENSG00000100422	chr22	46684411	46738261	-	53851
## 1628	ENSG00000100425	chr22	49773283	49827512	-	54230
## 1629	ENSG00000100426	chr22	49853842	49890078	+	36237
## 1630	ENSG00000100427	chr22	50059391	50085902	-	26512
## 1631	ENSG00000100429	chr22	50245183	50251405	-	6223
## 1632	ENSG00000100439	chr14	22598237	22613215	+	14979
## 1633	ENSG00000100441	chr14	24429286	24441834	+	12549
## 1634	ENSG00000100442	chr14	45115600	45135319	-	19720
## 1635	ENSG00000100445	chr14	24439766	24442905	-	3140
## 1636	ENSG00000100448	chr14	24573522	24576260	-	2739
## 1637	ENSG00000100461	chr14	22893206	22919184	-	25979
## 1638	ENSG00000100462	chr14	22920511	22929585	-	9075
## 1639	ENSG00000100473	chr14	30874514	30895065	+	20552
## 1640	ENSG00000100478	chr14	31025106	31096450	+	71345
## 1641	ENSG00000100479	chr14	49643555	49688422	-	44868
## 1642	ENSG00000100483	chr14	50108632	50116600	-	7969
## 1643	ENSG00000100485	chr14	50117120	50231558	-	114439
## 1644	ENSG00000100490	chr14	50329404	50416461	-	87058
## 1645	ENSG00000100503	chr14	50719763	50831121	-	111359
## 1646	ENSG00000100504	chr14	50857891	50944736	-	86846
## 1647	ENSG00000100519	chr14	52707172	52728587	+	21416
## 1648	ENSG00000100522	chr14	52775194	52791668	-	16475
## 1649	ENSG00000100523	chr14	53036745	53153282	-	116538
## 1650	ENSG00000100526	chr14	54396849	54420218	+	23370
## 1651	ENSG00000100528	chr14	54423560	54441431	-	17872
## 1652	ENSG00000100532	chr14	54509812	54539309	+	29498
## 1653	ENSG00000100554	chr14	67294371	67360265	-	65895
## 1654	ENSG00000100564	chr14	67581955	67600287	-	18333
## 1655	ENSG00000100567	chr14	58244831	58272012	+	27182
## 1656	ENSG00000100568	chr14	67647075	67674831	-	27757
## 1657	ENSG00000100575	chr14	58408494	58427614	-	19121
## 1658	ENSG00000100577	chr14	77320884	77331597	+	10714
## 1659	ENSG00000100578	chr14	58427385	58551289	+	123905
## 1660	ENSG00000100580	chr14	77335021	77377109	-	42089
## 1661	ENSG00000100591	chr14	77457870	77469474	+	11605
## 1662	ENSG00000100592	chr14	59188646	59371405	+	182760
## 1663	ENSG00000100596	chr14	77505997	77616773	-	110777
## 1664	ENSG00000100599	chr14	92513774	92688994	+	175221
## 1665	ENSG00000100601	chr14	77672404	77708020	-	35617
## 1666	ENSG00000100603	chr14	77717599	77761207	-	43609
## 1667	ENSG00000100605	chr14	92936914	93116320	-	179407
## 1668	ENSG00000100612	chr14	60144120	60169856	-	25737
## 1669	ENSG00000100614	chr14	60245752	60299087	+	53336
## 1670	ENSG00000100625	chr14	60709528	60724348	-	14821
## 1671	ENSG00000100629	chr14	80476983	80959517	-	482535
## 1672	ENSG00000100632	chr14	69380123	69398627	-	18505
## 1673	ENSG00000100644	chr14	61695513	61748259	+	52747
## 1674	ENSG00000100647	chr14	69611596	69715142	+	103547
## 1675	ENSG00000100650	chr14	69726900	69772005	+	45106
## 1676	ENSG00000100664	chr14	103333544	103345025	+	11482
## 1677	ENSG00000100697	chr14	95086228	95158010	-	71783
## 1678	ENSG00000100711	chr14	103715730	103733668	+	17939
## 1679	ENSG00000100714	chr14	64388031	64463457	+	75427
## 1680	ENSG00000100722	chr14	88562909	88627596	+	64688



## 1681	ENSG00000100726	chr16	1493344	1510457	+	17114
## 1682	ENSG00000100731	chr14	70907405	71115382	+	207978
## 1683	ENSG00000100744	chr14	96363452	96387288	+	23837
## 1684	ENSG00000100749	chr14	96797304	96931722	+	134419
## 1685	ENSG00000100764	chr14	90256495	90275429	+	18935
## 1686	ENSG00000100767	chr14	73237497	73274640	+	37144
## 1687	ENSG00000100784	chr14	90847862	91060636	-	212775
## 1688	ENSG00000100796	chr14	91457611	91510554	-	52944
## 1689	ENSG00000100802	chr14	22985908	23010166	-	24259
## 1690	ENSG00000100804	chr14	23016543	23035230	-	18688
## 1691	ENSG00000100811	chr14	100238298	100282792	+	44495
## 1692	ENSG00000100813	chr14	23058564	23095614	-	37051
## 1693	ENSG00000100814	chr14	20311368	20333312	-	21945
## 1694	ENSG00000100815	chr14	91965991	92040896	-	74906
## 1695	ENSG00000100823	chr14	20455191	20457772	+	2582
## 1696	ENSG00000100836	chr14	23321289	23326185	+	4897
## 1697	ENSG00000100852	chr14	32076114	32159728	+	83615
## 1698	ENSG00000100865	chr14	102341102	102362916	-	21815
## 1699	ENSG00000100883	chr14	34981957	35029567	+	47611
## 1700	ENSG00000100888	chr14	21385194	21456126	-	70933
## 1701	ENSG00000100889	chr14	24094053	24110598	+	16546
## 1702	ENSG00000100890	chr14	35121846	35277614	+	155769
## 1703	ENSG00000100897	chr14	24114195	24125242	+	11048
## 1704	ENSG00000100902	chr14	35278633	35317493	+	38861
## 1705	ENSG00000100906	chr14	35401511	35404749	-	3239
## 1706	ENSG00000100908	chr14	24138959	24141588	-	2630
## 1707	ENSG00000100911	chr14	24143362	24147570	-	4209
## 1708	ENSG00000100916	chr14	35826318	35932325	+	106008
## 1709	ENSG00000100918	chr14	24171853	24180257	+	8405
## 1710	ENSG00000100926	chr14	24189143	24195687	-	6545
## 1711	ENSG00000100934	chr14	39031919	39109646	-	77728
## 1712	ENSG00000100938	chr14	24232422	24239242	+	6821
## 1713	ENSG00000100941	chr14	39175183	39183218	+	8036
## 1714	ENSG00000100949	chr14	24265538	24271739	-	6202
## 1715	ENSG00000100979	chr20	45898621	45912155	-	13535
## 1716	ENSG00000100982	chr20	45934628	45948023	+	13396
## 1717	ENSG00000100983	chr20	34928430	34955817	-	27388
## 1718	ENSG00000100991	chr20	35002404	35092871	-	90468
## 1719	ENSG00000100994	chr20	25248069	25298014	+	49946
## 1720	ENSG00000100997	chr20	25294743	25390983	-	96241
## 1721	ENSG00000101000	chr20	35172073	35216240	+	44168
## 1722	ENSG00000101003	chr20	25407727	25452628	+	44902
## 1723	ENSG00000101004	chr20	25452705	25585517	-	132813
## 1724	ENSG00000101019	chr20	35302566	35412141	-	109576
## 1725	ENSG00000101040	chr20	47209214	47356889	-	147676
## 1726	ENSG00000101052	chr20	43590931	43647296	+	56366
## 1727	ENSG00000101057	chr20	43667019	43716496	+	49478
## 1728	ENSG00000101079	chr20	36651766	36746078	-	94313
## 1729	ENSG00000101082	chr20	36612318	36646216	-	33899
## 1730	ENSG00000101084	chr20	36605734	36612557	+	6824
## 1731	ENSG00000101096	chr20	51386957	51562831	-	175875
## 1732	ENSG00000101104	chr20	44910062	44959035	+	48974
## 1733	ENSG00000101109	chr20	44966474	45079959	+	113486
## 1734	ENSG00000101126	chr20	50888919	50931240	-	42322

## 1735	ENSG00000101132	chr20	54207847	54228052	+	20206
## 1736	ENSG00000101138	chr20	56392371	56406369	+	13999
## 1737	ENSG00000101146	chr20	57351010	57379211	+	28202
## 1738	ENSG00000101150	chr20	63865228	63891545	+	26318
## 1739	ENSG00000101152	chr20	63895182	63936031	+	40850
## 1740	ENSG00000101158	chr20	58981208	58995133	+	13926
## 1741	ENSG00000101160	chr20	58995185	59007247	-	12063
## 1742	ENSG00000101161	chr20	63981135	64033100	+	51966
## 1743	ENSG00000101166	chr20	59033145	59042909	-	9765
## 1744	ENSG00000101181	chr20	62183029	62203568	+	20540
## 1745	ENSG00000101182	chr20	62136735	62143440	-	6706
## 1746	ENSG00000101187	chr20	62642445	62685785	+	43341
## 1747	ENSG00000101188	chr20	62708837	62762771	+	53935
## 1748	ENSG00000101189	chr20	62796453	62801738	+	5286
## 1749	ENSG00000101190	chr20	62841115	62861763	-	20649
## 1750	ENSG00000101191	chr20	62877738	62937952	-	60215
## 1751	ENSG00000101193	chr20	62938119	62948475	+	10357
## 1752	ENSG00000101194	chr20	62952647	62969585	+	16939
## 1753	ENSG00000101199	chr20	63272785	63289793	+	17009
## 1754	ENSG00000101216	chr20	63587602	63627041	-	39440
## 1755	ENSG00000101220	chr20	3753508	3768387	-	14880
## 1756	ENSG00000101224	chr20	3786772	3806121	+	19350
## 1757	ENSG00000101236	chr20	3927309	4015582	-	88274
## 1758	ENSG00000101246	chr20	63698642	63708025	-	9384
## 1759	ENSG00000101247	chr20	13784950	13821582	+	36633
## 1760	ENSG00000101255	chr20	362835	397559	+	34725
## 1761	ENSG00000101265	chr20	4780023	4823645	-	43623
## 1762	ENSG00000101266	chr20	473591	543821	-	70231
## 1763	ENSG00000101276	chr20	760080	776015	-	15936
## 1764	ENSG00000101290	chr20	5126786	5197887	+	71102
## 1765	ENSG00000101294	chr20	31514428	31577923	+	63496
## 1766	ENSG00000101306	chr20	31819308	31834689	+	15382
## 1767	ENSG00000101307	chr20	1563521	1620061	-	56541
## 1768	ENSG00000101310	chr20	18507493	18561415	+	53923
## 1769	ENSG00000101311	chr20	6074845	6123544	-	48700
## 1770	ENSG00000101336	chr20	32052188	32101856	+	49669
## 1771	ENSG00000101337	chr20	32109506	32167258	+	57753
## 1772	ENSG00000101342	chr20	36876121	36894235	+	18115
## 1773	ENSG00000101343	chr20	20034368	20056046	-	21679
## 1774	ENSG00000101346	chr20	32207880	32238667	+	30788
## 1775	ENSG00000101347	chr20	36890229	36951843	-	61615
## 1776	ENSG00000101350	chr20	32277664	32335011	+	57348
## 1777	ENSG00000101353	chr20	37101226	37179588	-	78363
## 1778	ENSG00000101361	chr20	2652145	2658393	+	6249
## 1779	ENSG00000101363	chr20	37289638	37317260	+	27623
## 1780	ENSG00000101365	chr20	2658395	2664219	-	5825
## 1781	ENSG00000101367	chr20	32819893	32850405	+	30513
## 1782	ENSG00000101384	chr20	10637684	10674107	-	36424
## 1783	ENSG00000101391	chr20	33358839	33401561	-	42723
## 1784	ENSG00000101407	chr20	37983007	38033468	-	50462
## 1785	ENSG00000101412	chr20	33675683	33686404	-	10722
## 1786	ENSG00000101413	chr20	38033546	38127780	+	94235
## 1787	ENSG00000101417	chr20	33702754	33720319	-	17566
## 1788	ENSG00000101421	chr20	33811304	33854366	+	43063

## 1789	ENSG00000101425	chr20	38260149	38337505	+	77357
## 1790	ENSG00000101439	chr20	23626706	23638473	-	11768
## 1791	ENSG00000101442	chr20	38748442	38772520	+	24079
## 1792	ENSG00000101444	chr20	34280268	34311802	-	31535
## 1793	ENSG00000101447	chr20	38926312	38953106	+	26795
## 1794	ENSG00000101452	chr20	38962299	39039723	+	77425
## 1795	ENSG00000101457	chr20	45791937	45811427	+	19491
## 1796	ENSG00000101464	chr20	34560542	34698790	-	138249
## 1797	ENSG00000101473	chr20	45841721	45857406	-	15686
## 1798	ENSG00000101474	chr20	24962925	24992979	-	30055
## 1799	ENSG00000101493	chr18	76358190	76495190	-	137001
## 1800	ENSG00000101542	chr18	61333582	61555773	+	222192
## 1801	ENSG00000101544	chr18	80109031	80147523	+	38493
## 1802	ENSG00000101546	chr18	80034358	80046397	+	12040
## 1803	ENSG00000101557	chr18	158383	214629	+	56247
## 1804	ENSG00000101558	chr18	9914002	9960021	+	46020
## 1805	ENSG00000101574	chr18	2537525	2571509	-	33985
## 1806	ENSG00000101577	chr18	2916994	3013315	-	96322
## 1807	ENSG00000101596	chr18	2655738	2805017	+	149280
## 1808	ENSG00000101608	chr18	3247481	3256236	+	8756
## 1809	ENSG00000101624	chr18	12661833	12702777	-	40945
## 1810	ENSG00000101638	chr18	46667821	46759257	-	91437
## 1811	ENSG00000101639	chr18	12991362	13125052	+	133691
## 1812	ENSG00000101654	chr18	13726660	13764558	+	37899
## 1813	ENSG00000101665	chr18	48919853	48950711	-	30859
## 1814	ENSG00000101695	chr18	32018372	32073213	+	54842
## 1815	ENSG00000101745	chr18	9136228	9285985	+	149758
## 1816	ENSG00000101751	chr18	54269404	54321266	+	51863
## 1817	ENSG00000101752	chr18	21704957	21870957	+	166001
## 1818	ENSG00000101773	chr18	22798261	23026488	+	228228
## 1819	ENSG00000101782	chr18	23452823	23486603	+	33781
## 1820	ENSG00000101811	chrX	100820359	100840932	+	20574
## 1821	ENSG00000101843	chrX	108084207	108091618	-	7412
## 1822	ENSG00000101844	chrX	108091668	108154671	+	63004
## 1823	ENSG00000101846	chrX	7219456	7354810	+	135355
## 1824	ENSG00000101849	chrX	9463295	9719743	+	256449
## 1825	ENSG00000101856	chrX	119236245	119244466	+	8222
## 1826	ENSG00000101868	chrX	24693919	24996986	+	303068
## 1827	ENSG00000101882	chrX	119920672	119943772	-	23101
## 1828	ENSG00000101888	chrX	109535781	109544690	+	8910
## 1829	ENSG00000101898	chr20	31547504	31548049	+	546
## 1830	ENSG00000101901	chrX	111665811	111760649	+	94839
## 1831	ENSG00000101911	chrX	12791355	12824222	+	32868
## 1832	ENSG00000101928	chrX	134887626	134915267	-	27642
## 1833	ENSG00000101935	chrX	110194186	110440233	-	246048
## 1834	ENSG00000101938	chrX	110673856	110795819	-	121964
## 1835	ENSG00000101940	chrX	48590042	48608867	+	18826
## 1836	ENSG00000101945	chrX	48695554	48709012	+	13459
## 1837	ENSG00000101955	chrX	38149336	38220924	-	71589
## 1838	ENSG00000101966	chrX	123859724	123913979	+	54256
## 1839	ENSG00000101972	chrX	123960212	124422664	+	462453
## 1840	ENSG00000101974	chrX	139726346	139945276	-	218931
## 1841	ENSG00000101986	chrX	153724868	153744762	+	19895
## 1842	ENSG00000101997	chrX	49235467	49250526	+	15060

## 1843	ENSG00000102003	chrX	49187804	49200259	-	12456
## 1844	ENSG00000102007	chrX	49171926	49175239	+	3314
## 1845	ENSG00000102024	chrX	115561174	115650861	+	89688
## 1846	ENSG00000102030	chrX	153929242	153935223	-	5982
## 1847	ENSG00000102032	chrX	153935263	153944691	-	9429
## 1848	ENSG00000102034	chrX	130064874	130110716	-	45843
## 1849	ENSG00000102043	chrX	64268081	64395431	-	127351
## 1850	ENSG00000102053	chrX	65366638	65507887	+	141250
## 1851	ENSG00000102054	chrX	16839283	16870414	-	31132
## 1852	ENSG00000102078	chrX	130339888	130373361	+	33474
## 1853	ENSG00000102081	chrX	147911951	147951125	+	39175
## 1854	ENSG00000102096	chrX	48913182	48919024	-	5843
## 1855	ENSG00000102098	chrX	18239314	18354727	-	115414
## 1856	ENSG00000102100	chrX	48903180	48911958	-	8779
## 1857	ENSG00000102103	chrX	48897912	48903143	+	5232
## 1858	ENSG00000102119	chrX	154379197	154381523	+	2327
## 1859	ENSG00000102125	chrX	154411518	154421726	+	10209
## 1860	ENSG00000102144	chrX	78065188	78129296	+	64109
## 1861	ENSG00000102158	chrX	77826364	77895593	-	69230
## 1862	ENSG00000102172	chrX	21940573	21994835	+	54263
## 1863	ENSG00000102178	chrX	154483717	154486670	-	2954
## 1864	ENSG00000102181	chrX	150766337	150898816	-	132480
## 1865	ENSG00000102189	chr12	92770637	92929331	-	158695
## 1866	ENSG00000102218	chrX	46836940	46882358	+	45419
## 1867	ENSG00000102221	chrX	46912276	47061242	+	148967
## 1868	ENSG00000102225	chrX	47217860	47229997	+	12138
## 1869	ENSG00000102226	chrX	47232690	47248328	+	15639
## 1870	ENSG00000102241	chrX	136497079	136512346	+	15268
## 1871	ENSG00000102265	chrX	47582313	47586789	+	4477
## 1872	ENSG00000102302	chrX	54445454	54496166	-	50713
## 1873	ENSG00000102309	chrX	72181353	72302926	+	121574
## 1874	ENSG00000102312	chrX	48508962	48520814	+	11853
## 1875	ENSG00000102316	chrX	54807599	54816012	+	8414
## 1876	ENSG00000102317	chrX	48574449	48579066	+	4618
## 1877	ENSG00000102384	chrX	101098218	101163681	+	65464
## 1878	ENSG00000102390	chrX	76172936	76178204	+	5269
## 1879	ENSG00000102393	chrX	101397803	101407925	-	10123
## 1880	ENSG00000102401	chrX	101622797	101627843	+	5047
## 1881	ENSG00000102524	chr13	108251240	108308484	+	57245
## 1882	ENSG00000102531	chr13	48975912	49209779	+	233868
## 1883	ENSG00000102543	chr13	49247925	49293485	+	45561
## 1884	ENSG00000102547	chr13	49308650	49444126	-	135477
## 1885	ENSG00000102554	chr13	73054976	73077542	+	22567
## 1886	ENSG00000102572	chr13	98445185	98577940	-	132756
## 1887	ENSG00000102580	chr13	95677139	95794989	+	117851
## 1888	ENSG00000102606	chr13	111114559	111305737	+	191179
## 1889	ENSG00000102699	chr13	24420926	24512810	-	91885
## 1890	ENSG00000102710	chr13	37009312	37059713	-	50402
## 1891	ENSG00000102738	chr13	40729135	40771173	-	42039
## 1892	ENSG00000102743	chr13	40789412	40810111	+	20700
## 1893	ENSG00000102753	chr13	49699307	49792921	-	93615
## 1894	ENSG00000102755	chr13	28300344	28495128	-	194785
## 1895	ENSG00000102760	chr13	41457559	41470882	+	13324
## 1896	ENSG00000102763	chr13	41566837	41961120	-	394284

## 1897	ENSG00000102780	chr13	42040036	42256578	+	216543
## 1898	ENSG00000102781	chr13	30202630	30307484	-	104855
## 1899	ENSG00000102786	chr13	51354077	51454264	-	100188
## 1900	ENSG00000102796	chr13	51767993	51804157	-	36165
## 1901	ENSG00000102804	chr13	44432143	44577147	-	145005
## 1902	ENSG00000102805	chr13	76990660	77019143	+	28484
## 1903	ENSG00000102837	chr13	53028759	53052057	+	23299
## 1904	ENSG00000102858	chr16	4616493	4690974	+	74482
## 1905	ENSG00000102870	chr16	30778449	30787202	-	8754
## 1906	ENSG00000102871	chr16	67154180	67160298	-	6119
## 1907	ENSG00000102878	chr16	67164681	67169945	+	5265
## 1908	ENSG00000102879	chr16	30182827	30189076	+	6250
## 1909	ENSG00000102882	chr16	30114105	30123506	-	9402
## 1910	ENSG00000102890	chr16	67199111	67204029	+	4919
## 1911	ENSG00000102893	chr16	47461123	47701523	+	240401
## 1912	ENSG00000102897	chr16	20899868	20925006	+	25139
## 1913	ENSG00000102898	chr16	67846732	67872567	+	25836
## 1914	ENSG00000102900	chr16	56730105	56850286	+	120182
## 1915	ENSG00000102901	chr16	67828157	67847811	-	19655
## 1916	ENSG00000102904	chr16	67806765	67832148	+	25384
## 1917	ENSG00000102908	chr16	69565094	69704666	+	139573
## 1918	ENSG00000102910	chr16	48244296	48363122	+	118827
## 1919	ENSG00000102921	chr16	48538726	48620148	-	81423
## 1920	ENSG00000102931	chr16	57245098	57253635	+	8538
## 1921	ENSG00000102934	chr16	57248547	57284687	-	36141
## 1922	ENSG00000102967	chr16	72008588	72027664	+	19077
## 1923	ENSG00000102974	chr16	67562407	67639183	+	76777
## 1924	ENSG00000102977	chr16	67657512	67660815	-	3304
## 1925	ENSG00000102978	chr16	57462387	57472010	+	9624
## 1926	ENSG00000102981	chr16	67660946	67662778	+	1833
## 1927	ENSG00000102984	chr16	71859680	71895336	-	35657
## 1928	ENSG00000102996	chr16	58025566	58046901	+	21336
## 1929	ENSG00000103005	chr16	57999546	58021618	+	22073
## 1930	ENSG00000103018	chr16	69424525	69466266	+	41742
## 1931	ENSG00000103024	chr16	1770286	1771730	-	1445
## 1932	ENSG00000103035	chr16	74296775	74306288	+	9514
## 1933	ENSG00000103037	chr16	58515479	58521181	+	5703
## 1934	ENSG00000103042	chr16	58665109	58685104	-	19996
## 1935	ENSG00000103043	chr16	70687439	70801161	-	113723
## 1936	ENSG00000103044	chr16	69105564	69118719	+	13156
## 1937	ENSG00000103047	chr16	68843604	69085180	+	241577
## 1938	ENSG00000103051	chr16	70480568	70523565	-	42998
## 1939	ENSG00000103056	chr16	68358325	68448688	-	90364
## 1940	ENSG00000103061	chr16	68284503	68310946	-	26444
## 1941	ENSG00000103064	chr16	68264516	68301823	+	37308
## 1942	ENSG00000103066	chr16	68245304	68261062	+	15759
## 1943	ENSG00000103091	chr16	74871367	75000173	-	128807
## 1944	ENSG00000103111	chr16	77190835	77202405	+	11571
## 1945	ENSG00000103121	chr16	80966448	81020270	-	53823
## 1946	ENSG00000103126	chr16	287440	352673	-	65234
## 1947	ENSG00000103145	chr16	3022620	3024286	-	1667
## 1948	ENSG00000103148	chr16	84271	138860	-	54590
## 1949	ENSG00000103150	chr16	83899126	83927026	+	27901
## 1950	ENSG00000103152	chr16	77007	85853	+	8847

## 1951	ENSG00000103160	chr16	84122146	84145192	-	23047
## 1952	ENSG00000103168	chr16	84177847	84187070	-	9224
## 1953	ENSG00000103174	chr16	5024844	5034141	-	9298
## 1954	ENSG00000103184	chr16	4958317	5019158	+	60842
## 1955	ENSG00000103187	chr16	84565594	84618077	-	52484
## 1956	ENSG00000103194	chr16	84699978	84779922	+	79945
## 1957	ENSG00000103197	chr16	2047465	2088720	+	41256
## 1958	ENSG00000103199	chr16	4748239	4767624	-	19386
## 1959	ENSG00000103202	chr16	396725	410367	+	13643
## 1960	ENSG00000103222	chr16	15949577	16143074	+	193498
## 1961	ENSG00000103226	chr16	16232495	16294814	+	62320
## 1962	ENSG00000103227	chr16	853634	981318	-	127685
## 1963	ENSG00000103245	chr16	729753	741329	-	11577
## 1964	ENSG00000103248	chr16	86530176	86555235	-	25060
## 1965	ENSG00000103249	chr16	1444934	1475580	-	30647
## 1966	ENSG00000103253	chr16	726936	735525	+	8590
## 1967	ENSG00000103254	chr16	720581	722601	+	2021
## 1968	ENSG00000103257	chr16	87830023	87869488	-	39466
## 1969	ENSG00000103260	chr16	715115	719655	+	4541
## 1970	ENSG00000103264	chr16	87326987	87392142	-	65156
## 1971	ENSG00000103266	chr16	680224	682870	+	2647
## 1972	ENSG00000103274	chr16	10743786	10769351	+	25566
## 1973	ENSG00000103275	chr16	1308880	1327018	+	18139
## 1974	ENSG00000103319	chr16	22206282	22288732	+	82451
## 1975	ENSG00000103326	chr16	527717	554636	+	26920
## 1976	ENSG00000103335	chr16	88715343	88785211	-	69869
## 1977	ENSG00000103342	chr16	11868128	11916082	-	47955
## 1978	ENSG00000103343	chr16	3401235	3409370	+	8136
## 1979	ENSG00000103351	chr16	3500924	3539048	+	38125
## 1980	ENSG00000103353	chr16	23557362	23574389	+	17028
## 1981	ENSG00000103356	chr16	23522014	23557731	-	35718
## 1982	ENSG00000103363	chr16	2771414	2777297	-	5884
## 1983	ENSG00000103365	chr16	23463542	23521995	-	58454
## 1984	ENSG00000103381	chr16	12659799	12804017	-	144219
## 1985	ENSG00000103404	chr16	23061406	23149270	-	87865
## 1986	ENSG00000103429	chr16	14632815	14669236	+	36422
## 1987	ENSG00000103479	chr16	53433977	53491649	+	57673
## 1988	ENSG00000103485	chr16	29679008	29698699	+	19692
## 1989	ENSG00000103489	chr16	17101769	17470881	-	369113
## 1990	ENSG00000103490	chr16	31201485	31203450	-	1966
## 1991	ENSG00000103494	chr16	53597683	53703938	-	106256
## 1992	ENSG00000103495	chr16	29806106	29811164	+	5059
## 1993	ENSG00000103496	chr16	31032889	31042975	+	10087
## 1994	ENSG00000103502	chr16	29858357	29863736	-	5380
## 1995	ENSG00000103507	chr16	31106107	31112791	+	6685
## 1996	ENSG00000103510	chr16	31115754	31131393	+	15640
## 1997	ENSG00000103512	chr16	14833681	14896160	+	62480
## 1998	ENSG00000103540	chr16	19523811	19553408	+	29598
## 1999	ENSG00000103544	chr16	19555240	19706793	+	151554
## 2000	ENSG00000103549	chr16	30761745	30776307	+	14563
## 2001	ENSG00000103550	chr16	19701934	19718235	-	16302
## 2002	ENSG00000103591	chr15	67201033	67255195	-	54163
## 2003	ENSG00000103642	chr15	63121800	63142061	+	20262
## 2004	ENSG00000103653	chr15	74782057	74803198	+	21142

##	2005	ENSG00000103657	chr15	63608618	63833942	-	225325
##	2006	ENSG00000103671	chr15	64387748	64455303	+	67556
##	2007	ENSG00000103707	chr15	65001512	65029639	-	28128
##	2008	ENSG00000103740	chr15	78167468	78245688	-	78221
##	2009	ENSG00000103769	chr15	65726054	65891991	+	165938
##	2010	ENSG00000103811	chr15	78921058	78949574	-	28517
##	2011	ENSG00000103852	chr15	99136323	99251223	-	114901
##	2012	ENSG00000103876	chr15	80152490	80186946	+	34457
##	2013	ENSG00000103888	chr15	80779343	80951776	+	172434
##	2014	ENSG00000103932	chr15	41517176	41544269	-	27094
##	2015	ENSG00000103942	chr15	82836946	82986153	-	149208
##	2016	ENSG00000103966	chr15	41895939	41972578	-	76640
##	2017	ENSG00000103978	chr15	42210452	42273663	-	63212
##	2018	ENSG00000103994	chr15	42412823	42491123	-	78301
##	2019	ENSG00000103995	chr15	48712928	48811146	-	98219
##	2020	ENSG00000104043	chr15	49858238	50182817	-	324580
##	2021	ENSG00000104047	chr15	49620980	49656232	+	35253
##	2022	ENSG00000104055	chr15	43232595	43266857	-	34263
##	2023	ENSG00000104059	chr15	29120254	29570723	-	450470
##	2024	ENSG00000104064	chr15	50275392	50355408	-	80017
##	2025	ENSG00000104081	chr15	40087890	40108892	-	21003
##	2026	ENSG00000104093	chr15	51447711	51622833	-	175123
##	2027	ENSG00000104129	chr15	40765155	40807478	-	42324
##	2028	ENSG00000104131	chr15	44537057	44563029	+	25973
##	2029	ENSG00000104133	chr15	44562696	44663678	-	100983
##	2030	ENSG00000104142	chr15	40894430	40903975	+	9546
##	2031	ENSG00000104147	chr15	41309268	41332621	-	23354
##	2032	ENSG00000104164	chr15	45587123	45615999	+	28877
##	2033	ENSG00000104205	chr8	66712418	66862022	+	149605
##	2034	ENSG00000104218	chr8	67062426	67196263	+	133838
##	2035	ENSG00000104219	chr8	17156029	17224799	+	68771
##	2036	ENSG00000104221	chr8	37843268	37849904	-	6637
##	2037	ENSG00000104228	chr8	27284887	27311319	-	26433
##	2038	ENSG00000104231	chr8	81701334	81732903	-	31570
##	2039	ENSG00000104267	chr8	85463852	85481493	+	17642
##	2040	ENSG00000104299	chr8	28767661	28890242	-	122582
##	2041	ENSG00000104312	chr8	89757747	89791063	+	33317
##	2042	ENSG00000104320	chr8	89933336	90003228	-	69893
##	2043	ENSG00000104324	chr8	96645227	97149654	+	504428
##	2044	ENSG00000104325	chr8	90001405	90052092	+	50688
##	2045	ENSG00000104331	chr8	56957933	56993844	-	35912
##	2046	ENSG00000104341	chr8	97775057	97853013	+	77957
##	2047	ENSG00000104343	chr8	73780097	73878910	-	98814
##	2048	ENSG00000104356	chr8	98117297	98159834	+	42538
##	2049	ENSG00000104361	chr8	98189833	98294393	-	104561
##	2050	ENSG00000104365	chr8	42271302	42332653	+	61352
##	2051	ENSG00000104375	chr8	98401403	98942827	-	541425
##	2052	ENSG00000104381	chr8	74321130	74488872	+	167743
##	2053	ENSG00000104388	chr8	60516857	60623627	+	106771
##	2054	ENSG00000104408	chr8	108201216	108435333	-	234118
##	2055	ENSG00000104412	chr8	108443601	108486918	+	43318
##	2056	ENSG00000104413	chr8	94641074	94707466	+	66393
##	2057	ENSG00000104419	chr8	133237171	133302022	-	64852
##	2058	ENSG00000104442	chr8	65602456	65634217	-	31762

## 2059	ENSG00000104447	chr8	115408496	115809673	-	401178
## 2060	ENSG00000104450	chr8	100157906	100259278	+	101373
## 2061	ENSG00000104472	chr8	140511298	140517137	+	5840
## 2062	ENSG00000104497	chr8	81799581	81842866	-	43286
## 2063	ENSG00000104517	chr8	102253012	102412841	-	159830
## 2064	ENSG00000104518	chr8	143553207	143563062	+	9856
## 2065	ENSG00000104522	chr8	143612618	143618048	-	5431
## 2066	ENSG00000104529	chr8	143579697	143599541	-	19845
## 2067	ENSG00000104549	chr8	124998497	125022283	+	23787
## 2068	ENSG00000104611	chr8	19313617	19396218	+	82602
## 2069	ENSG00000104613	chr8	19817140	19852083	+	34944
## 2070	ENSG00000104626	chr8	9002147	9116746	+	114600
## 2071	ENSG00000104635	chr8	22367249	22434129	+	66881
## 2072	ENSG00000104643	chr8	11284416	11328146	+	43731
## 2073	ENSG00000104660	chr8	30095398	30177208	+	81811
## 2074	ENSG00000104671	chr8	30156297	30183640	+	27344
## 2075	ENSG00000104679	chr8	23270120	23296279	+	26160
## 2076	ENSG00000104687	chr8	30678061	30727926	-	49866
## 2077	ENSG00000104689	chr8	23190452	23225126	-	34675
## 2078	ENSG00000104691	chr8	30732247	30767006	+	34760
## 2079	ENSG00000104695	chr8	30774457	30814314	-	39858
## 2080	ENSG00000104714	chr8	614746	738106	-	123361
## 2081	ENSG00000104731	chr16	87696485	87765992	-	69508
## 2082	ENSG00000104738	chr8	47960185	47978160	+	17976
## 2083	ENSG00000104756	chr8	25427847	25458476	-	30630
## 2084	ENSG00000104763	chr8	18055992	18084998	-	29007
## 2085	ENSG00000104765	chr8	26382898	26505636	+	122739
## 2086	ENSG00000104774	chr19	12646511	12666742	-	20232
## 2087	ENSG00000104783	chr19	43766533	43781257	-	14725
## 2088	ENSG00000104805	chr19	48900050	48923372	+	23323
## 2089	ENSG00000104812	chr19	48968125	48993310	-	25186
## 2090	ENSG00000104814	chr19	38587641	38618882	-	31242
## 2091	ENSG00000104823	chr19	38815422	38832005	-	16584
## 2092	ENSG00000104824	chr19	38836388	38852347	-	15960
## 2093	ENSG00000104825	chr19	38899700	38908893	+	9194
## 2094	ENSG00000104833	chr19	6494319	6502848	-	8530
## 2095	ENSG00000104835	chr19	38915266	38930896	-	15631
## 2096	ENSG00000104852	chr19	49085419	49108605	+	23187
## 2097	ENSG00000104853	chr19	44954585	44993341	+	38757
## 2098	ENSG00000104856	chr19	45001430	45038198	+	36769
## 2099	ENSG00000104859	chr19	45039040	45070956	+	31917
## 2100	ENSG00000104863	chr19	49114324	49118460	+	4137
## 2101	ENSG00000104866	chr19	45091396	45148077	+	56682
## 2102	ENSG00000104870	chr19	49506816	49526333	+	19518
## 2103	ENSG00000104872	chr19	49446298	49453497	-	7200
## 2104	ENSG00000104880	chr19	7395113	7472477	+	77365
## 2105	ENSG00000104884	chr19	45349837	45370918	-	21082
## 2106	ENSG00000104885	chr19	2164149	2232578	+	68430
## 2107	ENSG00000104886	chr19	2230084	2237704	-	7621
## 2108	ENSG00000104889	chr19	12806580	12813638	+	7059
## 2109	ENSG00000104892	chr19	45333434	45351520	+	18087
## 2110	ENSG00000104894	chr19	49335171	49343335	+	8165
## 2111	ENSG00000104897	chr19	2236504	2248679	+	12176
## 2112	ENSG00000104899	chr19	2249309	2252073	+	2765



##	2113	ENSG00000104903	chr19	13099033	13103161	-	4129
##	2114	ENSG00000104904	chr19	2269509	2273490	+	3982
##	2115	ENSG00000104907	chr19	13104902	13117567	-	12666
##	2116	ENSG00000104915	chr19	13144058	13150383	-	6326
##	2117	ENSG00000104918	chr19	7669044	7670454	+	1411
##	2118	ENSG00000104936	chr19	45769717	45782552	-	12836
##	2119	ENSG00000104946	chr19	49877425	49888749	+	11325
##	2120	ENSG00000104951	chr19	49889654	49929539	-	39886
##	2121	ENSG00000104957	chr19	13731760	13763296	+	31537
##	2122	ENSG00000104960	chr19	49850735	49860744	+	10010
##	2123	ENSG00000104964	chr19	3052910	3063107	-	10198
##	2124	ENSG00000104969	chr19	2754714	2783371	-	28658
##	2125	ENSG00000104973	chr19	49818279	49838816	+	20538
##	2126	ENSG00000104976	chr19	7920316	7923250	+	2935
##	2127	ENSG00000104979	chr19	13774168	13778462	+	4295
##	2128	ENSG00000104980	chr19	7926718	7943920	-	17203
##	2129	ENSG00000104983	chr19	45995461	46021318	+	25858
##	2130	ENSG00000104998	chr19	14031748	14053216	+	21469
##	2131	ENSG00000105011	chr19	14119509	14136956	-	17448
##	2132	ENSG00000105048	chr19	55132794	55149354	-	16561
##	2133	ENSG00000105053	chr19	49976467	50025946	-	49480
##	2134	ENSG00000105058	chr19	16185380	16192046	+	6667
##	2135	ENSG00000105063	chr19	55229780	55258995	-	29216
##	2136	ENSG00000105072	chr19	16496311	16521352	+	25042
##	2137	ENSG00000105085	chr19	16574907	16629062	-	54156
##	2138	ENSG00000105122	chr19	15451624	15464571	-	12948
##	2139	ENSG00000105127	chr19	15353385	15379798	-	26414
##	2140	ENSG00000105135	chr19	15114984	15125785	-	10802
##	2141	ENSG00000105136	chr19	57487711	57496097	+	8387
##	2142	ENSG00000105171	chr19	29604017	29617237	+	13221
##	2143	ENSG00000105173	chr19	29811898	29824308	+	12411
##	2144	ENSG00000105176	chr19	29923644	30016608	+	92965
##	2145	ENSG00000105185	chr19	32581068	32587452	+	6385
##	2146	ENSG00000105186	chr19	32597007	32676597	-	79591
##	2147	ENSG00000105193	chr19	39433207	39435948	-	2742
##	2148	ENSG00000105197	chr19	39480412	39493785	+	13374
##	2149	ENSG00000105202	chr19	39834458	39846414	-	11957
##	2150	ENSG00000105204	chr19	39825350	39834201	-	8852
##	2151	ENSG00000105220	chr19	34359480	34402156	+	42677
##	2152	ENSG00000105221	chr19	40230317	40285536	-	55220
##	2153	ENSG00000105223	chr19	40348456	40380439	+	31984
##	2154	ENSG00000105227	chr19	40393768	40413366	-	19599
##	2155	ENSG00000105229	chr19	4007646	4039386	+	31741
##	2156	ENSG00000105245	chr19	40665905	40690972	-	25068
##	2157	ENSG00000105248	chr19	4247079	4269090	+	22012
##	2158	ENSG00000105254	chr19	36114289	36125947	+	11659
##	2159	ENSG00000105255	chr19	4304600	4323843	+	19244
##	2160	ENSG00000105258	chr19	36113710	36115346	-	1637
##	2161	ENSG00000105270	chr19	36014660	36033343	-	18684
##	2162	ENSG00000105281	chr19	46774883	46788594	-	13712
##	2163	ENSG00000105287	chr19	46674275	46717127	-	42853
##	2164	ENSG00000105298	chr19	3610641	3626815	-	16175
##	2165	ENSG00000105321	chr19	47255980	47271953	+	15974
##	2166	ENSG00000105323	chr19	41262496	41307598	+	45103

##	2167	ENSG00000105325	chr19	3506273	3538330	+	32058
##	2168	ENSG00000105329	chr19	41301587	41353911	-	52325
##	2169	ENSG00000105339	chr8	141117278	141195808	+	78531
##	2170	ENSG00000105341	chr19	41431318	41440717	-	9400
##	2171	ENSG00000105352	chr19	41618971	41627074	-	8104
##	2172	ENSG00000105355	chr19	4838341	4867768	-	29428
##	2173	ENSG00000105364	chr19	10251901	10260045	+	8145
##	2174	ENSG00000105366	chr19	51450847	51458456	-	7610
##	2175	ENSG00000105369	chr19	41877120	41881372	+	4253
##	2176	ENSG00000105371	chr19	10286967	10288522	+	1556
##	2177	ENSG00000105372	chr19	41859918	41872926	+	13009
##	2178	ENSG00000105373	chr19	47745522	47757058	+	11537
##	2179	ENSG00000105374	chr19	51371606	51372715	-	1110
##	2180	ENSG00000105376	chr19	10289981	10296778	+	6798
##	2181	ENSG00000105379	chr19	51345169	51366418	-	21250
##	2182	ENSG00000105383	chr19	51225064	51243860	+	18797
##	2183	ENSG00000105393	chr19	17267350	17281249	+	13900
##	2184	ENSG00000105397	chr19	10350529	10380676	-	30148
##	2185	ENSG00000105401	chr19	10391134	10420121	-	28988
##	2186	ENSG00000105402	chr19	47487637	47515240	-	27604
##	2187	ENSG00000105404	chr19	41956681	41959390	-	2710
##	2188	ENSG00000105426	chr19	5158495	5340803	-	182309
##	2189	ENSG00000105427	chr19	42387019	42390287	-	3269
##	2190	ENSG00000105429	chr19	42325609	42378769	+	53161
##	2191	ENSG00000105438	chr19	48382570	48391553	-	8984
##	2192	ENSG00000105443	chr19	48469032	48482314	+	13283
##	2193	ENSG00000105447	chr19	48445773	48457022	+	11250
##	2194	ENSG00000105472	chr19	50723329	50725718	+	2390
##	2195	ENSG00000105479	chr19	48296457	48321894	-	25438
##	2196	ENSG00000105483	chr19	48180770	48255946	-	75177
##	2197	ENSG00000105486	chr19	48115445	48170603	-	55159
##	2198	ENSG00000105497	chr19	51571298	51592508	+	21211
##	2199	ENSG00000105499	chr19	48047843	48110817	-	62975
##	2200	ENSG00000105501	chr19	51611927	51645545	-	33619
##	2201	ENSG00000105514	chr19	11322046	11346270	-	24225
##	2202	ENSG00000105516	chr19	48630030	48637438	-	7409
##	2203	ENSG00000105518	chr19	11342776	11346518	-	3743
##	2204	ENSG00000105519	chr19	5911707	5916208	+	4502
##	2205	ENSG00000105520	chr19	11355386	11365698	+	10313
##	2206	ENSG00000105552	chr19	48795062	48811029	-	15968
##	2207	ENSG00000105556	chr19	301444	344815	-	43372
##	2208	ENSG00000105568	chr19	52190039	52229533	+	39495
##	2209	ENSG00000105576	chr19	12699194	12724011	-	24818
##	2210	ENSG00000105583	chr19	12668071	12671356	-	3286
##	2211	ENSG00000105607	chr19	12891026	12914207	+	23182
##	2212	ENSG00000105612	chr19	12875211	12881468	-	6258
##	2213	ENSG00000105618	chr19	54115410	54131719	+	16310
##	2214	ENSG00000105639	chr19	17824780	17848071	-	23292
##	2215	ENSG00000105640	chr19	17859876	17864153	+	4278
##	2216	ENSG00000105641	chr19	17871973	17895174	+	23202
##	2217	ENSG00000105643	chr19	18001132	18014102	+	12971
##	2218	ENSG00000105647	chr19	18153118	18170540	+	17423
##	2219	ENSG00000105649	chr19	18196784	18204074	-	7291
##	2220	ENSG00000105655	chr19	18434388	18438301	-	3914

##	2221	ENSG00000105656	chr19	18442663	18522127	-	79465
##	2222	ENSG00000105662	chr19	18683677	18782333	+	98657
##	2223	ENSG00000105669	chr19	18899514	18919397	-	19884
##	2224	ENSG00000105671	chr19	18919675	18928633	+	8959
##	2225	ENSG00000105676	chr19	19033575	19060311	+	26737
##	2226	ENSG00000105677	chr19	35545595	35547526	+	1932
##	2227	ENSG00000105679	chr19	35533412	35545316	+	11905
##	2228	ENSG00000105698	chr19	35268978	35279821	+	10844
##	2229	ENSG00000105700	chr19	18557762	18569387	+	11626
##	2230	ENSG00000105701	chr19	18531751	18544077	-	12327
##	2231	ENSG00000105705	chr19	19276018	19320844	-	44827
##	2232	ENSG00000105711	chr19	35030684	35040448	+	9765
##	2233	ENSG00000105722	chr19	42247572	42255157	-	7586
##	2234	ENSG00000105723	chr19	42230186	42242625	-	12440
##	2235	ENSG00000105726	chr19	19645198	19663693	-	18496
##	2236	ENSG00000105732	chr19	42068477	42081549	+	13073
##	2237	ENSG00000105737	chr19	41998321	42069498	-	71178
##	2238	ENSG00000105738	chr19	37907228	38208372	+	301145
##	2239	ENSG00000105755	chr19	43506719	43527244	-	20526
##	2240	ENSG00000105771	chr19	43727992	43754990	-	26999
##	2241	ENSG00000105778	chr7	32495426	32588721	+	93296
##	2242	ENSG00000105793	chr7	90335223	90391455	+	56233
##	2243	ENSG00000105808	chr7	102573807	102616757	-	42951
##	2244	ENSG00000105810	chr7	92604921	92836594	-	231674
##	2245	ENSG00000105819	chr7	103297422	103329511	+	32090
##	2246	ENSG00000105821	chr7	103312474	103344873	-	32400
##	2247	ENSG00000105829	chr7	93962762	94004382	-	41621
##	2248	ENSG00000105835	chr7	106248285	106286326	-	38042
##	2249	ENSG00000105849	chr7	19695462	19709087	-	13626
##	2250	ENSG00000105851	chr7	106865278	106907145	+	41868
##	2251	ENSG00000105854	chr7	95404863	95435329	-	30467
##	2252	ENSG00000105856	chr7	107168961	107202529	+	33569
##	2253	ENSG00000105865	chr7	107563484	107578464	+	14981
##	2254	ENSG00000105866	chr7	21428034	21514822	+	86789
##	2255	ENSG00000105875	chr7	135183839	135211534	-	27696
##	2256	ENSG00000105877	chr7	21543215	21901839	+	358625
##	2257	ENSG00000105879	chr7	107743697	107761667	+	17971
##	2258	ENSG00000105887	chr7	135926761	135977353	-	50593
##	2259	ENSG00000105926	chr7	24573268	24694193	+	120926
##	2260	ENSG00000105939	chr7	139043520	139109719	-	66200
##	2261	ENSG00000105948	chr7	139133744	139191986	+	58243
##	2262	ENSG00000105953	chr7	44606572	44709066	+	102495
##	2263	ENSG00000105963	chr7	897901	955407	-	57507
##	2264	ENSG00000105967	chr7	115935148	116159896	-	224749
##	2265	ENSG00000105968	chr7	44826791	44848083	-	21293
##	2266	ENSG00000105982	chr7	156640281	156677130	+	36850
##	2267	ENSG00000105983	chr7	156668946	156893230	-	224285
##	2268	ENSG00000105988	chr10	92216332	92216793	+	462
##	2269	ENSG00000105991	chr7	27092993	27095996	-	3004
##	2270	ENSG00000105993	chr7	157335381	157417439	+	82059
##	2271	ENSG00000105997	chr7	27106184	27152581	-	46398
##	2272	ENSG00000106004	chr7	27141052	27143668	-	2617
##	2273	ENSG00000106009	chr7	2537877	2555727	-	17851
##	2274	ENSG00000106012	chr7	2558972	2614734	+	55763

## 2275	ENSG00000106018	chr7	159028175	159144957	-	116783
## 2276	ENSG00000106028	chr7	141738321	141787922	+	49602
## 2277	ENSG00000106031	chr7	27193503	27200106	-	6604
## 2278	ENSG00000106049	chr7	27525442	27662995	-	137554
## 2279	ENSG00000106052	chr7	27739331	27844564	+	105234
## 2280	ENSG00000106077	chr7	73736094	73738867	-	2774
## 2281	ENSG00000106080	chr7	30010587	30026684	-	16098
## 2282	ENSG00000106086	chr7	30027404	30130483	+	103080
## 2283	ENSG00000106100	chr7	30424527	30478784	-	54258
## 2284	ENSG00000106105	chr7	30594681	30634033	+	39353
## 2285	ENSG00000106123	chr7	142855061	142871094	+	16034
## 2286	ENSG00000106133	chr7	72947581	72954790	-	7210
## 2287	ENSG00000106144	chr7	143288215	143307696	+	19482
## 2288	ENSG00000106153	chr7	56101569	56106576	-	5008
## 2289	ENSG00000106211	chr7	76302544	76304295	+	1752
## 2290	ENSG00000106244	chr7	99392048	99408829	-	16782
## 2291	ENSG00000106245	chr7	99408641	99419616	+	10976
## 2292	ENSG00000106246	chr7	99416739	99466163	-	49425
## 2293	ENSG00000106261	chr7	100015572	100041689	+	26118
## 2294	ENSG00000106263	chr7	2354086	2380745	+	26660
## 2295	ENSG00000106266	chr7	2251770	2354318	-	102549
## 2296	ENSG00000106268	chr7	2242222	2251146	+	8925
## 2297	ENSG00000106290	chr7	100107070	100119841	-	12772
## 2298	ENSG00000106299	chr7	123681935	123749067	-	67133
## 2299	ENSG00000106305	chr7	6009245	6023834	+	14590
## 2300	ENSG00000106327	chr7	100620416	100642779	-	22364
## 2301	ENSG00000106328	chr7	127591409	127602144	+	10736
## 2302	ENSG00000106330	chr7	100612102	100615384	+	3283
## 2303	ENSG00000106333	chr7	100602177	100608175	+	5999
## 2304	ENSG00000106344	chr7	128297685	128343908	-	46224
## 2305	ENSG00000106346	chr7	6104884	6161564	+	56681
## 2306	ENSG00000106348	chr7	128392277	128410252	-	17976
## 2307	ENSG00000106351	chr7	100539211	100568219	+	29009
## 2308	ENSG00000106355	chr7	32485332	32495283	-	9952
## 2309	ENSG00000106367	chr7	101154397	101161596	+	7200
## 2310	ENSG00000106392	chr7	7156934	7248651	+	91718
## 2311	ENSG00000106397	chr7	101205977	101218420	-	12444
## 2312	ENSG00000106399	chr7	7636518	7718607	-	82090
## 2313	ENSG00000106400	chr7	101217668	101224190	+	6523
## 2314	ENSG00000106404	chr7	101232092	101238820	-	6729
## 2315	ENSG00000106415	chr7	7968794	8094272	+	125479
## 2316	ENSG00000106443	chr7	10973872	11169630	+	195759
## 2317	ENSG00000106459	chr7	129611714	129757082	+	145369
## 2318	ENSG00000106460	chr7	12211241	12243367	+	32127
## 2319	ENSG00000106462	chr7	148807383	148884321	-	76939
## 2320	ENSG00000106477	chr7	130393771	130442433	-	48663
## 2321	ENSG00000106479	chr7	149838367	149867479	+	29113
## 2322	ENSG00000106484	chr7	130486171	130506296	+	20126
## 2323	ENSG00000106524	chr7	16599776	16645817	-	46042
## 2324	ENSG00000106537	chr7	16753535	16784536	+	31002
## 2325	ENSG00000106554	chr7	132784868	133082088	-	297221
## 2326	ENSG00000106560	chr7	150685697	150693641	+	7945
## 2327	ENSG00000106571	chr7	41960950	42237870	-	276921
## 2328	ENSG00000106588	chr7	42916857	42932223	-	15367

## 2329	ENSG00000106591	chr7	42932200	42948958	+	16759
## 2330	ENSG00000106603	chr7	43608456	43729717	-	121262
## 2331	ENSG00000106608	chr7	43875894	43926411	-	50518
## 2332	ENSG00000106609	chr7	66921225	66958551	+	37327
## 2333	ENSG00000106610	chr7	67302621	67321526	+	18906
## 2334	ENSG00000106615	chr7	151466012	151520120	-	54109
## 2335	ENSG00000106617	chr7	151556111	151877125	-	321015
## 2336	ENSG00000106628	chr7	44114681	44124358	-	9678
## 2337	ENSG00000106635	chr7	73536356	73558002	-	21647
## 2338	ENSG00000106636	chr7	44200968	44214294	+	13327
## 2339	ENSG00000106638	chr7	73568932	73578791	-	9860
## 2340	ENSG00000106665	chr7	74289475	74405943	+	116469
## 2341	ENSG00000106682	chr7	74174245	74197101	+	22857
## 2342	ENSG00000106683	chr7	74082933	74122525	+	39593
## 2343	ENSG00000106692	chr9	105558130	105641118	+	82989
## 2344	ENSG00000106701	chr9	105447796	105552433	+	104638
## 2345	ENSG00000106723	chr9	88388419	88478694	+	90276
## 2346	ENSG00000106771	chr9	109015152	109119945	-	104794
## 2347	ENSG00000106780	chr9	120600813	120714470	-	113658
## 2348	ENSG00000106785	chr9	98069275	98119212	-	49938
## 2349	ENSG00000106789	chr9	98120975	98192640	-	71666
## 2350	ENSG00000106799	chr9	99104038	99154192	+	50155
## 2351	ENSG00000106803	chr9	99222064	99230615	+	8552
## 2352	ENSG00000106804	chr9	120952335	121050276	-	97942
## 2353	ENSG00000106829	chr9	79571773	79726882	+	155110
## 2354	ENSG00000106852	chr9	122202577	122229626	-	27050
## 2355	ENSG00000106853	chr9	111562577	111599855	-	37279
## 2356	ENSG00000106868	chr9	112040785	112175408	-	134624
## 2357	ENSG00000106948	chr9	114334156	114394405	-	60250
## 2358	ENSG00000106952	chr9	114893343	114930595	-	37253
## 2359	ENSG00000106976	chr9	128191655	128255248	+	63594
## 2360	ENSG00000106991	chr9	127815012	127854756	-	39745
## 2361	ENSG00000106992	chr9	127866480	127877743	-	11264
## 2362	ENSG00000106993	chr9	4679559	4708398	+	28840
## 2363	ENSG00000107020	chr9	5357973	5437878	-	79906
## 2364	ENSG00000107021	chr9	128787204	128810432	+	23229
## 2365	ENSG00000107036	chr9	5629025	5776557	+	147533
## 2366	ENSG00000107077	chr9	6757641	7175648	+	418008
## 2367	ENSG00000107099	chr9	214854	465259	+	250406
## 2368	ENSG00000107104	chr9	470291	746106	+	275816
## 2369	ENSG00000107140	chr9	35605305	35610041	+	4737
## 2370	ENSG00000107164	chr9	130578965	130638352	+	59388
## 2371	ENSG00000107175	chr9	35732335	35737004	+	4670
## 2372	ENSG00000107185	chr9	35749287	35758575	+	9289
## 2373	ENSG00000107201	chr9	32455705	32526324	-	70620
## 2374	ENSG00000107223	chr9	136862119	136866286	-	4168
## 2375	ENSG00000107262	chr9	33247820	33264761	-	16942
## 2376	ENSG00000107263	chr9	131576770	131740074	-	163305
## 2377	ENSG00000107290	chr9	132261356	132354985	-	93630
## 2378	ENSG00000107331	chr9	137007227	137028922	-	21696
## 2379	ENSG00000107338	chr9	37919134	38069211	-	150078
## 2380	ENSG00000107341	chr9	33817567	33920404	+	102838
## 2381	ENSG00000107362	chr9	71862452	71910931	-	48480
## 2382	ENSG00000107371	chr9	37766978	37801437	-	34460

## 2383	ENSG00000107372	chr9	72351425	72365235	-	13811
## 2384	ENSG00000107404	chr1	1335276	1349350	-	14075
## 2385	ENSG00000107438	chr10	95237572	95291024	-	53453
## 2386	ENSG00000107443	chr10	96043394	96060870	+	17477
## 2387	ENSG00000107521	chr10	98416198	98446947	-	30750
## 2388	ENSG00000107537	chr10	13277796	13302412	-	24617
## 2389	ENSG00000107551	chr10	44959407	44995891	+	36485
## 2390	ENSG00000107554	chr10	99875577	100009919	-	134343
## 2391	ENSG00000107560	chr10	118004916	118046603	-	41688
## 2392	ENSG00000107566	chr10	100150094	100188334	-	38241
## 2393	ENSG00000107581	chr10	119033670	119080823	-	47154
## 2394	ENSG00000107614	chr10	17142254	17202054	-	59801
## 2395	ENSG00000107625	chr10	68901278	68946847	+	45570
## 2396	ENSG00000107643	chr10	48306639	48439360	+	132722
## 2397	ENSG00000107651	chr10	119892711	119944658	+	51948
## 2398	ENSG00000107669	chr10	121740421	121928801	-	188381
## 2399	ENSG00000107672	chr10	121957088	121975217	-	18130
## 2400	ENSG00000107679	chr10	122374696	122442602	+	67907
## 2401	ENSG00000107719	chr10	70478821	70568449	+	89629
## 2402	ENSG00000107738	chr10	71747559	71773498	-	25940
## 2403	ENSG00000107745	chr10	72367327	72626191	-	258865
## 2404	ENSG00000107758	chr10	73436428	73496024	-	59597
## 2405	ENSG00000107771	chr10	84328586	84518521	+	189936
## 2406	ENSG00000107779	chr10	86756650	86932838	+	176189
## 2407	ENSG00000107789	chr10	87504875	87553460	+	48586
## 2408	ENSG00000107798	chr10	89213569	89414557	-	200989
## 2409	ENSG00000107815	chr10	100987367	100994401	+	7035
## 2410	ENSG00000107816	chr10	100996618	101007836	+	11219
## 2411	ENSG00000107819	chr10	101031234	101041244	+	10011
## 2412	ENSG00000107829	chr10	101610664	101695295	-	84632
## 2413	ENSG00000107833	chr10	101781325	101783413	-	2089
## 2414	ENSG00000107854	chr10	91798312	91865276	+	66965
## 2415	ENSG00000107862	chr10	102245532	102382899	+	137368
## 2416	ENSG00000107863	chr10	24583609	24723668	-	140060
## 2417	ENSG00000107864	chr10	92046692	92291087	-	244396
## 2418	ENSG00000107872	chr10	102419189	102423136	+	3948
## 2419	ENSG00000107874	chr10	102423245	102432661	-	9417
## 2420	ENSG00000107882	chr10	102503987	102633535	+	129549
## 2421	ENSG00000107890	chr10	26991914	27100498	-	108585
## 2422	ENSG00000107897	chr10	27195214	27242130	-	46917
## 2423	ENSG00000107902	chr10	124461834	124617888	+	156055
## 2424	ENSG00000107929	chr10	806914	931705	-	124792
## 2425	ENSG00000107937	chr10	988019	1019936	+	31918
## 2426	ENSG00000107938	chr10	125719515	125764143	+	44629
## 2427	ENSG00000107949	chr10	125823546	125853695	+	30150
## 2428	ENSG00000107951	chr10	30309801	30374448	-	64648
## 2429	ENSG00000107954	chr10	103493979	103592552	+	98574
## 2430	ENSG00000107957	chr10	103594027	103855543	-	261517
## 2431	ENSG00000107959	chr10	3137728	3172841	-	35114
## 2432	ENSG00000107960	chr10	103882542	103918205	-	35664
## 2433	ENSG00000107968	chr10	30433937	30461833	+	27897
## 2434	ENSG00000108010	chr10	130136399	130184521	+	48123
## 2435	ENSG00000108021	chr10	5684838	5763740	+	78903
## 2436	ENSG00000108039	chr10	109864766	109923553	-	58788

## 2437	ENSG00000108055	chr10	110567691	110604636	+	36946
## 2438	ENSG00000108061	chr10	110919547	111013667	+	94121
## 2439	ENSG00000108064	chr10	58385022	58399221	+	14200
## 2440	ENSG00000108091	chr10	59788763	59906656	-	117894
## 2441	ENSG00000108094	chr10	35008551	35090642	-	82092
## 2442	ENSG00000108100	chr10	35247025	35572669	+	325645
## 2443	ENSG00000108106	chr19	55399745	55407777	-	8033
## 2444	ENSG00000108107	chr19	55385345	55403250	+	17906
## 2445	ENSG00000108175	chr10	79069035	79316528	+	247494
## 2446	ENSG00000108176	chr10	67796665	67838166	-	41502
## 2447	ENSG00000108179	chr10	79347469	79355337	+	7869
## 2448	ENSG00000108187	chr10	68282660	68333049	-	50390
## 2449	ENSG00000108219	chr10	80454166	80533123	+	78958
## 2450	ENSG00000108239	chr10	94402504	94535930	+	133427
## 2451	ENSG00000108256	chr17	29255836	29294118	-	38283
## 2452	ENSG00000108262	chr17	29573469	29594054	-	20586
## 2453	ENSG00000108298	chr17	39200283	39204727	+	4445
## 2454	ENSG00000108306	chr17	39252644	39402523	-	149880
## 2455	ENSG00000108312	chr17	44205033	44221626	-	16594
## 2456	ENSG00000108344	chr17	39980797	39997960	+	17164
## 2457	ENSG00000108349	chr17	40140318	40172183	+	31866
## 2458	ENSG00000108352	chr17	40177010	40195656	+	18647
## 2459	ENSG00000108375	chr17	58352500	58417595	-	65096
## 2460	ENSG00000108384	chr17	58692573	58735611	+	43039
## 2461	ENSG00000108389	chr17	58489529	58517905	-	28377
## 2462	ENSG00000108395	chr17	58982638	59106921	-	124284
## 2463	ENSG00000108405	chr17	3896592	3916500	-	19909
## 2464	ENSG00000108406	chr17	59565525	59608345	+	42821
## 2465	ENSG00000108423	chr17	59859482	59892945	-	33464
## 2466	ENSG00000108424	chr17	47649476	47685505	+	36030
## 2467	ENSG00000108433	chr17	46923117	46967019	+	43903
## 2468	ENSG00000108439	chr17	47941506	47948288	+	6783
## 2469	ENSG00000108443	chr17	59893046	59950564	+	57519
## 2470	ENSG00000108465	chr17	47967810	47981774	+	13965
## 2471	ENSG00000108468	chr17	48070052	48101521	-	31470
## 2472	ENSG00000108469	chr17	75626845	75667189	-	40345
## 2473	ENSG00000108474	chr17	16217191	16351797	+	134607
## 2474	ENSG00000108479	chr17	75751594	75765711	-	14118
## 2475	ENSG00000108506	chr17	61865367	61928016	-	62650
## 2476	ENSG00000108509	chr17	4967992	4987652	-	19661
## 2477	ENSG00000108510	chr17	61942605	62065282	-	122678
## 2478	ENSG00000108515	chr17	4948092	4957131	+	9040
## 2479	ENSG00000108518	chr17	4945652	4949061	-	3410
## 2480	ENSG00000108523	chr17	4940008	4945222	+	5215
## 2481	ENSG00000108528	chr17	4937130	4940251	-	3122
## 2482	ENSG00000108557	chr17	17681473	17811453	+	129981
## 2483	ENSG00000108559	chr17	5360963	5420160	-	59198
## 2484	ENSG00000108561	chr17	5432777	5448830	-	16054
## 2485	ENSG00000108578	chr17	30248195	30292056	-	43862
## 2486	ENSG00000108582	chr17	30378905	30469989	+	91085
## 2487	ENSG00000108587	chr17	30477362	30527592	+	50231
## 2488	ENSG00000108588	chr17	63745250	63776351	-	31102
## 2489	ENSG00000108590	chr17	6643315	6651634	-	8320
## 2490	ENSG00000108591	chr17	18087886	18107971	+	20086

## 2491	ENSG00000108592	chr17	63819433	63830012	-	10580
## 2492	ENSG00000108599	chr17	19904302	19978343	-	74042
## 2493	ENSG00000108604	chr17	63832081	63843065	-	10985
## 2494	ENSG00000108622	chr17	64002594	64020634	-	18041
## 2495	ENSG00000108639	chr17	78168558	78173527	+	4970
## 2496	ENSG00000108641	chr17	19337554	19378182	-	40629
## 2497	ENSG00000108651	chr17	31860899	31901765	-	40867
## 2498	ENSG00000108654	chr17	64499616	64508199	-	8584
## 2499	ENSG00000108666	chr17	32324565	32350023	-	25459
## 2500	ENSG00000108669	chr17	78674048	78782297	-	108250
## 2501	ENSG00000108671	chr17	32444261	32483318	+	39058
## 2502	ENSG00000108733	chr17	35574795	35578863	-	4069
## 2503	ENSG00000108771	chr17	42101404	42112733	-	11330
## 2504	ENSG00000108773	chr17	42113108	42121358	-	8251
## 2505	ENSG00000108774	chr17	42124976	42155044	-	30069
## 2506	ENSG00000108784	chr17	42536172	42544449	+	8278
## 2507	ENSG00000108785	chr17	42546764	42548706	+	1943
## 2508	ENSG00000108786	chr17	42549214	42555213	+	6000
## 2509	ENSG00000108788	chr17	42567068	42573239	+	6172
## 2510	ENSG00000108797	chr17	42682613	42699814	+	17202
## 2511	ENSG00000108799	chr17	42700275	42745049	-	44775
## 2512	ENSG00000108813	chr17	49968970	49974959	+	5990
## 2513	ENSG00000108819	chr17	50133735	50150630	-	16896
## 2514	ENSG00000108825	chr17	42950526	42980528	-	30003
## 2515	ENSG00000108826	chr17	50367857	50373214	-	5358
## 2516	ENSG00000108828	chr17	43014605	43025123	-	10519
## 2517	ENSG00000108829	chr17	50375059	50397553	-	22495
## 2518	ENSG00000108839	chr17	6996065	7010736	+	14672
## 2519	ENSG00000108840	chr17	44076746	44123702	-	46957
## 2520	ENSG00000108848	chr17	50719544	50756213	+	36670
## 2521	ENSG00000108854	chr17	64542295	64662068	-	119774
## 2522	ENSG00000108861	chr17	43766121	43778988	-	12868
## 2523	ENSG00000108883	chr17	44849943	44899662	-	49720
## 2524	ENSG00000108924	chr17	55265012	55325065	+	60054
## 2525	ENSG00000108932	chr17	68267026	68291267	-	24242
## 2526	ENSG00000108946	chr17	68511780	68551319	+	39540
## 2527	ENSG00000108953	chr17	1344272	1400378	-	56107
## 2528	ENSG00000108958	chr17	1858039	1858446	-	408
## 2529	ENSG00000108960	chr17	55392613	55421992	-	29380
## 2530	ENSG00000108961	chr17	8288497	8290092	+	1596
## 2531	ENSG00000108963	chr17	2030110	2043430	+	13321
## 2532	ENSG00000109016	chr17	21123364	21193265	+	69902
## 2533	ENSG00000109046	chr17	27294076	27315926	+	21851
## 2534	ENSG00000109062	chr17	74748613	74769353	+	20741
## 2535	ENSG00000109063	chr17	10628526	10657309	-	28784
## 2536	ENSG00000109065	chr17	74770547	74776367	-	5821
## 2537	ENSG00000109066	chr17	74776483	74839779	+	63297
## 2538	ENSG00000109079	chr17	28335602	28347009	+	11408
## 2539	ENSG00000109083	chr17	28328325	28335489	-	7165
## 2540	ENSG00000109084	chr17	28319095	28328685	+	9591
## 2541	ENSG00000109089	chr17	74987632	75005800	+	18169
## 2542	ENSG00000109103	chr17	28546707	28552668	-	5962
## 2543	ENSG00000109107	chr17	28573115	28577264	-	4150
## 2544	ENSG00000109111	chr17	28662091	28702684	+	40594



## 2545	ENSG00000109113	chr17	28714281	28718429	-	4149
## 2546	ENSG00000109118	chr17	28905250	28951771	-	46522
## 2547	ENSG00000109133	chr4	41935120	41960572	+	25453
## 2548	ENSG00000109171	chr4	48341322	48426212	+	84891
## 2549	ENSG00000109180	chr4	48805212	48861817	+	56606
## 2550	ENSG00000109184	chr4	51843000	51916837	+	73838
## 2551	ENSG00000109189	chr4	52590972	52659335	-	68364
## 2552	ENSG00000109220	chr4	54009789	54064690	-	54902
## 2553	ENSG00000109265	chr4	56049073	56328625	+	279553
## 2554	ENSG00000109270	chr4	99878336	99894490	-	16155
## 2555	ENSG00000109320	chr4	102501329	102617302	+	115974
## 2556	ENSG00000109323	chr4	102631488	102760994	-	129507
## 2557	ENSG00000109332	chr4	102794383	102868896	-	74514
## 2558	ENSG00000109381	chr4	139028112	139177218	-	149107
## 2559	ENSG00000109390	chr4	139266880	139302551	-	35672
## 2560	ENSG00000109445	chr4	141220887	141234697	+	13811
## 2561	ENSG00000109452	chr4	142023160	142847432	-	824273
## 2562	ENSG00000109458	chr4	143336762	143474568	+	137807
## 2563	ENSG00000109466	chr4	165207618	165323156	+	115539
## 2564	ENSG00000109472	chr4	165361194	165498320	+	137127
## 2565	ENSG00000109475	chr4	108620566	108630412	+	9847
## 2566	ENSG00000109519	chr4	7058906	7068197	-	9292
## 2567	ENSG00000109534	chr4	109815510	109824740	+	9231
## 2568	ENSG00000109536	chr4	189940788	189963204	+	22417
## 2569	ENSG00000109572	chr4	169612633	169723673	+	111041
## 2570	ENSG00000109576	chr4	170060222	170091699	-	31478
## 2571	ENSG00000109586	chr4	173168753	173323967	+	155215
## 2572	ENSG00000109606	chr4	24517441	24584550	-	67110
## 2573	ENSG00000109618	chr4	25120014	25160442	-	40429
## 2574	ENSG00000109667	chr4	9771153	10054936	-	283784
## 2575	ENSG00000109670	chr4	152321259	152536101	-	214843
## 2576	ENSG00000109674	chr4	177309836	177362943	+	53108
## 2577	ENSG00000109685	chr4	1871424	1982207	+	110784
## 2578	ENSG00000109686	chr4	151102751	151325632	-	222882
## 2579	ENSG00000109689	chr4	26857678	27025381	+	167704
## 2580	ENSG00000109705	chr4	13540830	13545050	-	4221
## 2581	ENSG00000109736	chr4	2930561	2934859	-	4299
## 2582	ENSG00000109738	chr4	157076057	157172090	+	96034
## 2583	ENSG00000109743	chr4	15702950	15738313	+	35364
## 2584	ENSG00000109756	chr4	159104178	159360169	+	255992
## 2585	ENSG00000109762	chr4	185204237	185370185	+	165949
## 2586	ENSG00000109775	chr4	185399540	185425985	-	26446
## 2587	ENSG00000109787	chr4	38664196	38701042	+	36847
## 2588	ENSG00000109790	chr4	39045039	39126857	+	81819
## 2589	ENSG00000109805	chr4	17810902	17844862	+	33961
## 2590	ENSG00000109814	chr4	39498755	39528311	-	29557
## 2591	ENSG00000109854	chr11	20363685	20383783	+	20099
## 2592	ENSG00000109861	chr11	88293592	88337787	-	44196
## 2593	ENSG00000109881	chr11	27330827	27363868	-	33042
## 2594	ENSG00000109906	chr11	114059593	114250676	+	191084
## 2595	ENSG00000109911	chr11	31509750	31783998	+	274249
## 2596	ENSG00000109917	chr11	116773799	116788050	-	14252
## 2597	ENSG00000109919	chr11	47617315	47642623	-	25309
## 2598	ENSG00000109920	chr11	47716517	47767443	-	50927

## 2599	ENSG00000109929	chr11	121292453	121308694	+	16242
## 2600	ENSG00000109971	chr11	123057489	123063230	-	5742
## 2601	ENSG00000110011	chr11	64230278	64234286	+	4009
## 2602	ENSG00000110013	chr11	124633113	124695707	-	62595
## 2603	ENSG00000110025	chr11	65027408	65040572	+	13165
## 2604	ENSG00000110031	chr11	58526871	58578220	-	51350
## 2605	ENSG00000110042	chr11	59171430	59208587	+	37158
## 2606	ENSG00000110046	chr11	64894546	64917248	-	22703
## 2607	ENSG00000110047	chr11	64851642	64888296	-	36655
## 2608	ENSG00000110048	chr11	59574398	59616144	-	41747
## 2609	ENSG00000110057	chr11	67991104	68004982	-	13879
## 2610	ENSG00000110060	chr11	125893485	125903221	-	9737
## 2611	ENSG00000110063	chr11	126303752	126345749	+	41998
## 2612	ENSG00000110066	chr11	68154863	68213828	-	58966
## 2613	ENSG00000110074	chr11	126269055	126278131	+	9077
## 2614	ENSG00000110075	chr11	68460731	68615334	+	154604
## 2615	ENSG00000110076	chr11	64606174	64723188	-	117015
## 2616	ENSG00000110077	chr11	60172014	60184666	-	12653
## 2617	ENSG00000110080	chr11	126355640	126440344	+	84705
## 2618	ENSG00000110090	chr11	68754620	68844410	-	89791
## 2619	ENSG00000110092	chr11	69641087	69654474	+	13388
## 2620	ENSG00000110104	chr11	60842071	60851081	+	9011
## 2621	ENSG00000110107	chr11	60890730	60906588	-	15859
## 2622	ENSG00000110108	chr11	60913874	60923443	+	9570
## 2623	ENSG00000110171	chr11	6448613	6474459	-	25847
## 2624	ENSG00000110172	chr11	90201160	90223364	-	22205
## 2625	ENSG00000110200	chr11	72106378	72112780	-	6403
## 2626	ENSG00000110218	chr11	94128928	94181972	+	53045
## 2627	ENSG00000110237	chr11	73308289	73369091	+	60803
## 2628	ENSG00000110274	chr11	117314557	117413268	+	98712
## 2629	ENSG00000110315	chr11	10511678	10541230	-	29553
## 2630	ENSG00000110321	chr11	10797050	10809110	-	12061
## 2631	ENSG00000110324	chr11	117986348	118003037	+	16690
## 2632	ENSG00000110328	chr11	11270876	11622005	-	351130
## 2633	ENSG00000110330	chr11	102347211	102378670	+	31460
## 2634	ENSG00000110344	chr11	118359585	118399211	+	39627
## 2635	ENSG00000110367	chr11	118747766	118791149	-	43384
## 2636	ENSG00000110395	chr11	119206276	119313926	+	107651
## 2637	ENSG00000110400	chr11	119623408	119729084	-	105677
## 2638	ENSG00000110422	chr11	33256672	33357023	+	100352
## 2639	ENSG00000110429	chr11	33740939	33774543	-	33605
## 2640	ENSG00000110435	chr11	34915829	35020591	+	104763
## 2641	ENSG00000110442	chr11	36269284	36289449	-	20166
## 2642	ENSG00000110455	chr11	44065925	44084222	+	18298
## 2643	ENSG00000110492	chr11	46380756	46383837	+	3082
## 2644	ENSG00000110497	chr11	46396414	46594125	-	197712
## 2645	ENSG00000110514	chr11	47269161	47330031	+	60871
## 2646	ENSG00000110536	chr11	47565430	47573461	+	8032
## 2647	ENSG00000110583	chr11	63938959	63957328	+	18370
## 2648	ENSG00000110619	chr11	3000922	3057613	-	56692
## 2649	ENSG00000110651	chr11	2376177	2397419	+	21243
## 2650	ENSG00000110660	chr11	107790991	107928293	-	137303
## 2651	ENSG00000110665	chr11	2295645	2303049	-	7405
## 2652	ENSG00000110693	chr11	15966449	16739591	-	773143

## 2653	ENSG00000110696	chr11	16613132	16756881	+	143750
## 2654	ENSG00000110697	chr11	67491768	67506263	-	14496
## 2655	ENSG00000110700	chr11	17074389	17077787	-	3399
## 2656	ENSG00000110711	chr11	67483041	67491103	+	8063
## 2657	ENSG00000110713	chr11	3671083	3797792	-	126710
## 2658	ENSG00000110717	chr11	68030617	68036644	+	6028
## 2659	ENSG00000110719	chr11	68039016	68050895	+	11880
## 2660	ENSG00000110721	chr11	68052859	68121444	-	68586
## 2661	ENSG00000110756	chr11	18278668	18322198	-	43531
## 2662	ENSG00000110768	chr11	18322295	18367044	+	44750
## 2663	ENSG00000110801	chr12	121888731	121918297	+	29567
## 2664	ENSG00000110811	chr12	6828410	6839851	+	11442
## 2665	ENSG00000110841	chr12	27523431	27695564	+	172134
## 2666	ENSG00000110844	chr12	49568218	49644666	+	76449
## 2667	ENSG00000110848	chr12	9752486	9760901	-	8416
## 2668	ENSG00000110851	chr12	107732866	107761272	-	28407
## 2669	ENSG00000110852	chr12	9852984	9870136	-	17153
## 2670	ENSG00000110871	chr12	120503274	120534434	-	31161
## 2671	ENSG00000110876	chr12	108622277	108633959	-	11683
## 2672	ENSG00000110880	chr12	108645109	108731596	-	86488
## 2673	ENSG00000110881	chr12	50057548	50083611	+	26064
## 2674	ENSG00000110888	chr12	30709552	30754951	-	45400
## 2675	ENSG00000110906	chr12	109448656	109477544	-	28889
## 2676	ENSG00000110911	chr12	50979401	51028566	-	49166
## 2677	ENSG00000110917	chr12	120686869	120701864	+	14996
## 2678	ENSG00000110921	chr12	109573255	109598117	+	24863
## 2679	ENSG00000110925	chr12	51061205	51083664	-	22460
## 2680	ENSG00000110931	chr12	121237691	121298308	-	60618
## 2681	ENSG00000110934	chr12	51281038	51324668	-	43631
## 2682	ENSG00000110955	chr12	56638175	56646068	-	7894
## 2683	ENSG00000110958	chr12	56663341	56688408	-	25068
## 2684	ENSG00000110987	chr12	122019422	122062044	+	42623
## 2685	ENSG00000111011	chr12	122503458	122527000	-	23543
## 2686	ENSG00000111012	chr12	57762334	57768986	-	6653
## 2687	ENSG00000111052	chr12	80792520	80937925	-	145406
## 2688	ENSG00000111058	chr12	80936414	81261205	+	324792
## 2689	ENSG00000111110	chr12	62643982	62935037	-	291056
## 2690	ENSG00000111142	chr12	95473520	95515839	+	42320
## 2691	ENSG00000111144	chr12	96000828	96043520	-	42693
## 2692	ENSG00000111145	chr12	96194382	96269835	+	75454
## 2693	ENSG00000111196	chr12	10604190	10613623	-	9434
## 2694	ENSG00000111203	chr12	2812622	2859791	+	47170
## 2695	ENSG00000111206	chr12	2857681	2877155	-	19475
## 2696	ENSG00000111224	chr12	3791047	3873448	-	82402
## 2697	ENSG00000111229	chr12	110434825	110450422	-	15598
## 2698	ENSG00000111231	chr12	110452484	110469268	-	16785
## 2699	ENSG00000111237	chr12	110491097	110502117	-	11021
## 2700	ENSG00000111247	chr12	4538798	4560048	+	21251
## 2701	ENSG00000111249	chr12	111034024	111350554	+	316531
## 2702	ENSG00000111252	chr12	111405948	111451623	+	45676
## 2703	ENSG00000111266	chr12	12474210	12562383	-	88174
## 2704	ENSG00000111269	chr12	12611827	12645108	+	33282
## 2705	ENSG00000111271	chr12	111686056	111757107	+	71052
## 2706	ENSG00000111276	chr12	12715058	12722371	+	7314

## 2707	ENSG00000111300	chr12	112026689	112109022	-	82334
## 2708	ENSG00000111321	chr12	6375045	6391571	+	16527
## 2709	ENSG00000111325	chr12	122974580	122980043	+	5464
## 2710	ENSG00000111328	chr12	123260971	123272334	-	11364
## 2711	ENSG00000111348	chr12	14942017	14961728	-	19712
## 2712	ENSG00000111358	chr12	123633739	123662606	+	28868
## 2713	ENSG00000111361	chr12	123620406	123633766	-	13361
## 2714	ENSG00000111364	chr12	123602077	123620941	+	18865
## 2715	ENSG00000111371	chr12	46183063	46270017	-	86955
## 2716	ENSG00000111412	chr12	116710185	116738070	-	27886
## 2717	ENSG00000111424	chr12	47841537	47943048	-	101512
## 2718	ENSG00000111445	chr12	118013588	118033130	+	19543
## 2719	ENSG00000111450	chr12	130789600	130839266	-	49667
## 2720	ENSG00000111452	chr12	130953907	131141469	+	187563
## 2721	ENSG00000111481	chr12	54301202	54351849	+	50648
## 2722	ENSG00000111490	chr12	64781193	64881032	+	99840
## 2723	ENSG00000111530	chr12	67269281	67319951	+	50671
## 2724	ENSG00000111540	chr12	55973913	55996683	+	22771
## 2725	ENSG00000111554	chr12	68272443	68332381	-	59939
## 2726	ENSG00000111581	chr12	68686734	68745809	+	59076
## 2727	ENSG00000111596	chr12	70242994	70354993	+	112000
## 2728	ENSG00000111602	chr12	56416373	56449403	-	33031
## 2729	ENSG00000111605	chr12	69239537	69274358	+	34822
## 2730	ENSG00000111615	chr12	75490861	75511636	-	20776
## 2731	ENSG00000111639	chr12	6491886	6493841	-	1956
## 2732	ENSG00000111640	chr12	6533927	6538374	+	4448
## 2733	ENSG00000111641	chr12	6556863	6568691	-	11829
## 2734	ENSG00000111642	chr12	6570083	6607476	-	37394
## 2735	ENSG00000111647	chr12	100028455	100142848	-	114394
## 2736	ENSG00000111652	chr12	6723741	6731875	+	8135
## 2737	ENSG00000111653	chr12	6650280	6663148	-	12869
## 2738	ENSG00000111664	chr12	6839954	6847393	+	7440
## 2739	ENSG00000111665	chr12	6844793	6852066	-	7274
## 2740	ENSG00000111666	chr12	101696947	101744140	+	47194
## 2741	ENSG00000111667	chr12	6852128	6866632	+	14505
## 2742	ENSG00000111669	chr12	6867119	6870948	+	3830
## 2743	ENSG00000111670	chr12	101745497	101830938	-	85442
## 2744	ENSG00000111671	chr12	6870935	6889358	-	18424
## 2745	ENSG00000111674	chr12	6913745	6923698	+	9954
## 2746	ENSG00000111676	chr12	6924463	6942321	+	17859
## 2747	ENSG00000111678	chr12	6942978	6946003	+	3026
## 2748	ENSG00000111679	chr12	6946468	6961316	+	14849
## 2749	ENSG00000111684	chr12	6976186	7018510	-	42325
## 2750	ENSG00000111696	chr12	103770453	103841197	-	70745
## 2751	ENSG00000111707	chr12	118376380	118418031	+	41652
## 2752	ENSG00000111711	chr12	21501781	21518408	+	16628
## 2753	ENSG00000111716	chr12	21635342	21757857	-	122516
## 2754	ENSG00000111725	chr12	119667753	119681630	+	13878
## 2755	ENSG00000111726	chr12	22046174	22065674	+	19501
## 2756	ENSG00000111727	chr12	104064457	104106524	+	42068
## 2757	ENSG00000111731	chr12	22448583	22544546	-	95964
## 2758	ENSG00000111737	chr12	120095095	120117502	-	22408
## 2759	ENSG00000111752	chr12	8913896	8941467	+	27572
## 2760	ENSG00000111775	chr12	120438090	120440742	+	2653

## 2761	ENSG00000111780	chr12	120438198	120460006	+	21809
## 2762	ENSG00000111785	chr12	106774595	106889316	+	114722
## 2763	ENSG00000111786	chr12	120461668	120469793	-	8126
## 2764	ENSG00000111788	chr12	9277235	9313241	+	36007
## 2765	ENSG00000111790	chr12	26938383	26966650	+	28268
## 2766	ENSG00000111801	chr6	26440472	26453415	+	12944
## 2767	ENSG00000111802	chr6	24649977	24667033	-	17057
## 2768	ENSG00000111817	chr6	116254173	116444860	+	190688
## 2769	ENSG00000111832	chr6	116571367	116597675	+	26309
## 2770	ENSG00000111843	chr6	10722915	10731129	+	8215
## 2771	ENSG00000111845	chr6	10694695	10709782	+	15088
## 2772	ENSG00000111850	chr6	87322583	87399749	+	77167
## 2773	ENSG00000111859	chr6	11183298	11382348	-	199051
## 2774	ENSG00000111860	chr6	118460772	118710075	-	249304
## 2775	ENSG00000111875	chr6	118894220	118909167	+	14948
## 2776	ENSG00000111877	chr6	118813442	118935162	-	121721
## 2777	ENSG00000111880	chr6	88610272	88963721	-	353450
## 2778	ENSG00000111885	chr6	119177209	119349761	-	172553
## 2779	ENSG00000111897	chr6	122443354	122471822	-	28469
## 2780	ENSG00000111906	chr6	125219962	125302078	-	82117
## 2781	ENSG00000111911	chr6	125956781	125980244	+	23464
## 2782	ENSG00000111912	chr6	125781161	125932030	+	150870
## 2783	ENSG00000111961	chr6	148272304	148552050	+	279747
## 2784	ENSG00000111962	chr6	148747328	149076990	+	329663
## 2785	ENSG00000111981	chr6	149964007	149973710	+	9704
## 2786	ENSG00000112029	chr6	152970519	152983579	-	13061
## 2787	ENSG00000112031	chr6	152987362	153002685	-	15324
## 2788	ENSG00000112033	chr6	35342558	35428191	+	85634
## 2789	ENSG00000112039	chr6	35452361	35467103	+	14743
## 2790	ENSG00000112062	chr6	36027677	36111236	+	83560
## 2791	ENSG00000112078	chr6	36442767	36491143	+	48377
## 2792	ENSG00000112079	chr6	36493892	36547470	-	53579
## 2793	ENSG00000112081	chr6	36594353	36605600	+	11248
## 2794	ENSG00000112096	chr6	159669057	159762529	-	93473
## 2795	ENSG00000112110	chr6	159789812	159798436	+	8625
## 2796	ENSG00000112118	chr6	52264009	52284881	-	20873
## 2797	ENSG00000112130	chr6	37353972	37394738	+	40767
## 2798	ENSG00000112137	chr6	12716805	13290484	+	573680
## 2799	ENSG00000112144	chr6	53001279	53061802	-	60524
## 2800	ENSG00000112146	chr6	53051991	53100873	+	48883
## 2801	ENSG00000112149	chr6	14117256	14136918	+	19663
## 2802	ENSG00000112159	chr6	89642499	89819723	-	177225
## 2803	ENSG00000112167	chr6	39104064	39115189	-	11126
## 2804	ENSG00000112195	chr6	41190277	41201194	-	10918
## 2805	ENSG00000112200	chr6	57086844	57170307	+	83464
## 2806	ENSG00000112208	chr6	57172326	57189833	+	17508
## 2807	ENSG00000112210	chr6	57186992	57222314	-	35323
## 2808	ENSG00000112218	chr6	96794126	96837463	-	43338
## 2809	ENSG00000112234	chr6	98868538	98948006	-	79469
## 2810	ENSG00000112237	chr6	99542380	99568973	-	26594
## 2811	ENSG00000112238	chr6	99606730	99615578	+	8849
## 2812	ENSG00000112242	chr6	20401906	20493715	+	91810
## 2813	ENSG00000112245	chr6	63521761	63583587	+	61827
## 2814	ENSG00000112249	chr6	100508194	100881372	-	373179

## 2815	ENSG00000112276	chr6	105096822	105137174	-	40353
## 2816	ENSG00000112282	chr6	131573966	131628229	-	54264
## 2817	ENSG00000112290	chr6	110099819	110180004	-	80186
## 2818	ENSG00000112293	chr6	24424565	24495205	-	70641
## 2819	ENSG00000112294	chr6	24494852	24537207	+	42356
## 2820	ENSG00000112297	chr6	106360808	106571978	+	211171
## 2821	ENSG00000112304	chr6	24667035	24705065	+	38031
## 2822	ENSG00000112305	chr6	70667776	70862015	+	194240
## 2823	ENSG00000112306	chr6	132814441	132817564	+	3124
## 2824	ENSG00000112308	chr6	24704861	24720836	-	15976
## 2825	ENSG00000112309	chr6	70856679	70957038	-	100360
## 2826	ENSG00000112312	chr6	24774931	24786099	+	11169
## 2827	ENSG00000112335	chr6	108211222	108261260	-	50039
## 2828	ENSG00000112339	chr6	134960378	135103056	-	142679
## 2829	ENSG00000112343	chr6	25962802	25991226	+	28425
## 2830	ENSG00000112357	chr6	136822564	136913937	+	91374
## 2831	ENSG00000112365	chr6	109462594	109483237	-	20644
## 2832	ENSG00000112367	chr6	109691312	109825428	+	134117
## 2833	ENSG00000112394	chr6	111087503	111231194	+	143692
## 2834	ENSG00000112406	chr6	139135112	139180802	+	45691
## 2835	ENSG00000112419	chr6	143536845	143831185	+	294341
## 2836	ENSG00000112425	chr6	145501583	145736024	-	234442
## 2837	ENSG00000112511	chr6	33410399	33416453	+	6055
## 2838	ENSG00000112514	chr6	33416442	33418317	-	1876
## 2839	ENSG00000112531	chr6	163414000	163578596	+	164597
## 2840	ENSG00000112559	chr6	41636882	41654246	+	17365
## 2841	ENSG00000112561	chr6	41683978	41736259	-	52282
## 2842	ENSG00000112576	chr6	41934933	42050357	-	115425
## 2843	ENSG00000112578	chr6	41921188	41933046	+	11859
## 2844	ENSG00000112592	chr6	170554302	170572870	+	18569
## 2845	ENSG00000112624	chr6	42746958	42868560	+	121603
## 2846	ENSG00000112640	chr6	42984499	43012342	+	27844
## 2847	ENSG00000112651	chr6	43054029	43059806	-	5778
## 2848	ENSG00000112658	chr6	43171299	43181507	+	10209
## 2849	ENSG00000112659	chr6	43182175	43224587	+	42413
## 2850	ENSG00000112667	chr6	43225629	43229484	-	3856
## 2851	ENSG00000112679	chr6	291630	351355	+	59726
## 2852	ENSG00000112685	chr6	485133	693111	-	207979
## 2853	ENSG00000112695	chr6	75237675	75250323	-	12649
## 2854	ENSG00000112697	chr6	75252924	75284968	-	32045
## 2855	ENSG00000112699	chr6	1623806	2245692	-	621887
## 2856	ENSG00000112701	chr6	75601509	75718278	+	116770
## 2857	ENSG00000112715	chr6	43770184	43786487	+	16304
## 2858	ENSG00000112739	chr6	4021267	4064983	+	43717
## 2859	ENSG00000112742	chr6	80003887	80042527	+	38641
## 2860	ENSG00000112759	chr6	44219505	44234151	+	14647
## 2861	ENSG00000112763	chr6	26457904	26476621	+	18718
## 2862	ENSG00000112773	chr6	81491439	81752774	-	261336
## 2863	ENSG00000112787	chr12	132489551	132585188	+	95638
## 2864	ENSG00000112799	chr6	6588108	6654983	+	66876
## 2865	ENSG00000112851	chr5	65926475	66082549	+	156075
## 2866	ENSG00000112855	chr5	140691426	140699291	+	7866
## 2867	ENSG00000112874	chr5	103548855	103562793	-	13939
## 2868	ENSG00000112877	chr5	612272	667168	+	54897

## 2869	ENSG00000112893	chr5	109689366	109869625	+	180260
## 2870	ENSG00000112941	chr5	6713007	6757048	+	44042
## 2871	ENSG00000112972	chr5	43289395	43313512	-	24118
## 2872	ENSG00000112977	chr5	10679230	10761272	-	82043
## 2873	ENSG00000112983	chr5	138139766	138178986	-	39221
## 2874	ENSG00000112984	chr5	138178719	138187715	+	8997
## 2875	ENSG00000112992	chr5	43602692	43707405	+	104714
## 2876	ENSG00000112996	chr5	44808925	44820428	+	11504
## 2877	ENSG00000113013	chr5	138554882	138575444	-	20563
## 2878	ENSG00000113048	chr5	72219409	72320646	-	101238
## 2879	ENSG00000113068	chr5	140245039	140303121	-	58083
## 2880	ENSG00000113083	chr5	122063195	122078285	-	15091
## 2881	ENSG00000113108	chr5	140558268	140564781	-	6514
## 2882	ENSG00000113119	chr5	140639427	140645408	+	5982
## 2883	ENSG00000113140	chr5	151661096	151687165	-	26070
## 2884	ENSG00000113141	chr5	140647058	140662479	+	15422
## 2885	ENSG00000113161	chr5	75336329	75362104	+	25776
## 2886	ENSG00000113163	chr5	75368486	75512138	-	143653
## 2887	ENSG00000113194	chr5	176447628	176510074	+	62447
## 2888	ENSG00000113231	chr5	77210449	77429807	+	219359
## 2889	ENSG00000113240	chr5	178602664	178630615	-	27952
## 2890	ENSG00000113269	chr5	179911651	180072118	-	160468
## 2891	ENSG00000113272	chr5	157731197	157741448	+	10252
## 2892	ENSG00000113273	chr5	78777209	78986087	-	208879
## 2893	ENSG00000113282	chr5	157785743	157859175	-	73433
## 2894	ENSG00000113300	chr5	180494412	180578405	+	83994
## 2895	ENSG00000113312	chr5	160009113	160065543	+	56431
## 2896	ENSG00000113318	chr5	80654648	80876460	+	221813
## 2897	ENSG00000113328	chr5	163437569	163446151	+	8583
## 2898	ENSG00000113356	chr5	90471748	90514553	+	42806
## 2899	ENSG00000113360	chr5	31400497	31532196	-	131700
## 2900	ENSG00000113368	chr5	126776623	126837020	+	60398
## 2901	ENSG00000113369	chr5	91368724	91383359	-	14636
## 2902	ENSG00000113384	chr5	32124704	32174350	-	49647
## 2903	ENSG00000113387	chr5	32531633	32604079	+	72447
## 2904	ENSG00000113389	chr5	32689070	32791724	+	102655
## 2905	ENSG00000113391	chr5	93618069	94111699	-	493631
## 2906	ENSG00000113396	chr5	128538013	129033642	+	495630
## 2907	ENSG00000113407	chr5	33440696	33469539	+	28844
## 2908	ENSG00000113441	chr5	96935394	97037515	+	102122
## 2909	ENSG00000113448	chr5	58969038	60522120	-	1553083
## 2910	ENSG00000113456	chr5	34905264	34918989	-	13726
## 2911	ENSG00000113460	chr5	34915376	34925996	+	10621
## 2912	ENSG00000113504	chr5	1050376	1112035	-	61660
## 2913	ENSG00000113522	chr5	132556019	132646344	+	90326
## 2914	ENSG00000113532	chr5	100806935	100903266	-	96332
## 2915	ENSG00000113552	chr5	141991749	142013041	-	21293
## 2916	ENSG00000113558	chr5	134148935	134177038	-	28104
## 2917	ENSG00000113569	chr5	37288137	37371181	-	83045
## 2918	ENSG00000113575	chr5	134194334	134226142	-	31809
## 2919	ENSG00000113580	chr5	143277931	143435512	-	157582
## 2920	ENSG00000113583	chr5	133955502	133968787	-	13286
## 2921	ENSG00000113593	chr5	65563236	65587549	+	24314
## 2922	ENSG00000113595	chr5	65589680	65625975	-	36296

## 2923	ENSG00000113597	chr5	65624716	65666233	+	41518
## 2924	ENSG00000113600	chr5	39284262	39424868	-	140607
## 2925	ENSG00000113615	chr5	134648789	134727823	+	79035
## 2926	ENSG00000113621	chr5	134873803	134901525	+	27723
## 2927	ENSG00000113638	chr5	40512333	40755975	-	243643
## 2928	ENSG00000113643	chr5	168486445	168519299	+	32855
## 2929	ENSG00000113648	chr5	135333900	135399914	-	66015
## 2930	ENSG00000113649	chr5	146447311	146511961	+	64651
## 2931	ENSG00000113658	chr5	136132845	136188747	+	55903
## 2932	ENSG00000113712	chr5	149492197	149551552	-	59356
## 2933	ENSG00000113716	chr5	150000046	150053142	+	53097
## 2934	ENSG00000113719	chr5	172834275	172952685	+	118411
## 2935	ENSG00000113732	chr5	172983757	173035445	+	51689
## 2936	ENSG00000113734	chr5	173144442	173164387	+	19946
## 2937	ENSG00000113739	chr5	173314713	173329503	-	14791
## 2938	ENSG00000113742	chr5	173888280	173961976	+	73697
## 2939	ENSG00000113749	chr5	175658030	175710756	+	52727
## 2940	ENSG00000113758	chr5	177456608	177474401	-	17794
## 2941	ENSG00000113761	chr5	177022696	177081189	+	58494
## 2942	ENSG00000113790	chr3	185190624	185281990	-	91367
## 2943	ENSG00000113810	chr3	160399274	160434962	+	35689
## 2944	ENSG00000113811	chr3	53884410	53891988	-	7579
## 2945	ENSG00000113812	chr3	53867066	53882202	-	15137
## 2946	ENSG00000113838	chr3	186546073	186570543	-	24471
## 2947	ENSG00000113845	chr3	119498532	119525090	+	26559
## 2948	ENSG00000113851	chr3	3148992	3179710	-	30719
## 2949	ENSG00000113916	chr3	187721377	187745727	-	24351
## 2950	ENSG00000113966	chr3	97764521	97801242	+	36722
## 2951	ENSG00000113971	chr3	132680609	132722442	-	41834
## 2952	ENSG00000114021	chr3	100334701	100361635	+	26935
## 2953	ENSG00000114023	chr3	122384176	122412334	+	28159
## 2954	ENSG00000114026	chr3	9749944	9788219	+	38276
## 2955	ENSG00000114030	chr3	122421949	122514945	-	92997
## 2956	ENSG00000114054	chr3	136250306	136337896	+	87591
## 2957	ENSG00000114062	chr15	25333728	25439056	-	105329
## 2958	ENSG00000114098	chr3	138187248	138298389	+	111142
## 2959	ENSG00000114107	chr3	138494344	138594538	-	100195
## 2960	ENSG00000114120	chr3	140941830	140979933	+	38104
## 2961	ENSG00000114125	chr3	141738204	141747560	+	9357
## 2962	ENSG00000114126	chr3	141944428	142149544	-	205117
## 2963	ENSG00000114127	chr3	142306607	142448062	-	141456
## 2964	ENSG00000114166	chr3	20040023	20154404	+	114382
## 2965	ENSG00000114209	chr3	167683298	167734939	-	51642
## 2966	ENSG00000114268	chr3	48517684	48562015	-	44332
## 2967	ENSG00000114270	chr3	48564073	48595267	-	31195
## 2968	ENSG00000114302	chr3	48744597	48847846	-	103250
## 2969	ENSG00000114315	chr3	194136145	194138732	+	2588
## 2970	ENSG00000114316	chr3	49277831	49340712	-	62882
## 2971	ENSG00000114331	chr3	195274736	195443078	-	168343
## 2972	ENSG00000114346	chr3	172750682	172821474	+	70793
## 2973	ENSG00000114353	chr3	50226292	50259355	+	33064
## 2974	ENSG00000114354	chr3	100709331	100748966	+	39636
## 2975	ENSG00000114383	chr3	50320027	50328251	-	8225
## 2976	ENSG00000114388	chr3	50347330	50351091	-	3762



## 2977	ENSG00000114391	chr3	101681091	101686782	-	5692
## 2978	ENSG00000114395	chr3	50350695	50358460	+	7766
## 2979	ENSG00000114416	chr3	180868141	180982753	+	114613
## 2980	ENSG00000114423	chr3	105655461	105869552	-	214092
## 2981	ENSG00000114439	chr3	107522936	107811324	+	288389
## 2982	ENSG00000114446	chr3	108160812	108222570	-	61759
## 2983	ENSG00000114450	chr3	179396089	179451590	-	55502
## 2984	ENSG00000114480	chr3	81489699	81762161	-	272463
## 2985	ENSG00000114491	chr3	124730366	124749273	+	18908
## 2986	ENSG00000114503	chr3	196935402	196942597	-	7196
## 2987	ENSG00000114520	chr3	125446644	125520197	-	73554
## 2988	ENSG00000114544	chr3	126006355	126101561	-	95207
## 2989	ENSG00000114554	chr3	126988594	127037392	+	48799
## 2990	ENSG00000114573	chr3	113747019	113812056	+	65038
## 2991	ENSG00000114626	chr3	127672935	127680920	+	7986
## 2992	ENSG00000114631	chr3	127629181	127672809	+	43629
## 2993	ENSG00000114646	chr3	47562239	47580792	-	18554
## 2994	ENSG00000114648	chr3	47282917	47346816	+	63900
## 2995	ENSG00000114650	chr3	47413694	47477126	-	63433
## 2996	ENSG00000114656	chr3	128909866	129002690	-	92825
## 2997	ENSG00000114686	chr3	131462212	131502983	-	40772
## 2998	ENSG00000114735	chr3	50569152	50596168	+	27017
## 2999	ENSG00000114737	chr3	50606490	50611831	-	5342
## 3000	ENSG00000114738	chr3	50611520	50649297	+	37778
## 3001	ENSG00000114739	chr3	38453851	38493142	+	39292
## 3002	ENSG00000114742	chr3	39051998	39096671	+	44674
## 3003	ENSG00000114744	chr3	149738470	149752499	-	14030
## 3004	ENSG00000114745	chr3	39096659	39108363	-	11705
## 3005	ENSG00000114767	chr3	51933430	51941941	-	8512
## 3006	ENSG00000114770	chr3	183919934	184018015	-	98082
## 3007	ENSG00000114779	chr3	51968510	51983409	-	14900
## 3008	ENSG00000114784	chr3	40309684	40312424	+	2741
## 3009	ENSG00000114786	chr3	51974706	51989183	+	14478
## 3010	ENSG00000114796	chr3	183635568	183684477	+	48910
## 3011	ENSG00000114805	chr3	155375580	155745067	-	369488
## 3012	ENSG00000114812	chr3	42489299	42537573	+	48275
## 3013	ENSG00000114841	chr3	52316319	52400491	+	84173
## 3014	ENSG00000114850	chr3	156540140	156555184	-	15045
## 3015	ENSG00000114853	chr3	42653684	42665854	+	12171
## 3016	ENSG00000114857	chr3	42600614	42648741	+	48128
## 3017	ENSG00000114859	chr3	184346185	184361651	-	15467
## 3018	ENSG00000114861	chr3	70954693	71583989	-	629297
## 3019	ENSG00000114867	chr3	184314495	184335358	+	20864
## 3020	ENSG00000114902	chr3	52704955	52711146	+	6192
## 3021	ENSG00000114904	chr3	52708449	52770949	-	62501
## 3022	ENSG00000114933	chr2	205993721	206086303	-	92583
## 3023	ENSG00000114942	chr2	206159585	206162928	+	3344
## 3024	ENSG00000114956	chr2	73926826	73958961	+	32136
## 3025	ENSG00000114978	chr2	74152528	74178898	-	26371
## 3026	ENSG00000114982	chr2	96593170	96642787	-	49618
## 3027	ENSG00000114988	chr2	96705929	96740064	-	34136
## 3028	ENSG00000114993	chr2	74425836	74442422	-	16587
## 3029	ENSG00000114999	chr2	112482154	112541739	+	59586
## 3030	ENSG00000115020	chr2	208266267	208358751	+	92485

## 3031	ENSG00000115042	chr2	95402721	95416616	+	13896
## 3032	ENSG00000115053	chr2	231453531	231483641	-	30111
## 3033	ENSG00000115073	chr2	97655963	97664107	-	8145
## 3034	ENSG00000115084	chr2	113705011	113756823	-	51813
## 3035	ENSG00000115091	chr2	113889960	113962596	+	72637
## 3036	ENSG00000115107	chr2	119223831	119265652	+	41822
## 3037	ENSG00000115109	chr2	120013005	120179119	+	166115
## 3038	ENSG00000115128	chr2	24067584	24076443	-	8860
## 3039	ENSG00000115129	chr2	24077433	24085861	-	8429
## 3040	ENSG00000115137	chr2	24943636	24972094	-	28459
## 3041	ENSG00000115145	chr2	152116801	152175992	-	59192
## 3042	ENSG00000115159	chr2	156435290	156613735	+	178446
## 3043	ENSG00000115163	chr2	26764289	26801067	+	36779
## 3044	ENSG00000115165	chr2	157414619	157488961	-	74343
## 3045	ENSG00000115183	chr2	158968634	159232659	+	264026
## 3046	ENSG00000115194	chr2	27253684	27275817	-	22134
## 3047	ENSG00000115204	chr2	27309492	27325680	-	16189
## 3048	ENSG00000115207	chr2	27325849	27357034	-	31186
## 3049	ENSG00000115211	chr2	27364352	27370486	-	6135
## 3050	ENSG00000115216	chr2	27427790	27442259	+	14470
## 3051	ENSG00000115232	chr2	181457202	181536187	+	78986
## 3052	ENSG00000115233	chr2	161308038	161411717	+	103680
## 3053	ENSG00000115234	chr2	27370496	27377533	+	7038
## 3054	ENSG00000115239	chr2	53532672	53787610	-	254939
## 3055	ENSG00000115241	chr2	27381194	27409687	-	28494
## 3056	ENSG00000115252	chr2	182140036	182523192	-	383157
## 3057	ENSG00000115255	chr19	1490747	1497927	+	7181
## 3058	ENSG00000115257	chr19	1481428	1490752	-	9325
## 3059	ENSG00000115266	chr19	1446302	1473244	+	26943
## 3060	ENSG00000115267	chr2	162267079	162318703	-	51625
## 3061	ENSG00000115268	chr19	1438358	1440494	+	2137
## 3062	ENSG00000115271	chr2	162318840	162371595	+	52756
## 3063	ENSG00000115274	chr2	74455023	74457960	+	2938
## 3064	ENSG00000115275	chr2	74461057	74465410	-	4354
## 3065	ENSG00000115282	chr2	74483073	74494886	+	11814
## 3066	ENSG00000115286	chr19	1383527	1395589	+	12063
## 3067	ENSG00000115289	chr2	74505043	74508580	-	3538
## 3068	ENSG00000115306	chr2	54456285	54671445	+	215161
## 3069	ENSG00000115307	chr2	74526645	74529939	-	3295
## 3070	ENSG00000115310	chr2	54972187	55112621	-	140435
## 3071	ENSG00000115317	chr2	74529377	74533348	+	3972
## 3072	ENSG00000115318	chr2	74532414	74555690	-	23277
## 3073	ENSG00000115325	chr2	74549026	74557554	+	8529
## 3074	ENSG00000115339	chr2	165747591	165794682	-	47092
## 3075	ENSG00000115350	chr2	74958492	74970128	+	11637
## 3076	ENSG00000115355	chr2	55287842	55419921	-	132080
## 3077	ENSG00000115364	chr2	75646783	75690851	+	44069
## 3078	ENSG00000115365	chr2	210431249	210477652	-	46404
## 3079	ENSG00000115368	chr2	189441433	189475565	+	34133
## 3080	ENSG00000115392	chr2	58159243	58241372	-	82130
## 3081	ENSG00000115415	chr2	190964358	191020960	-	56603
## 3082	ENSG00000115419	chr2	190880827	190965552	+	84726
## 3083	ENSG00000115421	chr2	60756230	60802085	+	45856
## 3084	ENSG00000115425	chr2	215996329	216082955	-	86627

## 3085	ENSG00000115446	chr2	98608579	98618515	+	9937
## 3086	ENSG00000115457	chr2	216632828	216664436	+	31609
## 3087	ENSG00000115459	chr2	85354394	85391752	+	37359
## 3088	ENSG00000115464	chr2	61187463	61470769	-	283307
## 3089	ENSG00000115484	chr2	61868089	61888804	-	20716
## 3090	ENSG00000115486	chr2	85544723	85561547	-	16825
## 3091	ENSG00000115504	chr2	62673851	63046487	+	372637
## 3092	ENSG00000115514	chr2	99318982	99340702	-	21721
## 3093	ENSG00000115520	chr2	197453423	197475308	+	21886
## 3094	ENSG00000115524	chr2	197389784	197435091	-	45308
## 3095	ENSG00000115525	chr2	85839144	85889014	-	49871
## 3096	ENSG00000115526	chr2	100391860	100417656	-	25797
## 3097	ENSG00000115539	chr2	100562690	100576735	+	14046
## 3098	ENSG00000115540	chr2	197515571	197553699	+	38129
## 3099	ENSG00000115541	chr2	197499994	197503457	+	3464
## 3100	ENSG00000115548	chr2	86440647	86492716	+	52070
## 3101	ENSG00000115556	chr2	218607765	218637184	+	29420
## 3102	ENSG00000115561	chr2	86503431	86563479	-	60049
## 3103	ENSG00000115568	chr2	218637916	218659655	-	21740
## 3104	ENSG00000115649	chr2	219171897	219178106	-	6210
## 3105	ENSG00000115652	chr2	106093303	106194339	-	101037
## 3106	ENSG00000115661	chr2	219245455	219250337	+	4883
## 3107	ENSG00000115677	chr2	241227264	241317061	-	89798
## 3108	ENSG00000115685	chr2	241149576	241183652	+	34077
## 3109	ENSG00000115687	chr2	241106099	241150264	-	44166
## 3110	ENSG00000115694	chr2	241492674	241509730	-	17057
## 3111	ENSG00000115738	chr2	8678845	8684453	+	5609
## 3112	ENSG00000115750	chr2	9843354	9934416	+	91063
## 3113	ENSG00000115756	chr2	10302889	10427617	+	124729
## 3114	ENSG00000115758	chr2	10439968	10448504	-	8537
## 3115	ENSG00000115760	chr2	32357028	32618899	+	261872
## 3116	ENSG00000115761	chr2	10570766	10689987	-	119222
## 3117	ENSG00000115762	chr2	131104847	131353709	+	248863
## 3118	ENSG00000115806	chr2	170928464	170967129	+	38666
## 3119	ENSG00000115808	chr2	36843640	36966472	-	122833
## 3120	ENSG00000115816	chr2	37201612	37231713	-	30102
## 3121	ENSG00000115825	chr2	37250502	37324808	-	74307
## 3122	ENSG00000115827	chr2	171434217	171485052	+	50836
## 3123	ENSG00000115839	chr2	135052265	135176394	+	124130
## 3124	ENSG00000115840	chr2	171784370	171999859	-	215490
## 3125	ENSG00000115866	chr2	135906677	135986100	-	79424
## 3126	ENSG00000115875	chr2	38743599	38751494	-	7896
## 3127	ENSG00000115884	chr2	20200797	20225433	-	24637
## 3128	ENSG00000115902	chr2	64988477	65023865	+	35389
## 3129	ENSG00000115904	chr2	38981396	39124345	-	142950
## 3130	ENSG00000115935	chr2	174559572	174682916	-	123345
## 3131	ENSG00000115942	chr2	200908973	200963680	-	54708
## 3132	ENSG00000115944	chr2	42333546	42425088	-	91543
## 3133	ENSG00000115946	chr2	68157844	68176238	+	18395
## 3134	ENSG00000115947	chr2	147930397	148021604	-	91208
## 3135	ENSG00000115956	chr2	68365173	68397453	+	32281
## 3136	ENSG00000115966	chr2	175072250	175168382	-	96133
## 3137	ENSG00000115970	chr2	43230836	43596046	-	365211
## 3138	ENSG00000115977	chr2	69457997	69674349	-	216353

## 3139	ENSG00000115993	chr2	201377207	201451579	-	74373
## 3140	ENSG00000115998	chr2	70149880	70248615	-	98736
## 3141	ENSG00000116001	chr2	70209444	70248660	-	39217
## 3142	ENSG00000116005	chr2	70257386	70281191	+	23806
## 3143	ENSG00000116017	chr19	925781	975934	+	50154
## 3144	ENSG00000116030	chr2	202206180	202238608	-	32429
## 3145	ENSG00000116032	chr19	1000419	1009732	+	9314
## 3146	ENSG00000116044	chr2	177227595	177392697	-	165103
## 3147	ENSG00000116062	chr2	47695530	47810101	+	114572
## 3148	ENSG00000116095	chr2	178480468	178516462	+	35995
## 3149	ENSG00000116096	chr2	72887360	72892158	+	4799
## 3150	ENSG00000116120	chr2	222570536	222656337	-	85802
## 3151	ENSG00000116127	chr2	73385758	73610793	+	225036
## 3152	ENSG00000116128	chr1	147541412	147626216	+	84805
## 3153	ENSG00000116133	chr1	54849633	54887218	-	37586
## 3154	ENSG00000116138	chr1	15526813	15592379	+	65567
## 3155	ENSG00000116157	chr1	52602372	52609051	+	6680
## 3156	ENSG00000116161	chr1	174999163	175011715	+	12553
## 3157	ENSG00000116171	chr1	52927229	53051703	+	124475
## 3158	ENSG00000116191	chr1	178725147	178921841	+	196695
## 3159	ENSG00000116198	chr1	3812081	3857214	-	45134
## 3160	ENSG00000116199	chr1	179025804	179076562	+	50759
## 3161	ENSG00000116205	chr1	54053587	54112519	+	58933
## 3162	ENSG00000116209	chr1	54026681	54053504	-	26824
## 3163	ENSG00000116212	chr1	53946077	53968168	+	22092
## 3164	ENSG00000116213	chr1	3630767	3652761	-	21995
## 3165	ENSG00000116221	chr1	54184041	54225464	+	41424
## 3166	ENSG00000116237	chr1	6221193	6235972	-	14780
## 3167	ENSG00000116251	chr1	6181269	6209389	-	28121
## 3168	ENSG00000116260	chr1	180154834	180204030	+	49197
## 3169	ENSG00000116266	chr1	108746674	108809526	+	62853
## 3170	ENSG00000116273	chr1	6613685	6624033	+	10349
## 3171	ENSG00000116288	chr1	7954291	7985505	+	31215
## 3172	ENSG00000116337	chr1	109616104	109632051	+	15948
## 3173	ENSG00000116350	chr1	29147743	29181987	-	34245
## 3174	ENSG00000116353	chr1	29192873	29230942	-	38070
## 3175	ENSG00000116396	chr1	110211343	110283100	+	71758
## 3176	ENSG00000116406	chr1	184690231	184754913	-	64683
## 3177	ENSG00000116455	chr1	111439890	111449376	-	9487
## 3178	ENSG00000116459	chr1	111448864	111462773	+	13910
## 3179	ENSG00000116473	chr1	111542218	111716691	+	174474
## 3180	ENSG00000116478	chr1	32292086	32333635	+	41550
## 3181	ENSG00000116489	chr1	112619173	112671619	+	52447
## 3182	ENSG00000116497	chr1	32816767	32858879	+	42113
## 3183	ENSG00000116514	chr1	32936445	32964685	-	28241
## 3184	ENSG00000116539	chr1	155335268	155562807	-	227540
## 3185	ENSG00000116544	chr1	34865436	34929585	-	64150
## 3186	ENSG00000116560	chr1	35176378	35193148	-	16771
## 3187	ENSG00000116574	chr1	228735077	228746669	+	11593
## 3188	ENSG00000116580	chr1	155749662	155859400	-	109739
## 3189	ENSG00000116584	chr1	155946851	156007070	-	60220
## 3190	ENSG00000116586	chr1	156054752	156058510	+	3759
## 3191	ENSG00000116604	chr1	156463727	156500828	-	37102
## 3192	ENSG00000116641	chr1	62454298	62688368	-	234071

## 3193	ENSG00000116649	chr1	11054584	11060024	-	5441
## 3194	ENSG00000116663	chr1	11664124	11674354	+	10231
## 3195	ENSG00000116667	chr1	184387058	184629020	+	241963
## 3196	ENSG00000116668	chr1	185157080	185291765	+	134686
## 3197	ENSG00000116670	chr1	11674480	11691650	-	17171
## 3198	ENSG00000116678	chr1	65420652	65641559	+	220908
## 3199	ENSG00000116679	chr1	185296388	185317329	-	20942
## 3200	ENSG00000116685	chr1	11919591	11926428	-	6838
## 3201	ENSG00000116688	chr1	11980181	12013514	+	33334
## 3202	ENSG00000116690	chr1	186296279	186314562	+	18284
## 3203	ENSG00000116691	chr1	12019466	12032045	+	12580
## 3204	ENSG00000116698	chr1	183472216	183598246	+	126031
## 3205	ENSG00000116701	chr1	183555563	183590876	-	35314
## 3206	ENSG00000116704	chr1	66999332	67054099	-	54768
## 3207	ENSG00000116711	chr1	186828953	186988981	+	160029
## 3208	ENSG00000116717	chr1	67685061	67688338	+	3278
## 3209	ENSG00000116731	chr1	13700198	13825079	+	124882
## 3210	ENSG00000116741	chr1	192809039	192812283	+	3245
## 3211	ENSG00000116747	chr1	193059422	193091777	+	32356
## 3212	ENSG00000116750	chr1	193012250	193060080	-	47831
## 3213	ENSG00000116752	chr1	114567557	114581639	-	14083
## 3214	ENSG00000116754	chr1	70205682	70253052	+	47371
## 3215	ENSG00000116761	chr1	70411218	70439851	+	28634
## 3216	ENSG00000116771	chr1	15572353	15585110	-	12758
## 3217	ENSG00000116786	chr1	15684332	15734769	+	50438
## 3218	ENSG00000116791	chr1	74705482	74733408	-	27927
## 3219	ENSG00000116793	chr1	113696831	113759489	-	62659
## 3220	ENSG00000116809	chr1	15941869	15976132	-	34264
## 3221	ENSG00000116815	chr1	116514535	116571039	-	56505
## 3222	ENSG00000116819	chr1	35573370	35595328	+	21959
## 3223	ENSG00000116830	chr1	117060303	117107453	+	47151
## 3224	ENSG00000116852	chr1	200969390	201023700	-	54311
## 3225	ENSG00000116857	chr1	201134772	201171574	-	36803
## 3226	ENSG00000116863	chr1	36088875	36093932	+	5058
## 3227	ENSG00000116871	chr1	36155579	36180849	+	25271
## 3228	ENSG00000116874	chr1	119031216	119140671	-	109456
## 3229	ENSG00000116898	chr1	36455718	36464437	-	8720
## 3230	ENSG00000116903	chr1	231332753	231337852	-	5100
## 3231	ENSG00000116906	chr1	231241207	231277973	+	36767
## 3232	ENSG00000116918	chr1	231528653	231566524	+	37872
## 3233	ENSG00000116922	chr1	37681570	37692249	-	10680
## 3234	ENSG00000116954	chr1	38838198	38859823	-	21626
## 3235	ENSG00000116977	chr1	236518000	236552981	+	34982
## 3236	ENSG00000116984	chr1	236795281	236903981	+	108701
## 3237	ENSG00000116985	chr1	39757182	39788861	-	31680
## 3238	ENSG00000116991	chr1	232397965	232561558	-	163594
## 3239	ENSG00000117000	chr1	40161373	40240921	+	79549
## 3240	ENSG00000117009	chr1	241532134	241595642	+	63509
## 3241	ENSG00000117010	chr1	40531561	40548169	+	16609
## 3242	ENSG00000117013	chr1	40784012	40840452	+	56441
## 3243	ENSG00000117016	chr1	40620679	40665657	-	44979
## 3244	ENSG00000117036	chr1	157121191	157138474	-	17284
## 3245	ENSG00000117054	chr1	75724347	75787575	+	63229
## 3246	ENSG00000117091	chr1	160678746	160711851	-	33106

## 3247	ENSG00000117115	chr1	17066761	17119435	-	52675
## 3248	ENSG00000117118	chr1	17018722	17054170	-	35449
## 3249	ENSG00000117133	chr1	84479259	84497790	+	18532
## 3250	ENSG00000117139	chr1	202724491	202809470	-	84980
## 3251	ENSG00000117143	chr1	162561506	162599842	+	38337
## 3252	ENSG00000117148	chr1	17755313	17827063	+	71751
## 3253	ENSG00000117151	chr1	84549606	84574480	-	24875
## 3254	ENSG00000117153	chr1	202891100	202928636	-	37537
## 3255	ENSG00000117155	chr1	84643707	84690803	-	47097
## 3256	ENSG00000117174	chr1	85649423	85708433	-	59011
## 3257	ENSG00000117222	chr1	205086142	205122015	-	35874
## 3258	ENSG00000117242	chr1	20642657	20652193	-	9537
## 3259	ENSG00000117245	chr1	20664014	20718017	-	54004
## 3260	ENSG00000117262	chr1	145607990	145670648	+	62659
## 3261	ENSG00000117280	chr1	205767986	205775460	-	7475
## 3262	ENSG00000117298	chr1	21217247	21345504	-	128258
## 3263	ENSG00000117305	chr1	23801885	23838620	-	36736
## 3264	ENSG00000117308	chr1	23795599	23800804	-	5206
## 3265	ENSG00000117335	chr1	207752057	207795513	+	43457
## 3266	ENSG00000117360	chr1	150321476	150353195	+	31720
## 3267	ENSG00000117362	chr1	150265399	150269580	-	4182
## 3268	ENSG00000117385	chr1	42746335	42767084	-	20750
## 3269	ENSG00000117394	chr1	42925375	42959173	-	33799
## 3270	ENSG00000117395	chr1	43164175	43270936	-	106762
## 3271	ENSG00000117399	chr1	43358955	43363203	+	4249
## 3272	ENSG00000117408	chr1	43946939	43968022	+	21084
## 3273	ENSG00000117410	chr1	43974487	43978295	+	3809
## 3274	ENSG00000117411	chr1	43978943	43991170	+	12228
## 3275	ENSG00000117419	chr1	44221070	44355260	-	134191
## 3276	ENSG00000117425	chr1	44819844	44843063	-	23220
## 3277	ENSG00000117448	chr1	45550543	45570049	+	19507
## 3278	ENSG00000117450	chr1	45511036	45523047	-	12012
## 3279	ENSG00000117461	chr1	46040140	46133036	-	92897
## 3280	ENSG00000117475	chr1	169367970	169396540	+	28571
## 3281	ENSG00000117479	chr1	169463909	169486003	-	22095
## 3282	ENSG00000117480	chr1	46394265	46413848	+	19584
## 3283	ENSG00000117481	chr1	46340177	46365152	+	24976
## 3284	ENSG00000117500	chr1	93149742	93180728	-	30987
## 3285	ENSG00000117505	chr1	93345888	93369498	+	23611
## 3286	ENSG00000117523	chr1	171485551	171593511	+	107961
## 3287	ENSG00000117528	chr1	94418455	94518666	+	100212
## 3288	ENSG00000117533	chr1	171700160	171742247	-	42088
## 3289	ENSG00000117543	chr1	100989623	101026088	-	36466
## 3290	ENSG00000117569	chr1	96721665	96823738	+	102074
## 3291	ENSG00000117586	chr1	173183734	173207313	-	23580
## 3292	ENSG00000117592	chr1	173477266	173488807	+	11542
## 3293	ENSG00000117593	chr1	173824503	173858546	+	34044
## 3294	ENSG00000117597	chr1	209828007	209857565	+	29559
## 3295	ENSG00000117602	chr1	24502351	24541040	+	38690
## 3296	ENSG00000117614	chr1	25222679	25232502	-	9824
## 3297	ENSG00000117616	chr1	25242237	25338213	-	95977
## 3298	ENSG00000117620	chr1	99969789	100035637	+	65849
## 3299	ENSG00000117625	chr1	211258377	211316385	+	58009
## 3300	ENSG00000117632	chr1	25884181	25906991	-	22811

## 3301	ENSG00000117640	chr1	25818640	25832942	+	14303
## 3302	ENSG00000117650	chr1	211658657	211675630	-	16974
## 3303	ENSG00000117676	chr1	26529761	26575030	+	45270
## 3304	ENSG00000117682	chr1	26432282	26471294	+	39013
## 3305	ENSG00000117691	chr1	212432887	212446379	+	13493
## 3306	ENSG00000117697	chr1	212726153	212791782	-	65630
## 3307	ENSG00000117713	chr1	26693236	26782104	+	88869
## 3308	ENSG00000117724	chr1	214603195	214664588	+	61394
## 3309	ENSG00000117748	chr1	27891524	27914746	-	23223
## 3310	ENSG00000117751	chr1	27830778	27851676	+	20899
## 3311	ENSG00000117758	chr1	27773183	27824452	+	51270
## 3312	ENSG00000117859	chr1	51577179	51798427	+	221249
## 3313	ENSG00000117862	chr1	52020131	52056171	-	36041
## 3314	ENSG00000117868	chr7	158730995	158830253	-	99259
## 3315	ENSG00000117877	chr19	45406209	45410766	+	4558
## 3316	ENSG00000117899	chr15	80946289	80989878	-	43590
## 3317	ENSG00000117906	chr15	76931619	76954392	+	22774
## 3318	ENSG00000117984	chr11	1752752	1764573	-	11822
## 3319	ENSG00000118007	chr3	136336233	136752403	-	416171
## 3320	ENSG00000118046	chr19	1177558	1228435	+	50878
## 3321	ENSG00000118058	chr11	118436490	118526832	+	90343
## 3322	ENSG00000118096	chr11	118544528	118572970	-	28443
## 3323	ENSG00000118162	chr19	47475144	47484268	-	9125
## 3324	ENSG00000118181	chr11	119015712	119018691	-	2980
## 3325	ENSG00000118193	chr1	200551497	200620734	-	69238
## 3326	ENSG00000118197	chr1	200623896	200669969	-	46074
## 3327	ENSG00000118217	chr1	161766294	161964070	+	197777
## 3328	ENSG00000118242	chr2	215942805	216034096	-	91292
## 3329	ENSG00000118246	chr2	206765357	206792509	+	27153
## 3330	ENSG00000118260	chr2	207529737	207603431	+	73695
## 3331	ENSG00000118263	chr2	207074137	207167267	-	93131
## 3332	ENSG00000118276	chr18	31622247	31685836	-	63590
## 3333	ENSG00000118292	chr1	150268200	150280916	+	12717
## 3334	ENSG00000118308	chr12	25004342	25108334	+	103993
## 3335	ENSG00000118363	chr11	74949247	74979031	+	29785
## 3336	ENSG00000118369	chr11	78188812	78214711	+	25900
## 3337	ENSG00000118412	chr6	89829894	89874436	+	44543
## 3338	ENSG00000118418	chr6	79201245	79234738	-	33494
## 3339	ENSG00000118420	chr6	82892398	83065841	-	173444
## 3340	ENSG00000118454	chr1	70260588	70354734	-	94147
## 3341	ENSG00000118482	chr6	63635820	63779336	+	143517
## 3342	ENSG00000118495	chr6	143940300	144064599	-	124300
## 3343	ENSG00000118496	chr6	145793502	145814753	-	21252
## 3344	ENSG00000118503	chr6	137867188	137883312	+	16125
## 3345	ENSG00000118507	chr6	131135666	131283535	+	147870
## 3346	ENSG00000118508	chr6	146543693	146554965	+	11273
## 3347	ENSG00000118513	chr6	135181315	135219173	+	37859
## 3348	ENSG00000118518	chr6	127266610	127288567	+	21958
## 3349	ENSG00000118557	chr16	72112157	72176878	-	64722
## 3350	ENSG00000118564	chr4	15604539	15681679	-	77141
## 3351	ENSG00000118579	chr4	17614631	17634105	+	19475
## 3352	ENSG00000118596	chr12	59596067	59789855	+	193789
## 3353	ENSG00000118600	chr12	63779803	63809558	+	29756
## 3354	ENSG00000118620	chr19	21020620	21060050	+	39431

## 3355	ENSG00000118640	chr2	85561562	85582031	+	20470
## 3356	ENSG00000118655	chr1	113905141	113914086	+	8946
## 3357	ENSG00000118680	chr18	3261909	3278284	+	16376
## 3358	ENSG00000118689	chr6	108559835	108684774	+	124940
## 3359	ENSG00000118705	chr20	37178410	37241623	+	63214
## 3360	ENSG00000118707	chr20	36573488	36593950	+	20463
## 3361	ENSG00000118762	chr4	88007668	88077777	+	70110
## 3362	ENSG00000118804	chr4	76306026	76311599	+	5574
## 3363	ENSG00000118816	chr4	77047158	77076005	-	28848
## 3364	ENSG00000118855	chr3	158732198	158829719	+	97522
## 3365	ENSG00000118873	chr1	220148293	220272454	-	124162
## 3366	ENSG00000118894	chr16	5084304	5097808	-	13505
## 3367	ENSG00000118900	chr16	4846665	4882360	+	35696
## 3368	ENSG00000118922	chr13	73686089	73995056	-	308968
## 3369	ENSG00000118939	chr13	75549480	75606020	+	56541
## 3370	ENSG00000118960	chr2	20560448	20651089	-	90642
## 3371	ENSG00000118961	chr2	20684014	20823130	-	139117
## 3372	ENSG00000118965	chr2	19910260	19990131	-	79872
## 3373	ENSG00000118971	chr12	4273772	4305350	+	31579
## 3374	ENSG00000118976	chr12	3839459	3842525	+	3067
## 3375	ENSG00000118985	chr5	95885098	95962071	-	76974
## 3376	ENSG00000119004	chr2	203238940	203305611	+	66672
## 3377	ENSG00000119013	chr2	201071433	201085750	+	14318
## 3378	ENSG00000119041	chr2	196763032	196799725	-	36694
## 3379	ENSG00000119042	chr2	199269500	199471266	-	201767
## 3380	ENSG00000119048	chr5	134371179	134391992	+	20814
## 3381	ENSG00000119121	chr9	74722495	74888094	-	165600
## 3382	ENSG00000119138	chr9	70384597	70414624	-	30028
## 3383	ENSG00000119139	chr9	69121264	69255208	+	133945
## 3384	ENSG00000119185	chr2	9403475	9423547	-	20073
## 3385	ENSG00000119203	chr2	9423568	9473101	+	49534
## 3386	ENSG00000119227	chr3	196946343	196969060	-	22718
## 3387	ENSG00000119231	chr3	196867856	196934714	+	66859
## 3388	ENSG00000119280	chr1	230837119	230869589	-	32471
## 3389	ENSG00000119285	chr1	236549005	236604504	-	55500
## 3390	ENSG00000119314	chr9	112217716	112333667	-	115952
## 3391	ENSG00000119318	chr9	107283137	107332194	+	49058
## 3392	ENSG00000119321	chr9	113161006	113221361	-	60356
## 3393	ENSG00000119326	chr9	108942569	109013529	-	70961
## 3394	ENSG00000119328	chr9	108934181	108950744	+	16564
## 3395	ENSG00000119333	chr9	128633661	128656787	-	23127
## 3396	ENSG00000119335	chr9	128683424	128696400	+	12977
## 3397	ENSG00000119383	chr9	129110950	129148946	+	37997
## 3398	ENSG00000119392	chr9	128504700	128542288	+	37589
## 3399	ENSG00000119396	chr9	121178137	121223014	-	44878
## 3400	ENSG00000119397	chr9	121074863	121177610	+	102748
## 3401	ENSG00000119401	chr9	116687302	116701300	+	13999
## 3402	ENSG00000119402	chr9	120751978	120793412	-	41435
## 3403	ENSG00000119403	chr9	120855652	120894896	-	39245
## 3404	ENSG00000119408	chr9	124257606	124353307	+	95702
## 3405	ENSG00000119411	chr9	113349541	113371233	+	21693
## 3406	ENSG00000119414	chr9	125146573	125189939	-	43367
## 3407	ENSG00000119421	chr9	122144058	122159819	-	15762
## 3408	ENSG00000119431	chr9	113373419	113376999	-	3581



## 3409	ENSG00000119446	chr9	122237624	122264839	-	27216
## 3410	ENSG00000119471	chr9	112379937	112472410	+	92474
## 3411	ENSG00000119487	chr9	125437393	125707234	-	269842
## 3412	ENSG00000119509	chr9	100099256	100301000	+	201745
## 3413	ENSG00000119522	chr9	123379654	123930152	-	550499
## 3414	ENSG00000119523	chr9	99216426	99221956	-	5531
## 3415	ENSG00000119535	chr1	36466043	36483278	-	17236
## 3416	ENSG00000119537	chr18	63327726	63367510	-	39785
## 3417	ENSG00000119541	chr18	63389190	63422483	-	33294
## 3418	ENSG00000119547	chr18	57435685	57491297	+	55613
## 3419	ENSG00000119559	chr19	1461143	1479556	-	18414
## 3420	ENSG00000119574	chr19	58513530	58538911	-	25382
## 3421	ENSG00000119596	chr14	74763366	74859435	+	96070
## 3422	ENSG00000119599	chr14	72926332	72959703	+	33372
## 3423	ENSG00000119616	chr14	74713144	74738620	+	25477
## 3424	ENSG00000119630	chr14	74941834	74955784	-	13951
## 3425	ENSG00000119632	chr14	94127779	94130253	-	2475
## 3426	ENSG00000119636	chr14	74019353	74082863	+	63511
## 3427	ENSG00000119638	chr14	75079353	75127344	-	47992
## 3428	ENSG00000119640	chr14	75053221	75069483	-	16263
## 3429	ENSG00000119650	chr14	75902136	76084585	+	182450
## 3430	ENSG00000119655	chr14	74476192	74494177	-	17986
## 3431	ENSG00000119661	chr14	73644875	73703732	+	58858
## 3432	ENSG00000119669	chr14	77024543	77028699	-	4157
## 3433	ENSG00000119673	chr14	73567620	73575658	+	8039
## 3434	ENSG00000119681	chr14	74498170	74612378	-	114209
## 3435	ENSG00000119682	chr14	74653437	74713115	-	59679
## 3436	ENSG00000119684	chr14	75013764	75051532	-	37769
## 3437	ENSG00000119685	chr14	75633625	75955078	+	321454
## 3438	ENSG00000119686	chr14	75578617	75663214	+	84598
## 3439	ENSG00000119688	chr14	74285423	74303056	-	17634
## 3440	ENSG00000119689	chr14	74881891	74903745	+	21855
## 3441	ENSG00000119699	chr14	75958099	75982991	-	24893
## 3442	ENSG00000119705	chr14	77708071	77761104	+	53034
## 3443	ENSG00000119707	chr14	73058436	73123898	+	65463
## 3444	ENSG00000119711	chr14	74056850	74084493	-	27644
## 3445	ENSG00000119718	chr14	75002911	75012366	+	9456
## 3446	ENSG00000119720	chr14	90267856	90332137	-	64282
## 3447	ENSG00000119723	chr14	73949926	73963670	+	13745
## 3448	ENSG00000119725	chr14	73886617	73932511	+	45895
## 3449	ENSG00000119729	chr2	46541806	46583121	+	41316
## 3450	ENSG00000119737	chr2	53852913	53859989	-	7077
## 3451	ENSG00000119760	chr2	27650812	27663840	-	13029
## 3452	ENSG00000119772	chr2	25227855	25342590	-	114736
## 3453	ENSG00000119777	chr2	27032910	27041695	+	8786
## 3454	ENSG00000119778	chr2	23748664	23927114	-	178451
## 3455	ENSG00000119787	chr2	38294880	38377285	-	82406
## 3456	ENSG00000119801	chr2	30146941	30160533	+	13593
## 3457	ENSG00000119812	chr2	33583658	33599382	-	15725
## 3458	ENSG00000119820	chr2	32277910	32316594	+	38685
## 3459	ENSG00000119844	chr2	64524305	64593005	+	68701
## 3460	ENSG00000119862	chr2	64453969	64461381	+	7413
## 3461	ENSG00000119866	chr2	60451167	60553567	-	102401
## 3462	ENSG00000119878	chr2	46616416	46625742	+	9327

## 3463	ENSG00000119888	chr2	47345158	47387601	+	42444
## 3464	ENSG00000119899	chr6	73593379	73654155	-	60777
## 3465	ENSG00000119900	chr6	71288803	71308950	+	20148
## 3466	ENSG00000119906	chr10	100912569	100965136	+	52568
## 3467	ENSG00000119912	chr10	92451684	92574076	-	122393
## 3468	ENSG00000119915	chr10	102226328	102229589	+	3262
## 3469	ENSG00000119917	chr10	89327894	89340971	+	13078
## 3470	ENSG00000119919	chr10	99532933	99536524	+	3592
## 3471	ENSG00000119922	chr10	89283694	89309276	+	25583
## 3472	ENSG00000119927	chr10	112149864	112215377	-	65514
## 3473	ENSG00000119929	chr10	99702558	99756134	+	53577
## 3474	ENSG00000119943	chr10	98383565	98415184	-	31620
## 3475	ENSG00000119946	chr10	99329099	99394330	+	65232
## 3476	ENSG00000119950	chr10	110207605	110287365	+	79761
## 3477	ENSG00000119953	chr10	110290730	110304951	-	14222
## 3478	ENSG00000119965	chr10	122930903	122954403	-	23501
## 3479	ENSG00000119969	chr10	94501434	94613905	+	112472
## 3480	ENSG00000119977	chr10	95663396	95694143	-	30748
## 3481	ENSG00000119979	chr10	119104086	119137984	+	33899
## 3482	ENSG00000119986	chr10	97677424	97687323	-	9900
## 3483	ENSG00000120008	chr10	120851175	120909524	+	58350
## 3484	ENSG00000120029	chr10	101845599	102056193	-	210595
## 3485	ENSG00000120049	chr10	101825974	101843920	-	17947
## 3486	ENSG00000120053	chr10	99396870	99430624	-	33755
## 3487	ENSG00000120055	chr10	102449837	102451543	-	1707
## 3488	ENSG00000120063	chr17	65010715	65056839	-	46125
## 3489	ENSG00000120129	chr5	172768090	172771195	-	3106
## 3490	ENSG00000120137	chr5	168548495	168579600	-	31106
## 3491	ENSG00000120158	chr9	4792869	4885917	+	93049
## 3492	ENSG00000120159	chr9	26840685	26892804	-	52120
## 3493	ENSG00000120253	chr6	149724315	149749665	-	25351
## 3494	ENSG00000120254	chr6	150865549	151101887	+	236339
## 3495	ENSG00000120265	chr6	149749443	149811420	+	61978
## 3496	ENSG00000120280	chrX	30558824	30577844	-	19021
## 3497	ENSG00000120314	chr5	140664676	140674124	+	9449
## 3498	ENSG00000120333	chr1	175010789	175023425	-	12637
## 3499	ENSG00000120334	chr1	173799550	173824720	-	25171
## 3500	ENSG00000120341	chr1	177923956	177984303	-	60348
## 3501	ENSG00000120370	chr1	170532129	170553446	+	21318
## 3502	ENSG00000120437	chr6	159760328	159779055	+	18728
## 3503	ENSG00000120438	chr6	159778498	159789749	-	11252
## 3504	ENSG00000120451	chr11	130875436	130916509	-	41074
## 3505	ENSG00000120458	chr11	124766498	124800673	-	34176
## 3506	ENSG00000120509	chrX	70286595	70290514	-	3920
## 3507	ENSG00000120519	chr4	146253975	146521964	-	267990
## 3508	ENSG00000120526	chr8	109240919	109334385	-	93467
## 3509	ENSG00000120533	chr8	109334324	109345953	+	11630
## 3510	ENSG00000120539	chr10	27154824	27186924	+	32101
## 3511	ENSG00000120594	chr10	19816239	20289856	+	473618
## 3512	ENSG00000120616	chr10	32267751	32378798	-	111048
## 3513	ENSG00000120645	chr12	66765	178460	+	111696
## 3514	ENSG00000120647	chr12	389273	442645	+	53373
## 3515	ENSG00000120656	chr1	28589323	28643085	-	53763
## 3516	ENSG00000120662	chr13	41216369	41263577	-	47209

## 3517	ENSG00000120669	chr13	36168208	36214615	-	46408
## 3518	ENSG00000120685	chr13	39009866	39038076	-	28211
## 3519	ENSG00000120686	chr13	38349849	38363619	+	13771
## 3520	ENSG00000120688	chr13	41061274	41084006	+	22733
## 3521	ENSG00000120690	chr13	40931920	41061440	-	129521
## 3522	ENSG00000120694	chr13	31134974	31162388	-	27415
## 3523	ENSG00000120696	chr13	41189833	41194566	-	4734
## 3524	ENSG00000120697	chr13	36949775	37000261	-	50487
## 3525	ENSG00000120699	chr13	36998816	37009613	+	10798
## 3526	ENSG00000120705	chr5	138506095	138543300	-	37206
## 3527	ENSG00000120709	chr5	138331935	138349729	+	17795
## 3528	ENSG00000120725	chr5	138946720	139293557	-	346838
## 3529	ENSG00000120727	chr5	139341587	139369720	+	28134
## 3530	ENSG00000120733	chr5	138352596	138437028	+	84433
## 3531	ENSG00000120738	chr5	138465490	138469315	+	3826
## 3532	ENSG00000120742	chr3	150541994	150603228	-	61235
## 3533	ENSG00000120756	chr3	142596387	142713664	+	117278
## 3534	ENSG00000120784	chr19	37613749	37692337	-	78589
## 3535	ENSG00000120798	chr12	95020229	95073703	-	53475
## 3536	ENSG00000120800	chr12	101280109	101386616	+	106508
## 3537	ENSG00000120802	chr12	98515512	98550379	+	34868
## 3538	ENSG00000120805	chr12	101393120	101407820	-	14701
## 3539	ENSG00000120832	chr12	106977291	106987166	-	9876
## 3540	ENSG00000120833	chr12	93569814	93583487	+	13674
## 3541	ENSG00000120837	chr12	104117077	104138289	-	21213
## 3542	ENSG00000120860	chr12	102012927	102062149	-	49223
## 3543	ENSG00000120868	chr12	98645141	98735433	+	90293
## 3544	ENSG00000120875	chr8	29333064	29350668	-	17605
## 3545	ENSG00000120885	chr8	27596917	27615031	-	18115
## 3546	ENSG00000120889	chr8	23020133	23069179	-	49047
## 3547	ENSG00000120899	chr8	27311482	27459391	+	147910
## 3548	ENSG00000120910	chr8	22440819	22541142	+	100324
## 3549	ENSG00000120913	chr8	22578279	22598025	+	19747
## 3550	ENSG00000120925	chr8	42849637	42897290	-	47654
## 3551	ENSG00000120942	chr1	11273206	11296049	+	22844
## 3552	ENSG00000120948	chr1	11012344	11026420	+	14077
## 3553	ENSG00000120963	chr8	101177878	101206193	-	28316
## 3554	ENSG00000120992	chr8	54046367	54102017	-	55651
## 3555	ENSG00000121005	chr8	74984515	75034558	+	50044
## 3556	ENSG00000121022	chr8	67043079	67083783	-	40705
## 3557	ENSG00000121039	chr8	73294612	73325281	+	30670
## 3558	ENSG00000121053	chr17	58192737	58205174	+	12438
## 3559	ENSG00000121057	chr17	57085092	57121349	+	36258
## 3560	ENSG00000121058	chr17	56938187	56961054	-	22868
## 3561	ENSG00000121060	chr17	56887909	56914038	-	26130
## 3562	ENSG00000121064	chr17	56978105	57006768	+	28664
## 3563	ENSG00000121067	chr17	49598884	49678234	-	79351
## 3564	ENSG00000121073	chr17	49700943	49709014	-	8072
## 3565	ENSG00000121089	chr4	164943290	164943937	+	648
## 3566	ENSG00000121104	chr17	49710332	49789180	-	78849
## 3567	ENSG00000121152	chr2	96335787	96373845	+	38059
## 3568	ENSG00000121207	chr4	154626945	154753118	+	126174
## 3569	ENSG00000121210	chr4	153466346	153636711	+	170366
## 3570	ENSG00000121211	chr4	153344649	153415118	+	70470

## 3571	ENSG00000121270	chr16	48166910	48247568	-	80659
## 3572	ENSG00000121274	chr16	50152918	50235310	+	82393
## 3573	ENSG00000121281	chr16	50246137	50318135	+	71999
## 3574	ENSG00000121289	chr19	32875925	32971991	-	96067
## 3575	ENSG00000121297	chr19	31274945	31349547	-	74603
## 3576	ENSG00000121310	chr1	52895910	52927212	-	31303
## 3577	ENSG00000121350	chr12	21437615	21471252	+	33638
## 3578	ENSG00000121390	chr13	19674752	19783019	-	108268
## 3579	ENSG00000121406	chr19	57527325	57557542	+	30218
## 3580	ENSG00000121410	chr19	58345178	58353499	-	8322
## 3581	ENSG00000121413	chr19	58083838	58118427	-	34590
## 3582	ENSG00000121417	chr19	57630395	57642779	+	12385
## 3583	ENSG00000121454	chr1	180230286	180278982	+	48697
## 3584	ENSG00000121481	chr1	185045364	185102608	+	57245
## 3585	ENSG00000121486	chr1	185118098	185157072	-	38975
## 3586	ENSG00000121542	chr3	123201927	123274130	+	72204
## 3587	ENSG00000121552	chr3	122325244	122341972	+	16729
## 3588	ENSG00000121578	chr3	119211732	119241103	-	29372
## 3589	ENSG00000121579	chr3	113716460	113746300	-	29841
## 3590	ENSG00000121621	chr11	28020620	28108308	-	87689
## 3591	ENSG00000121644	chr1	244652935	244709033	+	56099
## 3592	ENSG00000121671	chr11	45847118	45883248	+	36131
## 3593	ENSG00000121680	chr11	45909669	45918812	-	9144
## 3594	ENSG00000121690	chr11	33015864	33033582	+	17719
## 3595	ENSG00000121691	chr11	34438925	34472062	+	33138
## 3596	ENSG00000121716	chr7	100352176	100367733	+	15558
## 3597	ENSG00000121741	chr13	19958670	20091829	+	133160
## 3598	ENSG00000121749	chr12	71839707	71927248	+	87542
## 3599	ENSG00000121764	chr1	31617686	31632518	+	14833
## 3600	ENSG00000121766	chr1	31296982	31364953	+	67972
## 3601	ENSG00000121774	chr1	32013829	32060850	+	47022
## 3602	ENSG00000121775	chr1	32072031	32102866	+	30836
## 3603	ENSG00000121851	chr1	145964702	145978848	+	14147
## 3604	ENSG00000121858	chr3	172505508	172523507	-	18000
## 3605	ENSG00000121864	chr3	179322991	179338583	+	15593
## 3606	ENSG00000121879	chr3	179148114	179240093	+	91980
## 3607	ENSG00000121892	chr4	39822863	39977956	-	155094
## 3608	ENSG00000121895	chr4	38966744	39032922	-	66179
## 3609	ENSG00000121897	chr4	39459000	39477653	+	18654
## 3610	ENSG00000121903	chr1	33472645	33496507	+	23863
## 3611	ENSG00000121931	chr1	110947185	110964079	-	16895
## 3612	ENSG00000121940	chr1	108929508	108963457	-	33950
## 3613	ENSG00000121957	chr1	108875350	108934545	+	59196
## 3614	ENSG00000121964	chr2	143938068	144332568	-	394501
## 3615	ENSG00000121966	chr2	136114349	136118165	-	3817
## 3616	ENSG00000121988	chr2	135136916	135531236	-	394321
## 3617	ENSG00000121989	chr2	147844517	147930826	+	86310
## 3618	ENSG00000122008	chr5	75511756	75601144	+	89389
## 3619	ENSG00000122025	chr13	28003274	28100592	-	97319
## 3620	ENSG00000122026	chr13	27251309	27256691	+	5383
## 3621	ENSG00000122033	chr13	27435643	27450591	-	14949
## 3622	ENSG00000122034	chr13	27424544	27435823	+	11280
## 3623	ENSG00000122042	chr13	29764371	29850684	-	86314
## 3624	ENSG00000122068	chr3	197737179	197787596	+	50418

## 3625	ENSG00000122085	chr2	241072169	241102332	-	30164
## 3626	ENSG00000122122	chrX	129779979	129795201	+	15223
## 3627	ENSG00000122126	chrX	129539849	129592561	+	52713
## 3628	ENSG00000122140	chr9	135499984	135504673	+	4690
## 3629	ENSG00000122188	chr1	203765176	203776233	+	11058
## 3630	ENSG00000122203	chr5	176346061	176361968	-	15908
## 3631	ENSG00000122218	chr1	160289273	160343400	-	54128
## 3632	ENSG00000122223	chr1	160830160	160862855	-	32696
## 3633	ENSG00000122224	chr1	160796074	160828261	+	32188
## 3634	ENSG00000122257	chr16	24537693	24572863	+	35171
## 3635	ENSG00000122299	chr16	11750586	11797267	-	46682
## 3636	ENSG00000122335	chr6	158109515	158168270	-	58756
## 3637	ENSG00000122359	chr10	80150889	80205572	-	54684
## 3638	ENSG00000122376	chr10	87094161	87191468	+	97308
## 3639	ENSG00000122378	chr10	80407829	80437115	+	29287
## 3640	ENSG00000122390	chr16	3443611	3486963	+	43353
## 3641	ENSG00000122406	chr1	92832025	92841924	+	9900
## 3642	ENSG00000122417	chr1	86346824	86396342	-	49519
## 3643	ENSG00000122432	chr1	84506291	84566194	+	59904
## 3644	ENSG00000122435	chr1	100133150	100150497	+	17348
## 3645	ENSG00000122477	chr1	100148449	100178273	-	29825
## 3646	ENSG00000122481	chr1	95234155	95247225	+	13071
## 3647	ENSG00000122482	chr1	90915298	91022272	-	106975
## 3648	ENSG00000122483	chr1	93179919	93278730	+	98812
## 3649	ENSG00000122484	chr1	92298965	92402056	+	103092
## 3650	ENSG00000122490	chr18	79902420	79951664	-	49245
## 3651	ENSG00000122512	chr7	5973239	6009125	-	35887
## 3652	ENSG00000122515	chr7	44748581	44769881	+	21301
## 3653	ENSG00000122545	chr7	35800932	35907105	+	106174
## 3654	ENSG00000122547	chr7	36153149	36301543	+	148395
## 3655	ENSG00000122550	chr7	23105758	23177914	+	72157
## 3656	ENSG00000122557	chr7	35632659	35695571	-	62913
## 3657	ENSG00000122565	chr7	26201162	26213356	+	12195
## 3658	ENSG00000122566	chr7	26189927	26201529	-	11603
## 3659	ENSG00000122574	chr7	29806486	29917066	+	110581
## 3660	ENSG00000122591	chr7	22889371	23014130	-	124760
## 3661	ENSG00000122642	chr7	32957404	33006931	+	49528
## 3662	ENSG00000122643	chr7	33014114	33062797	-	48684
## 3663	ENSG00000122644	chr7	12686856	12690934	+	4079
## 3664	ENSG00000122674	chr7	5898725	5926550	+	27826
## 3665	ENSG00000122678	chr7	44072247	44082540	-	10294
## 3666	ENSG00000122687	chr7	2234231	2242198	-	7968
## 3667	ENSG00000122691	chr7	19020991	19117672	-	96682
## 3668	ENSG00000122692	chr9	33041764	33076659	-	34896
## 3669	ENSG00000122694	chr9	36136536	36163913	+	27378
## 3670	ENSG00000122696	chr9	37879400	37904353	-	24954
## 3671	ENSG00000122705	chr9	36190856	36304781	+	113926
## 3672	ENSG00000122707	chr9	36036433	36124451	+	88019
## 3673	ENSG00000122728	chr9	32629454	32635669	-	6216
## 3674	ENSG00000122729	chr9	32384603	32454769	+	70167
## 3675	ENSG00000122741	chr9	37800502	37867666	+	67165
## 3676	ENSG00000122778	chr7	138831381	138981318	-	149938
## 3677	ENSG00000122779	chr7	138460334	138589993	+	129660
## 3678	ENSG00000122783	chr7	135092363	135170795	-	78433

## 3679	ENSG00000122861	chr10	73909177	73917497	+	8321
## 3680	ENSG00000122862	chr10	69088106	69104811	+	16706
## 3681	ENSG00000122873	chr10	58269058	58289586	+	20529
## 3682	ENSG00000122877	chr10	62811996	62919900	-	107905
## 3683	ENSG00000122882	chr10	73130155	73169055	-	38901
## 3684	ENSG00000122884	chr10	73007217	73096974	-	89758
## 3685	ENSG00000122912	chr10	68477999	68527474	-	49476
## 3686	ENSG00000122952	chr10	56357228	56361275	-	4048
## 3687	ENSG00000122958	chr10	69123512	69172861	+	49350
## 3688	ENSG00000122965	chr12	113816738	113966371	-	149634
## 3689	ENSG00000122966	chr12	119685790	119877291	-	191502
## 3690	ENSG00000122970	chr12	110124335	110218797	+	94463
## 3691	ENSG00000122971	chr12	120725735	120740008	+	14274
## 3692	ENSG00000122986	chr12	110627841	110704950	-	77110
## 3693	ENSG00000123009	chr12	120282303	120282716	+	414
## 3694	ENSG00000123064	chr12	113157174	113185479	-	28306
## 3695	ENSG00000123066	chr12	115953872	116277338	-	323467
## 3696	ENSG00000123080	chr1	50960745	50974633	+	13889
## 3697	ENSG00000123091	chr1	51236271	51273455	+	37185
## 3698	ENSG00000123094	chr12	25959029	26079892	+	120864
## 3699	ENSG00000123104	chr12	26336515	26833198	-	496684
## 3700	ENSG00000123106	chr12	28133249	28581511	+	448263
## 3701	ENSG00000123124	chr8	86342738	86478420	+	135683
## 3702	ENSG00000123130	chrX	23702253	23766475	-	64223
## 3703	ENSG00000123131	chrX	23664262	23686399	+	22138
## 3704	ENSG00000123136	chr19	14408819	14419383	-	10565
## 3705	ENSG00000123143	chr19	14433053	14471867	+	38815
## 3706	ENSG00000123144	chr19	12730640	12734775	-	4136
## 3707	ENSG00000123146	chr19	14380501	14408725	+	28225
## 3708	ENSG00000123154	chr19	12666800	12675832	+	9033
## 3709	ENSG00000123159	chr19	14477760	14496149	-	18390
## 3710	ENSG00000123178	chr13	49912706	49936490	-	23785
## 3711	ENSG00000123179	chr13	49660723	49691475	-	30753
## 3712	ENSG00000123191	chr13	51930436	52012125	-	81690
## 3713	ENSG00000123200	chr13	45954465	46052759	-	98295
## 3714	ENSG00000123213	chr5	65722196	65871725	+	149530
## 3715	ENSG00000123219	chr5	65517766	65563171	-	45406
## 3716	ENSG00000123268	chr12	50763710	50821122	+	57413
## 3717	ENSG00000123297	chr12	57782589	57808071	+	25483
## 3718	ENSG00000123329	chr12	57472255	57488814	-	16560
## 3719	ENSG00000123338	chr12	54497711	54548238	+	50528
## 3720	ENSG00000123349	chr12	53295291	53299450	+	4160
## 3721	ENSG00000123352	chr12	49366584	49527424	+	160841
## 3722	ENSG00000123353	chr12	55817919	55821879	+	3961
## 3723	ENSG00000123360	chr12	54549350	54579239	+	29890
## 3724	ENSG00000123374	chr12	55966769	55972784	+	6016
## 3725	ENSG00000123395	chr12	52069246	52077494	+	8249
## 3726	ENSG00000123405	chr12	54292111	54301121	-	9011
## 3727	ENSG00000123411	chr12	56007659	56038435	+	30777
## 3728	ENSG00000123415	chr12	54121277	54189008	-	67732
## 3729	ENSG00000123416	chr12	49127782	49131397	-	3616
## 3730	ENSG00000123427	chr12	57771492	57782541	+	11050
## 3731	ENSG00000123444	chr11	47572197	47579015	-	6819
## 3732	ENSG00000123472	chr1	46632737	46673867	-	41131

## 3733	ENSG00000123473	chr1	47250139	47314147	-	64009
## 3734	ENSG00000123485	chr2	233833416	233854566	-	21151
## 3735	ENSG00000123505	chr6	110874770	110895713	+	20944
## 3736	ENSG00000123545	chr6	96889313	96897881	-	8569
## 3737	ENSG00000123552	chr6	99432379	99521728	-	89350
## 3738	ENSG00000123562	chrX	103675496	103688158	-	12663
## 3739	ENSG00000123570	chrX	103822322	103832228	-	9907
## 3740	ENSG00000123575	chrX	104166620	104195902	+	29283
## 3741	ENSG00000123595	chrX	13689125	13710506	+	21382
## 3742	ENSG00000123600	chr2	171317405	171434802	-	117398
## 3743	ENSG00000123607	chr2	165857475	165953843	-	96369
## 3744	ENSG00000123609	chr2	151270465	151290057	-	19593
## 3745	ENSG00000123636	chr2	159318979	159616692	-	297714
## 3746	ENSG00000123643	chr5	151437046	151492381	+	55336
## 3747	ENSG00000123684	chr1	211743457	211830772	-	87316
## 3748	ENSG00000123728	chrX	132203024	132219480	-	16457
## 3749	ENSG00000123737	chr4	121801317	121817021	+	15705
## 3750	ENSG00000123739	chr4	109709989	109730077	-	20089
## 3751	ENSG00000123810	chr19	41354421	41364173	-	9753
## 3752	ENSG00000123815	chr19	40691529	40718207	-	26679
## 3753	ENSG00000123836	chr1	207034366	207081024	+	46659
## 3754	ENSG00000123892	chr11	88113242	88175467	-	62226
## 3755	ENSG00000123908	chr8	140520156	140635619	-	115464
## 3756	ENSG00000123933	chr4	2247432	2262294	-	14863
## 3757	ENSG00000123965	chr7	74894116	74897835	+	3720
## 3758	ENSG00000123975	chr9	89311198	89316703	+	5506
## 3759	ENSG00000123983	chr2	222860934	222944639	+	83706
## 3760	ENSG00000123992	chr2	219373546	219400022	-	26477
## 3761	ENSG00000124006	chr2	219550729	219571859	-	21131
## 3762	ENSG00000124067	chr16	67943474	67969601	-	26128
## 3763	ENSG00000124074	chr16	67662945	67667265	-	4321
## 3764	ENSG00000124098	chr20	56358915	56368663	+	9749
## 3765	ENSG00000124103	chr20	56517187	56526142	+	8956
## 3766	ENSG00000124104	chr20	45833810	45843275	+	9466
## 3767	ENSG00000124120	chr20	44475886	44494603	+	18718
## 3768	ENSG00000124126	chr20	48624252	48827883	-	203632
## 3769	ENSG00000124151	chr20	47501902	47656877	+	154976
## 3770	ENSG00000124155	chr20	45416077	45426244	+	10168
## 3771	ENSG00000124160	chr20	46060985	46089952	-	28968
## 3772	ENSG00000124164	chr20	58389122	58451101	+	61980
## 3773	ENSG00000124172	chr20	59025467	59032382	-	6916
## 3774	ENSG00000124177	chr20	41402101	41618494	-	216394
## 3775	ENSG00000124181	chr20	41136960	41196801	+	59842
## 3776	ENSG00000124193	chr20	43457928	43464247	+	6320
## 3777	ENSG00000124198	chr20	48921890	49036693	+	114804
## 3778	ENSG00000124201	chr20	49237946	49278426	-	40481
## 3779	ENSG00000124207	chr20	49046246	49096960	+	50715
## 3780	ENSG00000124208	chr20	50081124	50153637	-	72514
## 3781	ENSG00000124209	chr20	58309696	58367507	+	57812
## 3782	ENSG00000124214	chr20	49113339	49188367	-	75029
## 3783	ENSG00000124215	chr20	59958427	60034011	+	75585
## 3784	ENSG00000124216	chr20	49982999	49988886	+	5888
## 3785	ENSG00000124217	chr20	50958826	50963931	+	5106
## 3786	ENSG00000124222	chr20	58651253	58679526	+	28274

## 3787	ENSG00000124226	chr20	49936336	49953892	+	17557
## 3788	ENSG00000124228	chr20	49219295	49244077	+	24783
## 3789	ENSG00000124243	chr20	50794894	50882676	+	87783
## 3790	ENSG00000124257	chr20	45888625	45891287	-	2663
## 3791	ENSG00000124275	chr5	7851186	7906025	+	54840
## 3792	ENSG00000124279	chr5	7859159	7869037	-	9879
## 3793	ENSG00000124299	chr19	33386950	33521794	-	134845
## 3794	ENSG00000124356	chr2	73828916	73873659	+	44744
## 3795	ENSG00000124357	chr2	71064344	71079805	+	15462
## 3796	ENSG00000124370	chr2	71109684	71130239	-	20556
## 3797	ENSG00000124374	chr2	71182739	71227083	-	44345
## 3798	ENSG00000124380	chr2	69893560	69905575	+	12016
## 3799	ENSG00000124383	chr2	71130314	71150101	+	19788
## 3800	ENSG00000124399	chr4	43898962	43899351	+	390
## 3801	ENSG00000124406	chr4	42408373	42657105	-	248733
## 3802	ENSG00000124422	chr17	20999593	21043760	-	44168
## 3803	ENSG00000124444	chr19	43596392	43601157	+	4766
## 3804	ENSG00000124459	chr19	43912629	43935278	-	22650
## 3805	ENSG00000124486	chrX	41085635	41236579	+	150945
## 3806	ENSG00000124491	chr6	6144085	6321013	-	176929
## 3807	ENSG00000124496	chr6	42224931	42452051	-	227121
## 3808	ENSG00000124508	chr6	26383096	26394874	+	11779
## 3809	ENSG00000124523	chr6	13574529	13615158	+	40630
## 3810	ENSG00000124532	chr6	24402908	24426194	+	23287
## 3811	ENSG00000124535	chr6	2765414	2786952	+	21539
## 3812	ENSG00000124541	chr6	43021645	43034156	+	12512
## 3813	ENSG00000124562	chr6	34757406	34773794	+	16389
## 3814	ENSG00000124570	chr6	2948159	2972165	-	24007
## 3815	ENSG00000124571	chr6	43522330	43576075	-	53746
## 3816	ENSG00000124574	chr6	43427366	43450430	+	23065
## 3817	ENSG00000124587	chr6	42963870	42979220	-	15351
## 3818	ENSG00000124588	chr6	2987987	3028869	+	40883
## 3819	ENSG00000124593	chr6	41780349	41790141	+	9793
## 3820	ENSG00000124596	chr6	41033627	41097787	-	64161
## 3821	ENSG00000124608	chr6	44299654	44313326	-	13673
## 3822	ENSG00000124613	chr6	27374615	27403904	+	29290
## 3823	ENSG00000124614	chr6	34417454	34426125	-	8672
## 3824	ENSG00000124641	chr6	41905354	41921139	-	15786
## 3825	ENSG00000124659	chr6	42744481	42746096	-	1616
## 3826	ENSG00000124678	chr6	35118071	35148610	-	30540
## 3827	ENSG00000124688	chr6	43629540	43640952	+	11413
## 3828	ENSG00000124702	chr6	43014103	43021298	+	7196
## 3829	ENSG00000124733	chr6	43012094	43013968	-	1875
## 3830	ENSG00000124743	chr6	53647901	53665708	-	17808
## 3831	ENSG00000124762	chr6	36676460	36687339	+	10880
## 3832	ENSG00000124766	chr6	21592768	21598619	+	5852
## 3833	ENSG00000124767	chr6	38675925	38703141	-	27217
## 3834	ENSG00000124782	chr6	7107597	7251980	+	144384
## 3835	ENSG00000124783	chr6	7268306	7347446	-	79141
## 3836	ENSG00000124784	chr6	7389496	7418037	+	28542
## 3837	ENSG00000124785	chr6	5997999	6007605	-	9607
## 3838	ENSG00000124786	chr6	8413068	8435483	-	22416
## 3839	ENSG00000124787	chr6	4994732	5004063	-	9332
## 3840	ENSG00000124788	chr6	16299112	16761491	-	462380



## 3841	ENSG00000124789	chr6	17615035	17706834	-	91800
## 3842	ENSG00000124795	chr6	18223868	18264823	-	40956
## 3843	ENSG00000124802	chr6	8073360	8102578	-	29219
## 3844	ENSG00000124813	chr6	45328157	45664349	+	336193
## 3845	ENSG00000124831	chr2	237627576	237813682	+	186107
## 3846	ENSG00000124920	chr11	61752642	61788518	+	35877
## 3847	ENSG00000124942	chr11	62433542	62556235	-	122694
## 3848	ENSG00000125037	chr3	9962537	10011116	-	48580
## 3849	ENSG00000125089	chr4	8182072	8241803	+	59732
## 3850	ENSG00000125107	chr16	58519951	58629886	-	109936
## 3851	ENSG00000125124	chr16	56466836	56520283	-	53448
## 3852	ENSG00000125144	chr16	56666731	56668065	-	1335
## 3853	ENSG00000125148	chr16	56608199	56609497	+	1299
## 3854	ENSG00000125149	chr16	67109958	67148539	+	38582
## 3855	ENSG00000125166	chr16	58707131	58734357	-	27227
## 3856	ENSG00000125170	chr16	57471922	57487327	-	15406
## 3857	ENSG00000125246	chr13	99606669	99897134	+	290466
## 3858	ENSG00000125247	chr13	100603927	100675093	-	71167
## 3859	ENSG00000125249	chr13	97434222	97469128	+	34907
## 3860	ENSG00000125257	chr13	95019829	95301446	-	281618
## 3861	ENSG00000125266	chr13	106489731	106535114	-	45384
## 3862	ENSG00000125304	chr13	99501417	99564006	+	62590
## 3863	ENSG00000125319	chr17	44141906	44162476	+	20571
## 3864	ENSG00000125347	chr5	132481609	132490798	-	9190
## 3865	ENSG00000125351	chrX	119805311	119852998	-	47688
## 3866	ENSG00000125352	chrX	119870475	119871827	-	1353
## 3867	ENSG00000125354	chrX	119615724	119693370	-	77647
## 3868	ENSG00000125356	chrX	119871487	119876662	+	5176
## 3869	ENSG00000125375	chr14	50312326	50335558	+	23233
## 3870	ENSG00000125378	chr14	53949736	53958761	-	9026
## 3871	ENSG00000125384	chr14	52314305	52328606	+	14302
## 3872	ENSG00000125386	chr4	2536631	2732565	+	195935
## 3873	ENSG00000125388	chr4	2963608	3040747	+	77140
## 3874	ENSG00000125430	chr17	14301083	14349404	+	48322
## 3875	ENSG00000125434	chr17	8287763	8295343	-	7581
## 3876	ENSG00000125445	chr17	75261674	75266373	+	4700
## 3877	ENSG00000125447	chr17	75236599	75262363	-	25765
## 3878	ENSG00000125449	chr17	75109952	75130265	+	20314
## 3879	ENSG00000125450	chr17	75205659	75235758	+	30100
## 3880	ENSG00000125454	chr17	75272981	75289510	-	16530
## 3881	ENSG00000125457	chr17	75266228	75271227	-	5000
## 3882	ENSG00000125458	chr17	75130225	75131795	-	1571
## 3883	ENSG00000125459	chr1	155610205	155614967	+	4763
## 3884	ENSG00000125482	chr9	132375548	132406851	-	31304
## 3885	ENSG00000125484	chr9	132670035	132694955	+	24921
## 3886	ENSG00000125485	chr9	132592997	132670401	-	77405
## 3887	ENSG00000125503	chr19	55090913	55117559	-	26647
## 3888	ENSG00000125505	chr19	54173412	54189882	-	16471
## 3889	ENSG00000125510	chr20	64080173	64100643	+	20471
## 3890	ENSG00000125520	chr20	63739861	63743505	+	3645
## 3891	ENSG00000125538	chr2	112829751	112836903	-	7153
## 3892	ENSG00000125611	chr2	112584240	112589275	+	5036
## 3893	ENSG00000125618	chr2	113215997	113278950	-	62954
## 3894	ENSG00000125629	chr2	118088452	118110997	+	22546

## 3895	ENSG00000125630	chr2	112541915	112577150	+	35236
## 3896	ENSG00000125631	chr2	117859427	117934942	+	75516
## 3897	ENSG00000125633	chr2	117915478	118014133	-	98656
## 3898	ENSG00000125637	chr2	113157325	113209396	+	52072
## 3899	ENSG00000125648	chr19	6436079	6465203	-	29125
## 3900	ENSG00000125650	chr19	6375148	6379058	-	3911
## 3901	ENSG00000125651	chr19	6379569	6393981	-	14413
## 3902	ENSG00000125652	chr19	6372433	6375251	+	2819
## 3903	ENSG00000125656	chr19	6361452	6368908	+	7457
## 3904	ENSG00000125676	chrX	123600561	123733056	-	132496
## 3905	ENSG00000125686	chr17	39404285	39451286	-	47002
## 3906	ENSG00000125691	chr17	38847865	38853843	-	5979
## 3907	ENSG00000125695	chr17	63702845	63752097	-	49253
## 3908	ENSG00000125703	chr1	62784135	62865513	+	81379
## 3909	ENSG00000125733	chr19	6737925	6751526	+	13602
## 3910	ENSG00000125734	chr19	6729914	6737603	-	7690
## 3911	ENSG00000125741	chr19	45527427	45602212	-	74786
## 3912	ENSG00000125743	chr19	45687454	45692569	-	5116
## 3913	ENSG00000125744	chr19	45485289	45497061	-	11773
## 3914	ENSG00000125746	chr19	45606994	45645629	-	38636
## 3915	ENSG00000125753	chr19	45506579	45526983	+	20405
## 3916	ENSG00000125755	chr19	45815410	45863290	-	47881
## 3917	ENSG00000125772	chr20	5544404	5611026	-	66623
## 3918	ENSG00000125779	chr20	3888839	3929882	+	41044
## 3919	ENSG00000125810	chr20	23079349	23086340	-	6992
## 3920	ENSG00000125812	chr20	23362182	23373063	+	10882
## 3921	ENSG00000125814	chr20	23374519	23421519	-	47001
## 3922	ENSG00000125817	chr20	3783851	3786690	-	2840
## 3923	ENSG00000125818	chr20	1113263	1189415	+	76153
## 3924	ENSG00000125821	chr20	18567453	18763917	+	196465
## 3925	ENSG00000125826	chr20	407498	430966	+	23469
## 3926	ENSG00000125827	chr20	7977348	8019829	-	42482
## 3927	ENSG00000125834	chr20	2101611	2177038	+	75428
## 3928	ENSG00000125835	chr20	2461634	2470853	-	9220
## 3929	ENSG00000125843	chr20	3820524	3828837	+	8314
## 3930	ENSG00000125844	chr20	17613678	17682295	-	68618
## 3931	ENSG00000125846	chr20	18288283	18316996	+	28714
## 3932	ENSG00000125850	chr20	17956979	18059188	-	102210
## 3933	ENSG00000125863	chr20	10401009	10434222	-	33214
## 3934	ENSG00000125868	chr20	17569863	17609919	+	40057
## 3935	ENSG00000125870	chr20	16729961	16742563	+	12603
## 3936	ENSG00000125871	chr20	17968913	17991122	+	22210
## 3937	ENSG00000125875	chr20	435480	462553	-	27074
## 3938	ENSG00000125877	chr20	3208868	3223870	+	15003
## 3939	ENSG00000125885	chr20	5950652	5998977	+	48326
## 3940	ENSG00000125898	chr20	833715	857463	+	23749
## 3941	ENSG00000125901	chr20	3045945	3048254	+	2310
## 3942	ENSG00000125910	chr19	3172346	3180332	+	7987
## 3943	ENSG00000125912	chr19	3185563	3209575	+	24013
## 3944	ENSG00000125944	chr1	23303771	23344336	-	40566
## 3945	ENSG00000125945	chr1	23359448	23369442	-	9995
## 3946	ENSG00000125952	chr14	65006174	65102695	-	96522
## 3947	ENSG00000125954	chr14	64914485	65061803	+	147319
## 3948	ENSG00000125962	chrX	102599168	102604159	+	4992

## 3949	ENSG00000125966	chr20	35226654	35277000	+	50347
## 3950	ENSG00000125967	chr20	33657087	33674463	-	17377
## 3951	ENSG00000125968	chr20	31605283	31606515	+	1233
## 3952	ENSG00000125970	chr20	33993646	34108308	+	114663
## 3953	ENSG00000125971	chr20	34516409	34540958	+	24550
## 3954	ENSG00000125977	chr20	34088298	34112332	-	24035
## 3955	ENSG00000125991	chr20	35542021	35557634	+	15614
## 3956	ENSG00000125995	chr20	35699272	35700984	+	1713
## 3957	ENSG00000126001	chr20	35455164	35519280	+	64117
## 3958	ENSG00000126003	chr20	32192503	32207791	-	15289
## 3959	ENSG00000126005	chr20	35201745	35278131	-	76387
## 3960	ENSG00000126012	chrX	53191321	53225422	-	34102
## 3961	ENSG00000126016	chrX	112774503	112840815	-	66313
## 3962	ENSG00000126062	chr3	50354749	50359610	-	4862
## 3963	ENSG00000126067	chr1	35599544	35641844	-	42301
## 3964	ENSG00000126070	chr1	35930718	36072500	+	141783
## 3965	ENSG00000126088	chr1	45012147	45015575	+	3429
## 3966	ENSG00000126091	chr1	43705824	43931165	+	225342
## 3967	ENSG00000126106	chr1	44635238	44674555	-	39318
## 3968	ENSG00000126107	chr1	45002540	45011329	-	8790
## 3969	ENSG00000126214	chr14	103561896	103714249	+	152354
## 3970	ENSG00000126215	chr14	103697609	103715504	-	17896
## 3971	ENSG00000126216	chr13	112485005	112588167	-	103163
## 3972	ENSG00000126226	chr13	113177539	113208715	-	31177
## 3973	ENSG00000126243	chr19	35935358	35945767	+	10410
## 3974	ENSG00000126246	chr19	35738801	35742453	-	3653
## 3975	ENSG00000126247	chr19	36139575	36150353	+	10779
## 3976	ENSG00000126249	chr19	34404384	34426168	+	21785
## 3977	ENSG00000126254	chr19	35629030	35637686	+	8657
## 3978	ENSG00000126261	chr19	34428352	34471251	+	42900
## 3979	ENSG00000126264	chr19	35902480	35904377	+	1898
## 3980	ENSG00000126267	chr19	35648223	35658861	+	10639
## 3981	ENSG00000126351	chr17	40058290	40093867	+	35578
## 3982	ENSG00000126368	chr17	40092787	40100725	-	7939
## 3983	ENSG00000126391	chr11	65386599	65413525	+	26927
## 3984	ENSG00000126432	chr11	64318088	64321811	+	3724
## 3985	ENSG00000126453	chr19	49665142	49673916	+	8775
## 3986	ENSG00000126456	chr19	49659569	49665875	-	6307
## 3987	ENSG00000126457	chr19	49675786	49689029	+	13244
## 3988	ENSG00000126458	chr19	49635292	49640201	-	4910
## 3989	ENSG00000126461	chr19	49642125	49658642	+	16518
## 3990	ENSG00000126464	chr19	49591643	49626439	+	34797
## 3991	ENSG00000126467	chr19	49739753	49763330	-	23578
## 3992	ENSG00000126522	chr7	66075798	66093558	+	17761
## 3993	ENSG00000126524	chr7	66987677	66995601	-	7925
## 3994	ENSG00000126561	chr17	42287547	42311943	+	24397
## 3995	ENSG00000126562	chr17	42780678	42796936	+	16259
## 3996	ENSG00000126581	chr17	42810134	42833350	-	23217
## 3997	ENSG00000126602	chr16	3651639	3717597	-	65959
## 3998	ENSG00000126653	chr17	30115521	30186475	+	70955
## 3999	ENSG00000126698	chr1	28199456	28233025	-	33570
## 4000	ENSG00000126705	chr1	27534035	27604431	-	70397
## 4001	ENSG00000126709	chr1	27666061	27672218	-	6158
## 4002	ENSG00000126746	chr12	6666477	6689572	-	23096

## 4003	ENSG00000126749	chr12	6970893	6979941	+	9049
## 4004	ENSG00000126756	chrX	47651798	47659161	-	7364
## 4005	ENSG00000126759	chrX	47624213	47630305	-	6093
## 4006	ENSG00000126767	chrX	47635521	47650604	-	15084
## 4007	ENSG00000126768	chrX	48893447	48898143	-	4697
## 4008	ENSG00000126773	chr14	60091911	60169133	+	77223
## 4009	ENSG00000126775	chr14	55366392	55411858	-	45467
## 4010	ENSG00000126777	chr14	55559072	55701526	+	142455
## 4011	ENSG00000126787	chr14	55148112	55191678	-	43567
## 4012	ENSG00000126790	chr14	59460363	59484430	-	24068
## 4013	ENSG00000126803	chr14	64535905	64546173	+	10269
## 4014	ENSG00000126804	chr14	64503712	64533690	+	29979
## 4015	ENSG00000126814	chr14	60971451	60981358	-	9908
## 4016	ENSG00000126822	chr14	64704102	64750247	+	46146
## 4017	ENSG00000126858	chr17	32142454	32253374	+	110921
## 4018	ENSG00000126860	chr17	31317560	31321884	-	4325
## 4019	ENSG00000126870	chr7	158856578	158956747	+	100170
## 4020	ENSG00000126878	chr9	131096476	131123152	+	26677
## 4021	ENSG00000126882	chr9	131258076	131276547	-	18472
## 4022	ENSG00000126883	chr9	131125561	131234670	+	109110
## 4023	ENSG00000126895	chrX	153902531	153907166	+	4636
## 4024	ENSG00000126903	chrX	154487306	154490690	-	3385
## 4025	ENSG00000126934	chr19	4090321	4124129	-	33809
## 4026	ENSG00000126945	chrX	101408295	101414133	+	5839
## 4027	ENSG00000126947	chrX	101550531	101554700	+	4170
## 4028	ENSG00000126953	chrX	101345661	101349196	-	3536
## 4029	ENSG00000126970	chrX	64915802	65034713	-	118912
## 4030	ENSG00000127022	chr5	179678628	179730925	+	52298
## 4031	ENSG00000127054	chr1	1311585	1324691	-	13107
## 4032	ENSG00000127080	chr9	92613184	92670265	-	57082
## 4033	ENSG00000127081	chr9	92845031	92878038	-	33008
## 4034	ENSG00000127084	chr9	92947451	93036236	+	88786
## 4035	ENSG00000127124	chr1	41506365	42035925	-	529561
## 4036	ENSG00000127125	chr1	42456117	42473385	+	17269
## 4037	ENSG00000127184	chr5	86617904	86620962	+	3059
## 4038	ENSG00000127191	chr9	136881912	136926607	+	44696
## 4039	ENSG00000127220	chr19	17292131	17310236	-	18106
## 4040	ENSG00000127311	chr12	66302545	66347645	+	45101
## 4041	ENSG00000127314	chr12	68610839	68671901	+	61063
## 4042	ENSG00000127328	chr12	69738681	69823204	+	84524
## 4043	ENSG00000127334	chr12	67648338	67665406	+	17069
## 4044	ENSG00000127337	chr12	69359703	69390796	+	31094
## 4045	ENSG00000127415	chr4	986997	1004506	+	17510
## 4046	ENSG00000127418	chr4	1009936	1026897	+	16962
## 4047	ENSG00000127419	chr4	932387	958656	+	26270
## 4048	ENSG00000127423	chr1	25831913	25859458	-	27546
## 4049	ENSG00000127445	chr19	9835257	9849682	+	14426
## 4050	ENSG00000127452	chr19	9810267	9827816	-	17550
## 4051	ENSG00000127463	chr1	19215664	19251552	-	35889
## 4052	ENSG00000127481	chr1	19074506	19210276	-	135771
## 4053	ENSG00000127483	chr1	20742661	20787323	-	44663
## 4054	ENSG00000127507	chr19	14732393	14778541	-	46149
## 4055	ENSG00000127511	chr19	16829400	16880353	+	50954
## 4056	ENSG00000127526	chr19	16549831	16572382	-	22552

## 4057	ENSG00000127527	chr19	16355239	16472085	-	116847
## 4058	ENSG00000127528	chr19	16324817	16327874	+	3058
## 4059	ENSG00000127540	chr19	1597172	1605490	-	8319
## 4060	ENSG00000127554	chr16	1984207	1987749	+	3543
## 4061	ENSG00000127561	chr16	1989660	1994275	+	4616
## 4062	ENSG00000127564	chr16	2968024	2980539	-	12516
## 4063	ENSG00000127580	chr16	684622	690444	-	5823
## 4064	ENSG00000127586	chr16	788046	800737	+	12692
## 4065	ENSG00000127589	chr8	30351873	30353518	+	1646
## 4066	ENSG00000127603	chr1	39081316	39487177	+	405862
## 4067	ENSG00000127616	chr19	10961001	11065395	+	104395
## 4068	ENSG00000127663	chr19	4969113	5153595	+	184483
## 4069	ENSG00000127666	chr19	4815932	4831704	-	15773
## 4070	ENSG00000127720	chr12	82358497	82479236	+	120740
## 4071	ENSG00000127774	chr17	3668815	3669668	+	854
## 4072	ENSG00000127804	chr17	2405562	2511891	-	106330
## 4073	ENSG00000127824	chr2	219249711	219278170	-	28460
## 4074	ENSG00000127831	chr2	218419092	218453295	+	34204
## 4075	ENSG00000127837	chr2	218264123	218270257	-	6135
## 4076	ENSG00000127838	chr2	218270392	218346793	+	76402
## 4077	ENSG00000127870	chr13	26132115	26222493	-	90379
## 4078	ENSG00000127884	chr10	133362480	133373689	-	11210
## 4079	ENSG00000127914	chr7	91940867	92110673	+	169807
## 4080	ENSG00000127922	chr7	96481626	96709891	-	228266
## 4081	ENSG00000127946	chr7	75533300	75738962	-	205663
## 4082	ENSG00000127947	chr7	77537275	77640071	+	102797
## 4083	ENSG00000127948	chr7	75899200	75986855	+	87656
## 4084	ENSG00000127952	chr7	75996338	76048004	-	51667
## 4085	ENSG00000127955	chr7	80133955	80219402	+	85448
## 4086	ENSG00000127957	chr7	75502930	75528148	-	25219
## 4087	ENSG00000127980	chr7	92487020	92528531	-	41512
## 4088	ENSG00000127989	chr7	91692008	91880720	-	188713
## 4089	ENSG00000127993	chr7	92528773	92538005	+	9233
## 4090	ENSG00000127995	chr7	94509219	94557019	+	47801
## 4091	ENSG00000128000	chr19	40028260	40056209	-	27950
## 4092	ENSG00000128011	chr19	39306568	39315336	-	8769
## 4093	ENSG00000128016	chr19	39406813	39409412	+	2600
## 4094	ENSG00000128039	chr4	55346109	55373096	+	26988
## 4095	ENSG00000128045	chr4	52862290	52866835	+	4546
## 4096	ENSG00000128050	chr4	56435741	56464579	+	28839
## 4097	ENSG00000128052	chr4	55078477	55125589	-	47113
## 4098	ENSG00000128059	chr4	56393362	56435615	-	42254
## 4099	ENSG00000128159	chr22	50217689	50244992	-	27304
## 4100	ENSG00000128185	chr22	20314276	20320080	-	5805
## 4101	ENSG00000128191	chr22	20080232	20111877	+	31646
## 4102	ENSG00000128203	chr22	26429273	26445015	+	15743
## 4103	ENSG00000128228	chr22	21642261	21644298	+	2038
## 4104	ENSG00000128245	chr22	31944461	31957603	+	13143
## 4105	ENSG00000128272	chr22	39519695	39522685	+	2991
## 4106	ENSG00000128294	chr22	26521983	26596717	-	74735
## 4107	ENSG00000128309	chr22	37019635	37029822	+	10188
## 4108	ENSG00000128311	chr22	37010859	37020183	-	9325
## 4109	ENSG00000128335	chr22	36226203	36239954	-	13752
## 4110	ENSG00000128340	chr22	37225261	37244448	-	19188

## 4111	ENSG00000128346	chr22	37943050	37953669	-	10620
## 4112	ENSG00000128394	chr22	39040604	39053910	+	13307
## 4113	ENSG00000128463	chr15	34224999	34230156	+	5158
## 4114	ENSG00000128487	chr17	20009344	20319026	+	309683
## 4115	ENSG00000128512	chr7	111726110	112206411	-	480302
## 4116	ENSG00000128513	chr7	124822386	124929983	-	107598
## 4117	ENSG00000128524	chr7	128862826	128865844	+	3019
## 4118	ENSG00000128534	chr7	118184032	118192824	+	8793
## 4119	ENSG00000128563	chr7	102363872	102426676	+	62805
## 4120	ENSG00000128567	chr7	131500262	131558217	-	57956
## 4121	ENSG00000128573	chr7	114086327	114693772	+	607446
## 4122	ENSG00000128581	chr7	101313367	101321823	-	8457
## 4123	ENSG00000128585	chr7	131110096	131496636	+	386541
## 4124	ENSG00000128590	chr7	108569568	108574850	+	5283
## 4125	ENSG00000128595	chr7	128739292	128771807	+	32516
## 4126	ENSG00000128604	chr7	128937612	128950035	+	12424
## 4127	ENSG00000128606	chr7	102912991	102944949	+	31959
## 4128	ENSG00000128607	chr7	130070510	130135720	+	65211
## 4129	ENSG00000128609	chr7	123536997	123558255	-	21259
## 4130	ENSG00000128617	chr7	128772491	128775790	-	3300
## 4131	ENSG00000128626	chr19	38930548	38933162	+	2615
## 4132	ENSG00000128641	chr2	191245185	191425389	+	180205
## 4133	ENSG00000128654	chr2	176269395	176338025	+	68631
## 4134	ENSG00000128692	chr2	170751805	170752788	+	984
## 4135	ENSG00000128694	chr2	189746660	189763227	-	16568
## 4136	ENSG00000128699	chr2	189770323	189784371	-	14049
## 4137	ENSG00000128708	chr2	171922448	171983682	+	61235
## 4138	ENSG00000128714	chr2	176092891	176095938	+	3048
## 4139	ENSG00000128731	chr15	28111040	28322152	-	211113
## 4140	ENSG00000128789	chr18	12658043	12725740	+	67698
## 4141	ENSG00000128791	chr18	9334767	9402420	+	67654
## 4142	ENSG00000128805	chr10	48446034	48656265	-	210232
## 4143	ENSG00000128815	chr10	48684876	48982956	+	298081
## 4144	ENSG00000128829	chr15	39934146	40035591	+	101446
## 4145	ENSG00000128872	chr15	51751561	51816368	+	64808
## 4146	ENSG00000128881	chr15	42738734	42920809	-	182076
## 4147	ENSG00000128886	chr15	43772600	43777543	-	4944
## 4148	ENSG00000128891	chr15	40528683	40565057	-	36375
## 4149	ENSG00000128908	chr15	40978880	41116354	-	137475
## 4150	ENSG00000128915	chr15	60419609	60479160	-	59552
## 4151	ENSG00000128923	chr15	58771192	58861900	+	90709
## 4152	ENSG00000128928	chr15	40405795	40435947	+	30153
## 4153	ENSG00000128944	chr15	40382721	40394246	+	11526
## 4154	ENSG00000128951	chr15	48331011	48343373	+	12363
## 4155	ENSG00000128965	chr15	40952962	40956519	+	3558
## 4156	ENSG00000128973	chr15	68206992	68257211	-	50220
## 4157	ENSG00000128989	chr15	52547045	52569883	-	22839
## 4158	ENSG00000129003	chr15	61852389	62060473	-	208085
## 4159	ENSG00000129007	chr15	68190705	68206110	-	15406
## 4160	ENSG00000129048	chr3	132597237	132618967	+	21731
## 4161	ENSG00000129055	chr3	134477706	134486716	-	9011
## 4162	ENSG00000129071	chr3	129430944	129440179	-	9236
## 4163	ENSG00000129083	chr11	14443440	14500027	-	56588
## 4164	ENSG00000129084	chr11	14504874	14643635	-	138762

## 4165	ENSG00000129103	chr7	56064002	56080670	+	16669
## 4166	ENSG00000129116	chr4	168497066	168928457	+	431392
## 4167	ENSG00000129128	chr4	176319964	176332245	+	12282
## 4168	ENSG00000129158	chr11	17788048	18013162	-	225115
## 4169	ENSG00000129173	chr11	19224063	19241620	-	17558
## 4170	ENSG00000129187	chr4	182890060	182917936	-	27877
## 4171	ENSG00000129195	chr17	6444415	6451469	+	7055
## 4172	ENSG00000129197	chr17	5419641	5432876	+	13236
## 4173	ENSG00000129219	chr17	4807096	4823434	+	16339
## 4174	ENSG00000129226	chr17	7579467	7582113	+	2647
## 4175	ENSG00000129235	chr17	6640758	6644541	+	3784
## 4176	ENSG00000129245	chr17	7591230	7614871	-	23642
## 4177	ENSG00000129250	chr17	4997948	5028401	+	30454
## 4178	ENSG00000129255	chr17	7583529	7592789	+	9261
## 4179	ENSG00000129292	chr8	132775358	132848807	+	73450
## 4180	ENSG00000129315	chr12	48688458	48716998	-	28541
## 4181	ENSG00000129317	chr12	43718993	43758817	-	39825
## 4182	ENSG00000129347	chr19	10553078	10566037	-	12960
## 4183	ENSG00000129351	chr19	10654261	10692417	+	38157
## 4184	ENSG00000129353	chr19	10602457	10644559	+	42103
## 4185	ENSG00000129355	chr19	10566462	10569059	-	2598
## 4186	ENSG00000129460	chr14	23469688	23509862	+	40175
## 4187	ENSG00000129465	chr14	24336021	24340045	-	4025
## 4188	ENSG00000129472	chr14	21459020	21476973	-	17954
## 4189	ENSG00000129473	chr14	23298790	23311759	+	12970
## 4190	ENSG00000129474	chr14	22971174	22982642	-	11469
## 4191	ENSG00000129480	chr14	31446036	31457510	-	11475
## 4192	ENSG00000129484	chr14	20343582	20357905	+	14324
## 4193	ENSG00000129493	chr14	31291791	31420582	-	128792
## 4194	ENSG00000129515	chr14	34561094	34630183	-	69090
## 4195	ENSG00000129518	chr14	34515929	34539711	-	23783
## 4196	ENSG00000129534	chr14	45203190	45253540	-	50351
## 4197	ENSG00000129535	chr14	24080107	24115014	-	34908
## 4198	ENSG00000129559	chr14	24216852	24232454	-	15603
## 4199	ENSG00000129562	chr14	22564905	22589269	-	24365
## 4200	ENSG00000129566	chr14	20365667	20413429	-	47763
## 4201	ENSG00000129595	chr5	112142441	112419316	-	276876
## 4202	ENSG00000129625	chr5	112876379	112922539	-	46161
## 4203	ENSG00000129636	chr16	47154387	47464149	-	309763
## 4204	ENSG00000129646	chr17	76274049	76307998	-	33950
## 4205	ENSG00000129657	chr17	77086716	77217101	+	130386
## 4206	ENSG00000129667	chr17	76470891	76501790	-	30900
## 4207	ENSG00000129675	chrX	136665547	136782088	-	116542
## 4208	ENSG00000129680	chrX	136213220	136256482	-	43263
## 4209	ENSG00000129691	chr8	38105242	38144076	+	38835
## 4210	ENSG00000129696	chr8	33473386	33513601	-	40216
## 4211	ENSG00000129810	chr3	20160593	20186292	-	25700
## 4212	ENSG00000129911	chr19	1852399	1863568	-	11170
## 4213	ENSG00000129925	chr16	370773	387113	-	16341
## 4214	ENSG00000129932	chr19	3490821	3500940	-	10120
## 4215	ENSG00000129933	chr19	19320681	19358755	+	38075
## 4216	ENSG00000129951	chr19	812488	821977	-	9490
## 4217	ENSG00000129968	chr19	1876810	1885547	-	8738
## 4218	ENSG00000129993	chr16	88874858	88977204	-	102347

##	4219	ENSG00000130005	chr19	1397084	1401570	-	4487
##	4220	ENSG00000130021	chrX	7048920	7148190	-	99271
##	4221	ENSG00000130024	chr6	169703905	169725566	-	21662
##	4222	ENSG00000130038	chr12	3606633	3764819	-	158187
##	4223	ENSG00000130052	chrX	68647666	68725842	+	78177
##	4224	ENSG00000130054	chrX	69505241	69532508	+	27268
##	4225	ENSG00000130066	chrX	23783173	23786226	+	3054
##	4226	ENSG00000130119	chrX	54530211	54561071	+	30861
##	4227	ENSG00000130150	chrX	14873441	14922327	+	48887
##	4228	ENSG00000130158	chr19	11199295	11262481	-	63187
##	4229	ENSG00000130159	chr19	11505916	11529174	-	23259
##	4230	ENSG00000130164	chr19	11089362	11133816	+	44455
##	4231	ENSG00000130165	chr19	11551147	11559236	-	8090
##	4232	ENSG00000130173	chr19	11237450	11241943	+	4494
##	4233	ENSG00000130175	chr19	11435288	11450968	+	15681
##	4234	ENSG00000130177	chr13	114234887	114272723	+	37837
##	4235	ENSG00000130193	chr8	142727203	142736927	+	9725
##	4236	ENSG00000130202	chr19	44846175	44889228	+	43054
##	4237	ENSG00000130204	chr19	44890569	44903689	+	13121
##	4238	ENSG00000130227	chr8	21919671	22006585	+	86915
##	4239	ENSG00000130244	chr19	38403135	38409088	+	5954
##	4240	ENSG00000130254	chr19	5586999	5624046	-	37048
##	4241	ENSG00000130255	chr19	5674947	5691876	+	16930
##	4242	ENSG00000130270	chr19	1782075	1812276	-	30202
##	4243	ENSG00000130283	chr19	18868545	18896096	-	27552
##	4244	ENSG00000130299	chr19	17334920	17342735	+	7816
##	4245	ENSG00000130303	chr19	17402939	17405648	-	2710
##	4246	ENSG00000130304	chr19	17468769	17506168	+	37400
##	4247	ENSG00000130305	chr7	73302517	73308867	-	6351
##	4248	ENSG00000130307	chr19	17249176	17282786	-	33611
##	4249	ENSG00000130309	chr19	17555594	17583162	+	27569
##	4250	ENSG00000130311	chr19	17309518	17323301	+	13784
##	4251	ENSG00000130312	chr19	17292609	17306843	+	14235
##	4252	ENSG00000130313	chr19	17511629	17521288	+	9660
##	4253	ENSG00000130332	chr19	2321517	2328620	-	7104
##	4254	ENSG00000130338	chr6	158232236	158511828	+	279593
##	4255	ENSG00000130340	chr6	157700387	157945077	+	244691
##	4256	ENSG00000130347	chr6	106571971	106629487	-	57517
##	4257	ENSG00000130348	chr6	106629578	106668417	+	38840
##	4258	ENSG00000130349	chr6	107028213	107051342	+	23130
##	4259	ENSG00000130363	chr6	158972871	159000187	-	27317
##	4260	ENSG00000130382	chr19	6210379	6279948	-	69570
##	4261	ENSG00000130396	chr6	167826922	167972023	+	145102
##	4262	ENSG00000130402	chr19	38647649	38731583	+	83935
##	4263	ENSG00000130413	chr11	8391868	8594289	-	202422
##	4264	ENSG00000130414	chr2	239892450	240025402	-	132953
##	4265	ENSG00000130429	chr7	99374249	99394801	+	20553
##	4266	ENSG00000130449	chr5	61332273	61546170	+	213898
##	4267	ENSG00000130475	chr19	17747718	17788568	+	40851
##	4268	ENSG00000130479	chr19	17719242	17734516	+	15275
##	4269	ENSG00000130487	chr22	50548033	50551023	+	2991
##	4270	ENSG00000130489	chr22	50523568	50526439	-	2872
##	4271	ENSG00000130511	chr19	18418864	18434562	+	15699
##	4272	ENSG00000130517	chr19	18340587	18369950	+	29364



## 4273	ENSG00000130518	chr19	18257097	18274509	-	17413
## 4274	ENSG00000130520	chr19	18306230	18323274	-	17045
## 4275	ENSG00000130522	chr19	18279760	18281622	-	1863
## 4276	ENSG00000130529	chr19	49157741	49211836	+	54096
## 4277	ENSG00000130544	chr19	7069444	7087968	+	18525
## 4278	ENSG00000130559	chr9	135808487	135907228	-	98742
## 4279	ENSG00000130560	chr9	135932969	135961380	-	28412
## 4280	ENSG00000130584	chr20	63743666	63831244	-	87579
## 4281	ENSG00000130589	chr20	63558086	63574239	-	16154
## 4282	ENSG00000130590	chr20	63974113	63980008	-	5896
## 4283	ENSG00000130592	chr11	1852970	1892267	+	39298
## 4284	ENSG00000130638	chr22	45671798	45845307	+	173510
## 4285	ENSG00000130640	chr10	133278630	133312337	-	33708
## 4286	ENSG00000130649	chr10	133520406	133561220	+	40815
## 4287	ENSG00000130653	chr9	137459953	137550534	-	90582
## 4288	ENSG00000130669	chr19	39125770	39182816	+	57047
## 4289	ENSG00000130684	chr20	25674215	25696841	-	22627
## 4290	ENSG00000130695	chr1	26234153	26279038	+	44886
## 4291	ENSG00000130699	chr20	61953469	62065810	-	112342
## 4292	ENSG00000130702	chr20	62307955	62367312	-	59358
## 4293	ENSG00000130703	chr20	62231922	62296213	+	64292
## 4294	ENSG00000130706	chr20	62302093	62308862	+	6770
## 4295	ENSG00000130713	chr9	130693721	130704894	+	11174
## 4296	ENSG00000130714	chr9	131502902	131523806	+	20905
## 4297	ENSG00000130717	chr9	131523801	131531268	-	7468
## 4298	ENSG00000130723	chr9	131394093	131500197	+	106105
## 4299	ENSG00000130724	chr19	58551566	58555124	-	3559
## 4300	ENSG00000130725	chr19	58555712	58558960	-	3249
## 4301	ENSG00000130726	chr19	58544091	58550722	+	6632
## 4302	ENSG00000130731	chr16	634427	636366	-	1940
## 4303	ENSG00000130733	chr19	10922185	10928681	-	6497
## 4304	ENSG00000130734	chr19	10543895	10553418	+	9524
## 4305	ENSG00000130741	chrX	24054716	24077971	+	23256
## 4306	ENSG00000130748	chr19	47045907	47048630	-	2724
## 4307	ENSG00000130749	chr19	47064187	47113752	-	49566
## 4308	ENSG00000130751	chr19	47019820	47045775	+	25956
## 4309	ENSG00000130755	chr19	39328353	39342372	-	14020
## 4310	ENSG00000130758	chr19	40191744	40215575	+	23832
## 4311	ENSG00000130764	chr1	3778558	3796504	-	17947
## 4312	ENSG00000130766	chr1	28259527	28282491	+	22965
## 4313	ENSG00000130768	chr1	27934993	27959157	+	24165
## 4314	ENSG00000130770	chr1	28236109	28246906	+	10798
## 4315	ENSG00000130772	chr1	28329002	28335967	+	6966
## 4316	ENSG00000130775	chr1	27872543	27886685	+	14143
## 4317	ENSG00000130779	chr12	122271432	122422632	-	151201
## 4318	ENSG00000130783	chr12	122774327	122827528	+	53202
## 4319	ENSG00000130787	chr12	122834453	122862960	+	28508
## 4320	ENSG00000130803	chr19	9140380	9163424	+	23045
## 4321	ENSG00000130810	chr19	10106289	10111634	+	5346
## 4322	ENSG00000130811	chr19	10115017	10119918	-	4902
## 4323	ENSG00000130812	chr19	10092338	10102796	-	10459
## 4324	ENSG00000130813	chr19	10086122	10093252	+	7131
## 4325	ENSG00000130816	chr19	10133345	10231286	-	97942
## 4326	ENSG00000130826	chrX	154762742	154777689	+	14948

## 4327	ENSG00000130827	chrX	154458281	154477779	+	19499
## 4328	ENSG00000130829	chrX	153642492	153651326	+	8835
## 4329	ENSG00000130830	chrX	154778684	154821007	-	42324
## 4330	ENSG00000130844	chr19	53520981	53580269	+	59289
## 4331	ENSG00000130856	chr18	76822607	76970727	+	148121
## 4332	ENSG00000130881	chr19	33177603	33208867	+	31265
## 4333	ENSG00000130921	chr12	123232916	123257959	+	25044
## 4334	ENSG00000130935	chr17	67717833	67744531	+	26699
## 4335	ENSG00000130939	chr1	10032832	10181239	+	148408
## 4336	ENSG00000130943	chr22	46255663	46263355	-	7693
## 4337	ENSG00000130958	chr9	96320706	96383710	-	63005
## 4338	ENSG00000130985	chrX	47190861	47215128	+	24268
## 4339	ENSG00000130997	chr4	2071918	2242121	-	170204
## 4340	ENSG00000131013	chr6	149504733	149546038	-	41306
## 4341	ENSG00000131018	chr6	152121684	152637801	-	516118
## 4342	ENSG00000131023	chr6	149658153	149718256	-	60104
## 4343	ENSG00000131037	chr19	55072020	55087923	+	15904
## 4344	ENSG00000131043	chr20	36236459	36270918	+	34460
## 4345	ENSG00000131051	chr20	35703609	35742312	-	38704
## 4346	ENSG00000131061	chr20	33731657	33792269	+	60613
## 4347	ENSG00000131067	chr20	34844720	34872860	-	28141
## 4348	ENSG00000131069	chr20	34872146	34927962	+	55817
## 4349	ENSG00000131089	chrX	63634967	63809274	-	174308
## 4350	ENSG00000131100	chr22	17592136	17628818	-	36683
## 4351	ENSG00000131115	chr19	44207547	44237268	+	29722
## 4352	ENSG00000131116	chr19	43607219	43619874	-	12656
## 4353	ENSG00000131127	chr4	337814	384864	+	47051
## 4354	ENSG00000131143	chr16	85798633	85807044	+	8412
## 4355	ENSG00000131148	chr16	85771758	85799608	-	27851
## 4356	ENSG00000131149	chr16	85169525	85676204	+	506680
## 4357	ENSG00000131152	chr16	87302876	87334273	-	31398
## 4358	ENSG00000131153	chr16	85676198	85690073	-	13876
## 4359	ENSG00000131165	chr16	89644431	89657845	-	13415
## 4360	ENSG00000131171	chrX	81201943	81298547	+	96605
## 4361	ENSG00000131174	chrX	77899438	77907373	+	7936
## 4362	ENSG00000131187	chr5	177402140	177409576	-	7437
## 4363	ENSG00000131188	chr5	177446445	177456286	+	9842
## 4364	ENSG00000131196	chr18	79395856	79529325	+	133470
## 4365	ENSG00000131236	chr1	40040233	40072649	+	32417
## 4366	ENSG00000131238	chr1	40072705	40097703	-	24999
## 4367	ENSG00000131242	chr17	31391624	31538217	+	146594
## 4368	ENSG00000131263	chrX	74585217	74614617	-	29401
## 4369	ENSG00000131269	chrX	75053172	75156732	-	103561
## 4370	ENSG00000131323	chr14	102777476	102911500	+	134025
## 4371	ENSG00000131351	chr19	17049729	17075625	-	25897
## 4372	ENSG00000131368	chr3	15042460	15065335	-	22876
## 4373	ENSG00000131370	chr3	15254853	15341368	-	86516
## 4374	ENSG00000131373	chr3	15560704	15601852	-	41149
## 4375	ENSG00000131374	chr3	17157162	18444817	-	1287656
## 4376	ENSG00000131375	chr3	15206152	15252918	+	46767
## 4377	ENSG00000131378	chr3	16313574	16514026	-	200453
## 4378	ENSG00000131379	chr3	14675099	14773034	+	97936
## 4379	ENSG00000131381	chr3	15070073	15099163	-	29091
## 4380	ENSG00000131389	chr3	14402576	14489349	+	86774

## 4381	ENSG00000131408	chr19	50329653	50382982	+	53330
## 4382	ENSG00000131437	chr5	132692628	132737638	-	45011
## 4383	ENSG00000131446	chr5	180784782	180815652	-	30871
## 4384	ENSG00000131462	chr17	42609676	42615234	+	5559
## 4385	ENSG00000131467	chr17	42824385	42843758	+	19374
## 4386	ENSG00000131469	chr17	42998273	43002959	+	4687
## 4387	ENSG00000131470	chr17	42572315	42577831	-	5517
## 4388	ENSG00000131473	chr17	41866908	41930542	-	63635
## 4389	ENSG00000131475	chr17	42773436	42779599	+	6164
## 4390	ENSG00000131480	chr17	42844600	42850707	+	6108
## 4391	ENSG00000131495	chr5	140638740	140647785	-	9046
## 4392	ENSG00000131503	chr5	140401814	140539856	+	138043
## 4393	ENSG00000131504	chr5	141515016	141619055	-	104040
## 4394	ENSG00000131507	chr5	142108505	142154443	+	45939
## 4395	ENSG00000131508	chr5	139526431	139628433	+	102003
## 4396	ENSG00000131558	chr7	133253073	134066589	+	813517
## 4397	ENSG00000131584	chr1	1292376	1309609	-	17234
## 4398	ENSG00000131591	chr1	1081818	1116361	-	34544
## 4399	ENSG00000131626	chr11	70270700	70384403	+	113704
## 4400	ENSG00000131650	chr16	2963944	2968383	+	4440
## 4401	ENSG00000131652	chr16	3024027	3027755	+	3729
## 4402	ENSG00000131653	chr16	2155698	2178129	+	22432
## 4403	ENSG00000131669	chr9	93121489	93134288	-	12800
## 4404	ENSG00000131697	chr1	5862811	5992473	-	129663
## 4405	ENSG00000131724	chrX	118727572	118794539	+	66968
## 4406	ENSG00000131725	chrX	118346073	118449961	+	103889
## 4407	ENSG00000131732	chr5	81301590	81313297	+	11708
## 4408	ENSG00000131747	chr17	40388516	40417950	-	29435
## 4409	ENSG00000131748	chr17	39637065	39663484	+	26420
## 4410	ENSG00000131759	chr17	40309192	40357643	+	48452
## 4411	ENSG00000131773	chr8	135457457	135656722	+	199266
## 4412	ENSG00000131778	chr1	147242641	147295766	+	53126
## 4413	ENSG00000131779	chr1	145911350	145918837	-	7488
## 4414	ENSG00000131781	chr1	147175351	147243050	-	67700
## 4415	ENSG00000131788	chr1	145848522	145859836	-	11315
## 4416	ENSG00000131791	chr1	147155106	147172550	-	17445
## 4417	ENSG00000131797	chr16	31700590	31711986	+	11397
## 4418	ENSG00000131828	chrX	19343893	19361705	+	17813
## 4419	ENSG00000131844	chr5	71587288	71658704	+	71417
## 4420	ENSG00000131845	chr19	57351307	57359898	+	8592
## 4421	ENSG00000131848	chr19	56219670	56368383	-	148714
## 4422	ENSG00000131849	chr19	58432814	58440222	-	7409
## 4423	ENSG00000131871	chr15	101270817	101277500	-	6684
## 4424	ENSG00000131873	chr15	101175723	101251932	-	76210
## 4425	ENSG00000131876	chr15	101281510	101295282	-	13773
## 4426	ENSG00000131899	chr17	18225587	18244875	+	19289
## 4427	ENSG00000131931	chr8	42836674	42843325	-	6652
## 4428	ENSG00000131943	chr19	29698886	29715789	-	16904
## 4429	ENSG00000131944	chr19	32972209	32978222	+	6014
## 4430	ENSG00000131966	chr14	58200080	58235636	+	35557
## 4431	ENSG00000131969	chr14	50872160	50904970	+	32811
## 4432	ENSG00000131979	chr14	54842008	54902852	-	60845
## 4433	ENSG00000132002	chr19	14514770	14529770	-	15001
## 4434	ENSG00000132003	chr19	13795460	13832230	+	36771

## 4435	ENSG00000132004	chr19	12688053	12696643	-	8591
## 4436	ENSG00000132005	chr19	13961538	14007039	-	45502
## 4437	ENSG00000132016	chr19	13882348	13906452	-	24105
## 4438	ENSG00000132017	chr19	13952492	13961449	+	8958
## 4439	ENSG00000132024	chr19	13906201	13930879	+	24679
## 4440	ENSG00000132109	chr11	4384897	4393696	-	8800
## 4441	ENSG00000132128	chr1	46261196	46303608	-	42413
## 4442	ENSG00000132141	chr17	34927859	34981078	-	53220
## 4443	ENSG00000132153	chr3	47802909	47850195	+	47287
## 4444	ENSG00000132155	chr3	12583601	12664226	-	80626
## 4445	ENSG00000132182	chr3	13316235	13420309	-	104075
## 4446	ENSG00000132196	chr1	162790702	162812817	+	22116
## 4447	ENSG00000132199	chr18	670324	712676	-	42353
## 4448	ENSG00000132205	chr18	2847030	2915993	+	68964
## 4449	ENSG00000132254	chr11	6474683	6481479	-	6797
## 4450	ENSG00000132256	chr11	5663557	5938619	-	275063
## 4451	ENSG00000132275	chr11	6595075	6603620	-	8546
## 4452	ENSG00000132286	chr11	6481447	6484679	+	3233
## 4453	ENSG00000132294	chr8	131904088	132013642	+	109555
## 4454	ENSG00000132300	chr2	86106182	86142157	+	35976
## 4455	ENSG00000132305	chr2	86143932	86195770	-	51839
## 4456	ENSG00000132313	chr2	86199355	86213794	+	14440
## 4457	ENSG00000132323	chr2	238170401	238203729	-	33329
## 4458	ENSG00000132326	chr2	238244038	238290102	-	46065
## 4459	ENSG00000132330	chr2	238060889	238099413	+	38525
## 4460	ENSG00000132334	chr10	127907061	128085855	+	178795
## 4461	ENSG00000132341	chr12	130871879	130877678	+	5800
## 4462	ENSG00000132356	chr5	40759379	40798374	-	38996
## 4463	ENSG00000132359	chr17	2755705	3037739	+	282035
## 4464	ENSG00000132361	chr17	2689386	2712663	-	23278
## 4465	ENSG00000132376	chr17	1494571	1516888	-	22318
## 4466	ENSG00000132382	chr17	4538897	4555631	-	16735
## 4467	ENSG00000132383	chr17	1829702	1900082	+	70381
## 4468	ENSG00000132388	chr17	4269259	4366628	-	97370
## 4469	ENSG00000132394	chr3	128153454	128408646	+	255193
## 4470	ENSG00000132405	chr4	6909242	7033118	+	123877
## 4471	ENSG00000132406	chr4	4235542	4248212	-	12671
## 4472	ENSG00000132423	chr6	99369400	99394204	-	24805
## 4473	ENSG00000132424	chr6	99398051	99425331	-	27281
## 4474	ENSG00000132432	chr7	54752250	54759974	-	7725
## 4475	ENSG00000132434	chr7	55365448	55433742	+	68295
## 4476	ENSG00000132436	chr7	50444128	50542535	-	98408
## 4477	ENSG00000132463	chr4	70815782	70839945	-	24164
## 4478	ENSG00000132466	chr4	73073376	73258798	-	185423
## 4479	ENSG00000132467	chr4	70688479	70690551	+	2073
## 4480	ENSG00000132470	chr17	75721328	75757818	+	36491
## 4481	ENSG00000132471	chr17	75845699	75856507	-	10809
## 4482	ENSG00000132475	chr17	75776434	75785893	-	9460
## 4483	ENSG00000132478	chr17	75784771	75825799	+	41029
## 4484	ENSG00000132481	chr17	75874161	75878575	-	4415
## 4485	ENSG00000132485	chr1	71063291	71081297	-	18007
## 4486	ENSG00000132507	chr17	7306999	7312463	+	5465
## 4487	ENSG00000132510	chr17	7839904	7854796	+	14893
## 4488	ENSG00000132522	chr17	7311324	7315564	-	4241

## 4489	ENSG00000132530	chr17	6755447	6775647	+	20201
## 4490	ENSG00000132535	chr17	7189890	7219702	-	29813
## 4491	ENSG00000132541	chr8	98102344	98117241	-	14898
## 4492	ENSG00000132549	chr8	99013266	99877580	+	864315
## 4493	ENSG00000132561	chr8	97868840	98036716	+	167877
## 4494	ENSG00000132570	chr5	134904906	135007959	+	103054
## 4495	ENSG00000132581	chr17	28648356	28662189	-	13834
## 4496	ENSG00000132589	chr17	28879335	28897679	-	18345
## 4497	ENSG00000132591	chr17	28854938	28861067	+	6130
## 4498	ENSG00000132600	chr16	68310974	68358563	+	47590
## 4499	ENSG00000132603	chr16	69339430	69343111	+	3682
## 4500	ENSG00000132604	chr16	69355561	69408571	-	53011
## 4501	ENSG00000132612	chr16	69311356	69326939	+	15584
## 4502	ENSG00000132613	chr16	70661204	70686066	-	24863
## 4503	ENSG00000132635	chr20	2835314	2841190	-	5877
## 4504	ENSG00000132640	chr20	11890723	11926609	+	35887
## 4505	ENSG00000132646	chr20	5114953	5126626	-	11674
## 4506	ENSG00000132661	chr20	23350736	23354777	+	4042
## 4507	ENSG00000132664	chr20	18467127	18484643	+	17517
## 4508	ENSG00000132670	chr20	2864184	3039076	+	174893
## 4509	ENSG00000132676	chr1	155687960	155739010	+	51051
## 4510	ENSG00000132680	chr1	155913043	155934400	-	21358
## 4511	ENSG00000132716	chr1	160215715	160262531	-	46817
## 4512	ENSG00000132718	chr1	155859509	155885199	+	25691
## 4513	ENSG00000132740	chr11	68903842	68940602	+	36761
## 4514	ENSG00000132744	chr11	67642555	67650659	-	8105
## 4515	ENSG00000132749	chr11	68707440	68751564	-	44125
## 4516	ENSG00000132763	chr1	45500053	45513382	+	13330
## 4517	ENSG00000132768	chr1	43970000	43973369	+	3370
## 4518	ENSG00000132773	chr1	45339670	45343975	+	4306
## 4519	ENSG00000132780	chr1	45583846	45618904	+	35059
## 4520	ENSG00000132781	chr1	45329163	45340470	-	11308
## 4521	ENSG00000132792	chr20	37693955	37872129	+	178175
## 4522	ENSG00000132801	chr20	45857617	45879122	+	21506
## 4523	ENSG00000132819	chr20	57391407	57409333	+	17927
## 4524	ENSG00000132823	chr20	44196496	44210791	-	14296
## 4525	ENSG00000132824	chr20	44496221	44522109	-	25889
## 4526	ENSG00000132825	chr20	59936668	59940297	-	3630
## 4527	ENSG00000132842	chr5	78000525	78294755	-	294231
## 4528	ENSG00000132846	chr5	77072072	77087323	-	15252
## 4529	ENSG00000132854	chr1	62236979	62319414	-	82436
## 4530	ENSG00000132879	chr1	11654375	11663327	+	8953
## 4531	ENSG00000132881	chr1	16231700	16237162	-	5463
## 4532	ENSG00000132906	chr1	15490832	15526534	-	35703
## 4533	ENSG00000132912	chr5	150708440	150759109	-	50670
## 4534	ENSG00000132950	chr13	19823482	19863636	-	40155
## 4535	ENSG00000132952	chr13	30617693	30660770	+	43078
## 4536	ENSG00000132953	chr13	20777329	20903048	-	125720
## 4537	ENSG00000132963	chr13	28659104	28678925	+	19822
## 4538	ENSG00000132964	chr13	26254104	26405238	+	151135
## 4539	ENSG00000132965	chr13	30713478	30764426	+	50949
## 4540	ENSG00000132967	chr3	22381819	22382929	+	1111
## 4541	ENSG00000132970	chr13	26557703	26688948	+	131246
## 4542	ENSG00000133026	chr17	8474205	8630761	-	156557

## 4543	ENSG00000133027	chr17	17505563	17591708	-	86146
## 4544	ENSG00000133028	chr17	10672474	10698375	-	25902
## 4545	ENSG00000133030	chr17	17042545	17217679	+	175135
## 4546	ENSG00000133048	chr1	203178931	203186749	-	7819
## 4547	ENSG00000133056	chr1	204422628	204494724	-	72097
## 4548	ENSG00000133059	chr1	205142505	205211566	-	69062
## 4549	ENSG00000133065	chr1	205789093	205813748	-	24656
## 4550	ENSG00000133069	chr1	205228176	205273343	+	45168
## 4551	ENSG00000133101	chr13	36431520	36442882	+	11363
## 4552	ENSG00000133103	chr13	39655627	39791665	+	136039
## 4553	ENSG00000133104	chr13	36301638	36370180	-	68543
## 4554	ENSG00000133111	chr13	36819224	36829104	+	9881
## 4555	ENSG00000133112	chr13	45333471	45341370	-	7900
## 4556	ENSG00000133114	chr13	44989529	45037669	+	48141
## 4557	ENSG00000133119	chr13	33818049	33966558	+	148510
## 4558	ENSG00000133121	chr13	33103135	33350630	-	247496
## 4559	ENSG00000133142	chrX	103576231	103587736	+	11506
## 4560	ENSG00000133193	chr17	73207353	73236753	-	29401
## 4561	ENSG00000133195	chr17	72645949	73092712	-	446764
## 4562	ENSG00000133226	chr1	24631716	24673267	+	41552
## 4563	ENSG00000133243	chr19	1985438	2034881	-	49444
## 4564	ENSG00000133246	chr19	8490056	8503112	-	13057
## 4565	ENSG00000133247	chr19	55339853	55348120	+	8268
## 4566	ENSG00000133250	chr19	8509678	8514164	-	4487
## 4567	ENSG00000133256	chr4	625584	670782	+	45199
## 4568	ENSG00000133265	chr19	55262231	55280381	-	18151
## 4569	ENSG00000133275	chr19	1941149	1981338	+	40190
## 4570	ENSG00000133302	chr5	94618347	94739436	+	121090
## 4571	ENSG00000133313	chr18	74495816	74523454	+	27639
## 4572	ENSG00000133315	chr11	63998558	64166106	-	167549
## 4573	ENSG00000133316	chr11	62832342	62841809	-	9468
## 4574	ENSG00000133317	chr11	63506084	63516774	+	10691
## 4575	ENSG00000133318	chr11	63681446	63759891	+	78446
## 4576	ENSG00000133398	chr5	6371881	6378594	-	6714
## 4577	ENSG00000133422	chr22	30925130	30968298	-	43169
## 4578	ENSG00000133454	chr22	25742144	26031041	+	288898
## 4579	ENSG00000133460	chr22	23856703	23886309	+	29607
## 4580	ENSG00000133466	chr22	37180167	37199385	-	19219
## 4581	ENSG00000133561	chr7	150625375	150632648	-	7274
## 4582	ENSG00000133597	chr7	140673153	140696261	+	23109
## 4583	ENSG00000133606	chr7	140453040	140479569	-	26530
## 4584	ENSG00000133612	chr7	151085831	151144436	+	58606
## 4585	ENSG00000133619	chr7	149714781	149734575	+	19795
## 4586	ENSG00000133624	chr7	149547154	149624752	-	77599
## 4587	ENSG00000133627	chr7	152759749	152855378	+	95630
## 4588	ENSG00000133639	chr12	92140278	92145897	-	5620
## 4589	ENSG00000133641	chr12	88033846	88050160	+	16315
## 4590	ENSG00000133657	chr3	194402672	194498364	-	95693
## 4591	ENSG00000133678	chr10	80078646	80092557	+	13912
## 4592	ENSG00000133703	chr12	25204789	25250936	-	46148
## 4593	ENSG00000133704	chr12	30628988	30695986	-	66999
## 4594	ENSG00000133706	chr5	146113038	146182660	-	69623
## 4595	ENSG00000133731	chr8	81657961	81686693	-	28733
## 4596	ENSG00000133739	chr8	85107147	85146076	+	38930

## 4597	ENSG00000133740	chr8	85177225	85217158	+	39934
## 4598	ENSG00000133773	chr12	82223681	82358805	-	135125
## 4599	ENSG00000133789	chr11	9664077	9752991	+	88915
## 4600	ENSG00000133794	chr11	13276652	13387266	+	110615
## 4601	ENSG00000133805	chr11	10308313	10507579	+	199267
## 4602	ENSG00000133812	chr11	9778667	10294207	-	515541
## 4603	ENSG00000133816	chr11	12094008	12263789	+	169782
## 4604	ENSG00000133835	chr5	119452443	119637199	+	184757
## 4605	ENSG00000133858	chr12	71609472	71667725	-	58254
## 4606	ENSG00000133872	chr8	30063012	30083208	-	20197
## 4607	ENSG00000133874	chr8	33547755	33567125	-	19371
## 4608	ENSG00000133884	chr11	65333754	65353249	+	19496
## 4609	ENSG00000133895	chr11	64803510	64811294	-	7785
## 4610	ENSG00000133935	chr14	75649791	75661189	-	11399
## 4611	ENSG00000133943	chr14	91060333	91225632	+	165300
## 4612	ENSG00000133961	chr14	73275107	73463642	-	188536
## 4613	ENSG00000133983	chr14	70325081	70359731	-	34651
## 4614	ENSG00000133985	chr14	70641787	70675360	+	33574
## 4615	ENSG00000133997	chr14	70581257	70600690	-	19434
## 4616	ENSG00000134001	chr14	67359997	67386516	+	26520
## 4617	ENSG00000134014	chr8	28089673	28191156	+	101484
## 4618	ENSG00000134030	chr18	48539046	48863217	+	324172
## 4619	ENSG00000134046	chr18	54151601	54224788	-	73188
## 4620	ENSG00000134049	chr18	47152998	47176374	-	23377
## 4621	ENSG00000134056	chr5	69217760	69230129	+	12370
## 4622	ENSG00000134057	chr5	69167010	69178245	+	11236
## 4623	ENSG00000134061	chr5	67179613	67196799	-	17187
## 4624	ENSG00000134070	chr3	10164865	10243743	+	78879
## 4625	ENSG00000134072	chr3	9757342	9769992	-	12651
## 4626	ENSG00000134077	chr3	9362842	9386791	+	23950
## 4627	ENSG00000134086	chr3	10141008	10152220	+	11213
## 4628	ENSG00000134107	chr3	4979116	4985323	+	6208
## 4629	ENSG00000134108	chr3	5122220	5180912	+	58693
## 4630	ENSG00000134109	chr3	5187646	5219957	+	32312
## 4631	ENSG00000134138	chr15	36889204	37101299	-	212096
## 4632	ENSG00000134146	chr15	35217345	35546193	-	328849
## 4633	ENSG00000134152	chr15	34140674	34210096	-	69423
## 4634	ENSG00000134153	chr15	34084017	34101948	-	17932
## 4635	ENSG00000134183	chr1	109603267	109619929	-	16663
## 4636	ENSG00000134184	chr1	109687814	109709039	+	21226
## 4637	ENSG00000134186	chr1	108692323	108701803	+	9481
## 4638	ENSG00000134202	chr1	109733932	109741038	-	7107
## 4639	ENSG00000134215	chr1	107571160	107965144	-	393985
## 4640	ENSG00000134222	chr1	109279556	109283186	-	3631
## 4641	ENSG00000134242	chr1	113813811	113871759	-	57949
## 4642	ENSG00000134243	chr1	109309568	109397951	-	88384
## 4643	ENSG00000134245	chr1	112466541	112530165	+	63625
## 4644	ENSG00000134248	chr1	110401249	110407942	-	6694
## 4645	ENSG00000134250	chr1	119911553	120069626	-	158074
## 4646	ENSG00000134253	chr1	117111060	117122587	-	11528
## 4647	ENSG00000134255	chr1	111139627	111185102	+	45476
## 4648	ENSG00000134262	chr1	113894748	113905201	-	10454
## 4649	ENSG00000134265	chr18	10525905	10552761	+	26857
## 4650	ENSG00000134278	chr18	12446512	12658134	-	211623

## 4651	ENSG00000134283	chr12	42238447	42459715	+	221269
## 4652	ENSG00000134285	chr12	48921518	48926474	-	4957
## 4653	ENSG00000134287	chr12	48935723	48957551	-	21829
## 4654	ENSG00000134291	chr12	47963569	47968878	+	5310
## 4655	ENSG00000134294	chr12	46358189	46372867	-	14679
## 4656	ENSG00000134297	chr12	45173064	45216041	-	42978
## 4657	ENSG00000134308	chr2	9583972	9631014	-	47043
## 4658	ENSG00000134313	chr2	8725278	8837630	-	112353
## 4659	ENSG00000134318	chr2	11179761	11348330	-	168570
## 4660	ENSG00000134324	chr2	11677595	11827409	+	149815
## 4661	ENSG00000134326	chr2	6840570	6866635	-	26066
## 4662	ENSG00000134330	chr2	9473658	9496543	+	22886
## 4663	ENSG00000134333	chr11	18394388	18408425	+	14038
## 4664	ENSG00000134352	chr5	55935095	55994993	-	59899
## 4665	ENSG00000134369	chr1	201622885	201826969	+	204085
## 4666	ENSG00000134371	chr1	193122017	193253901	+	131885
## 4667	ENSG00000134375	chr1	201955491	201970661	+	15171
## 4668	ENSG00000134419	chr16	18781295	18790383	-	9089
## 4669	ENSG00000134440	chr18	57600656	57622213	-	21558
## 4670	ENSG00000134444	chr18	62187258	62307829	+	120572
## 4671	ENSG00000134452	chr10	5890203	5937594	+	47392
## 4672	ENSG00000134453	chr10	6088987	6117457	+	28471
## 4673	ENSG00000134461	chr10	5861617	5889906	-	28290
## 4674	ENSG00000134480	chr5	87391494	87413019	-	21526
## 4675	ENSG00000134490	chr18	23197144	23437961	-	240818
## 4676	ENSG00000134504	chr18	26454910	26657401	-	202492
## 4677	ENSG00000134508	chr18	23134564	23260467	+	125904
## 4678	ENSG00000134516	chr5	169637247	170083382	+	446136
## 4679	ENSG00000134574	chr11	47214465	47239240	+	24776
## 4680	ENSG00000134575	chr11	47239302	47248906	-	9605
## 4681	ENSG00000134590	chrX	135032366	135033546	+	1181
## 4682	ENSG00000134594	chrX	130171649	130184870	+	13222
## 4683	ENSG00000134597	chrX	130401969	130413343	+	11375
## 4684	ENSG00000134602	chrX	132023265	132075943	+	52679
## 4685	ENSG00000134627	chr11	94543840	94621421	+	77582
## 4686	ENSG00000134644	chr1	30931506	31065991	-	134486
## 4687	ENSG00000134684	chr1	32775237	32818153	-	42917
## 4688	ENSG00000134686	chr1	33323623	33431052	-	107430
## 4689	ENSG00000134690	chr1	37692418	37709719	+	17302
## 4690	ENSG00000134697	chr1	37566816	37595935	-	29120
## 4691	ENSG00000134698	chr1	35808172	35857890	+	49719
## 4692	ENSG00000134717	chr1	52056125	52090716	+	34592
## 4693	ENSG00000134744	chr1	52408282	52553487	-	145206
## 4694	ENSG00000134748	chr1	52404564	52420839	+	16276
## 4695	ENSG00000134755	chr18	31058840	31102415	-	43576
## 4696	ENSG00000134758	chr18	32091855	32131561	+	39707
## 4697	ENSG00000134759	chr18	36129444	36180556	+	51113
## 4698	ENSG00000134769	chr18	34493290	34891844	+	398555
## 4699	ENSG00000134775	chr18	36297714	36780055	+	482342
## 4700	ENSG00000134779	chr18	36777647	36829216	-	51570
## 4701	ENSG00000134780	chr11	61680433	61747001	+	66569
## 4702	ENSG00000134802	chr11	57406954	57427580	-	20627
## 4703	ENSG00000134809	chr11	57528463	57530803	-	2341
## 4704	ENSG00000134815	chr19	47349281	47382704	+	33424



## 4705	ENSG00000134824	chr11	61792980	61867354	+	74375
## 4706	ENSG00000134825	chr11	61768501	61792802	-	24302
## 4707	ENSG00000134830	chr19	47332147	47347327	+	15181
## 4708	ENSG00000134851	chr4	55395957	55453397	+	57441
## 4709	ENSG00000134852	chr4	55427903	55547138	-	119236
## 4710	ENSG00000134864	chr13	100530164	100589528	-	59365
## 4711	ENSG00000134873	chr13	95433604	95579759	+	146156
## 4712	ENSG00000134874	chr13	95578202	95644703	-	66502
## 4713	ENSG00000134882	chr13	99200774	99386434	+	185661
## 4714	ENSG00000134884	chr13	106541673	106568164	-	26492
## 4715	ENSG00000134897	chr13	102799049	102841535	+	42487
## 4716	ENSG00000134899	chr13	102844844	102876001	+	31158
## 4717	ENSG00000134900	chr13	102597003	102679958	+	82956
## 4718	ENSG00000134901	chr13	102784281	102799007	-	14727
## 4719	ENSG00000134905	chr13	110641412	110713603	-	72192
## 4720	ENSG00000134909	chr11	128965060	129279324	-	314265
## 4721	ENSG00000134910	chr11	125591712	125625215	+	33504
## 4722	ENSG00000134970	chr5	115613508	115632992	-	19485
## 4723	ENSG00000134982	chr5	112707498	112846239	+	138742
## 4724	ENSG00000134986	chr5	111662621	111997464	-	334844
## 4725	ENSG00000134987	chr5	111091716	111130502	+	38787
## 4726	ENSG00000134996	chr9	75088543	75147265	+	58723
## 4727	ENSG00000135002	chr9	76385517	76394517	-	9001
## 4728	ENSG00000135018	chr9	83659963	83708203	-	48241
## 4729	ENSG00000135040	chr9	85941146	86022298	+	81153
## 4730	ENSG00000135045	chr9	74946581	74952886	-	6306
## 4731	ENSG00000135048	chr9	71683366	71816690	-	133325
## 4732	ENSG00000135049	chr9	85546539	85742029	-	195491
## 4733	ENSG00000135052	chr9	86026146	86100173	-	74028
## 4734	ENSG00000135069	chr9	78297143	78330093	+	32951
## 4735	ENSG00000135070	chr9	86264546	86283102	-	18557
## 4736	ENSG00000135090	chr12	118149801	118372945	-	223145
## 4737	ENSG00000135093	chr12	109023089	109088026	+	64938
## 4738	ENSG00000135108	chr12	117141988	117190531	-	48544
## 4739	ENSG00000135124	chr12	121209857	121234106	+	24250
## 4740	ENSG00000135148	chr12	112125501	112153609	+	28109
## 4741	ENSG00000135164	chr7	87152361	87196337	+	43977
## 4742	ENSG00000135185	chr7	87196160	87220587	-	24428
## 4743	ENSG00000135211	chr7	77793728	77798580	-	4853
## 4744	ENSG00000135226	chr4	69280499	69295050	+	14552
## 4745	ENSG00000135241	chr7	108470422	108569666	-	99245
## 4746	ENSG00000135245	chr7	128455849	128458418	+	2570
## 4747	ENSG00000135249	chr7	105532085	105567677	+	35593
## 4748	ENSG00000135250	chr7	105110704	105399308	-	288605
## 4749	ENSG00000135253	chr7	128862451	128910719	-	48269
## 4750	ENSG00000135269	chr7	116210493	116258783	+	48291
## 4751	ENSG00000135272	chr7	114922154	115019916	+	97763
## 4752	ENSG00000135297	chr6	73461578	73509236	+	47659
## 4753	ENSG00000135299	chr6	89433170	89633834	+	200665
## 4754	ENSG00000135314	chr6	73241314	73310365	-	69052
## 4755	ENSG00000135315	chr6	84124241	84227635	-	103395
## 4756	ENSG00000135316	chr6	85607785	85643792	-	36008
## 4757	ENSG00000135317	chr6	85505496	85594156	-	88661
## 4758	ENSG00000135334	chr6	87675072	87702209	-	27138

## 4759	ENSG00000135336	chr6	87590067	87667453	+	77387
## 4760	ENSG00000135341	chr6	90513573	90587045	-	73473
## 4761	ENSG00000135362	chr11	36296288	36465204	+	168917
## 4762	ENSG00000135363	chr11	33858576	33892289	-	33714
## 4763	ENSG00000135365	chr11	45929323	46121178	-	191856
## 4764	ENSG00000135372	chr11	34105602	34147670	+	42069
## 4765	ENSG00000135378	chr11	32829943	32858123	+	28181
## 4766	ENSG00000135387	chr11	34051683	34101156	+	49474
## 4767	ENSG00000135390	chr12	53632726	53677408	-	44683
## 4768	ENSG00000135392	chr12	55820960	55830824	-	9865
## 4769	ENSG00000135404	chr12	55725323	55729707	-	4385
## 4770	ENSG00000135407	chr12	57797376	57818704	-	21329
## 4771	ENSG00000135414	chr12	55743280	55757278	+	13999
## 4772	ENSG00000135423	chr12	56470944	56488414	-	17471
## 4773	ENSG00000135437	chr12	55720367	55724705	+	4339
## 4774	ENSG00000135439	chr12	57723761	57742157	-	18397
## 4775	ENSG00000135441	chr12	55716037	55720087	+	4051
## 4776	ENSG00000135446	chr12	57747727	57756013	-	8287
## 4777	ENSG00000135447	chr12	54575387	54588659	-	13273
## 4778	ENSG00000135451	chr12	49323236	49331731	+	8496
## 4779	ENSG00000135452	chr12	57738013	57750211	+	12199
## 4780	ENSG00000135454	chr12	57623410	57633355	-	9946
## 4781	ENSG00000135457	chr12	51093663	51173134	-	79472
## 4782	ENSG00000135469	chr12	56266858	56270966	+	4109
## 4783	ENSG00000135473	chr12	56316223	56334053	-	17831
## 4784	ENSG00000135476	chr12	53268299	53293643	+	25345
## 4785	ENSG00000135482	chr12	56118159	56127514	+	9356
## 4786	ENSG00000135486	chr12	54280193	54287088	+	6896
## 4787	ENSG00000135502	chr12	57619527	57626151	+	6625
## 4788	ENSG00000135503	chr12	51951667	51997078	+	45412
## 4789	ENSG00000135506	chr12	57693955	57721557	+	27603
## 4790	ENSG00000135517	chr12	56449502	56469166	-	19665
## 4791	ENSG00000135521	chr6	143843344	143863812	+	20469
## 4792	ENSG00000135525	chr6	136342281	136550819	-	208539
## 4793	ENSG00000135535	chr6	109366514	109382457	-	15944
## 4794	ENSG00000135537	chr6	108294894	108526796	+	231903
## 4795	ENSG00000135540	chr6	138422043	138692571	-	270529
## 4796	ENSG00000135587	chr6	109440763	109443919	+	3157
## 4797	ENSG00000135596	chr6	109444062	109465968	-	21907
## 4798	ENSG00000135597	chr6	138903493	138988261	-	84769
## 4799	ENSG00000135605	chr4	48135783	48269864	-	134082
## 4800	ENSG00000135617	chr2	73228006	73233238	-	5233
## 4801	ENSG00000135622	chr2	74654228	74683853	+	29626
## 4802	ENSG00000135624	chr2	73233420	73253021	+	19602
## 4803	ENSG00000135632	chr2	73214222	73227237	+	13016
## 4804	ENSG00000135636	chr2	71453722	71686768	+	233047
## 4805	ENSG00000135637	chr2	74471986	74483408	-	11423
## 4806	ENSG00000135643	chr12	70366276	70434292	+	68017
## 4807	ENSG00000135655	chr12	62260338	62417431	+	157094
## 4808	ENSG00000135677	chr12	64713445	64759447	-	46003
## 4809	ENSG00000135678	chr12	68842197	68971570	-	129374
## 4810	ENSG00000135679	chr12	68808176	68850686	+	42511
## 4811	ENSG00000135686	chr16	84648525	84667686	+	19162
## 4812	ENSG00000135698	chr16	82147798	82170226	-	22429

## 4813	ENSG00000135720	chr16	66720893	66751798	-	30906
## 4814	ENSG00000135722	chr16	67159931	67164570	+	4640
## 4815	ENSG00000135723	chr16	67229387	67247658	-	18272
## 4816	ENSG00000135736	chr16	57512178	57536599	-	24422
## 4817	ENSG00000135740	chr16	67237683	67272190	+	34508
## 4818	ENSG00000135744	chr1	230702523	230714297	-	11775
## 4819	ENSG00000135747	chr1	246945547	247078811	-	133265
## 4820	ENSG00000135749	chr1	232983435	233295713	-	312279
## 4821	ENSG00000135763	chr1	229626234	229660199	+	33966
## 4822	ENSG00000135766	chr1	231363751	231425044	-	61294
## 4823	ENSG00000135775	chr1	230642489	230693982	+	51494
## 4824	ENSG00000135776	chr1	229516582	229558695	-	42114
## 4825	ENSG00000135778	chr1	232950605	232983882	+	33278
## 4826	ENSG00000135801	chr1	229593111	229626047	-	32937
## 4827	ENSG00000135821	chr1	182381704	182392206	-	10503
## 4828	ENSG00000135823	chr1	180972712	181023121	-	50410
## 4829	ENSG00000135828	chr1	182573634	182589256	-	15623
## 4830	ENSG00000135829	chr1	182839369	182887751	+	48383
## 4831	ENSG00000135835	chr1	180913154	180951614	+	38461
## 4832	ENSG00000135837	chr1	179954738	180114880	+	160143
## 4833	ENSG00000135838	chr1	182789293	182830384	+	41092
## 4834	ENSG00000135842	chr1	184790724	184974550	-	183827
## 4835	ENSG00000135845	chr1	172370189	172444086	-	73898
## 4836	ENSG00000135870	chr1	173931214	174022297	-	91084
## 4837	ENSG00000135898	chr2	230907318	230961066	-	53749
## 4838	ENSG00000135900	chr2	223957404	223967714	+	10311
## 4839	ENSG00000135905	chr2	224765090	225042445	-	277356
## 4840	ENSG00000135912	chr2	218710845	218755416	+	44572
## 4841	ENSG00000135913	chr2	218450251	218568361	-	118111
## 4842	ENSG00000135916	chr2	230864639	230879248	+	14610
## 4843	ENSG00000135924	chr2	219279267	219286900	+	7634
## 4844	ENSG00000135926	chr2	218274192	218292586	-	18395
## 4845	ENSG00000135930	chr2	232550052	232583644	+	33593
## 4846	ENSG00000135932	chr2	230712845	230821075	+	108231
## 4847	ENSG00000135940	chr2	97646040	97648383	+	2344
## 4848	ENSG00000135945	chr2	99400475	99490035	-	89561
## 4849	ENSG00000135953	chr2	102715840	102736888	-	21049
## 4850	ENSG00000135956	chr2	96248516	96265994	-	17479
## 4851	ENSG00000135966	chr2	105264391	105330034	-	65644
## 4852	ENSG00000135968	chr2	108448561	108509415	+	60855
## 4853	ENSG00000135972	chr2	105037983	105099960	+	61978
## 4854	ENSG00000135974	chr2	105337359	105349211	+	11853
## 4855	ENSG00000135976	chr2	97113496	97264521	+	151026
## 4856	ENSG00000135999	chr2	148644440	148787568	+	143129
## 4857	ENSG00000136002	chr2	130836916	131047263	+	210348
## 4858	ENSG00000136003	chr12	108562582	108569384	+	6803
## 4859	ENSG00000136010	chr12	105019784	105084577	-	64794
## 4860	ENSG00000136014	chr12	95516560	95551490	-	34931
## 4861	ENSG00000136021	chr12	100267140	100341724	+	74585
## 4862	ENSG00000136040	chr12	94148723	94307675	+	158953
## 4863	ENSG00000136044	chr12	105173296	105236238	-	62943
## 4864	ENSG00000136045	chr12	107685732	107713167	+	27436
## 4865	ENSG00000136048	chr12	101877351	102012130	+	134780
## 4866	ENSG00000136051	chr12	105107324	105169134	+	61811

## 4867	ENSG00000136059	chr3	37988059	38007188	+	19130
## 4868	ENSG00000136068	chr3	58008400	58172251	+	163852
## 4869	ENSG00000136098	chr13	52132639	52159861	-	27223
## 4870	ENSG00000136100	chr13	52412602	52450628	-	38027
## 4871	ENSG00000136104	chr13	50909678	50973745	+	64068
## 4872	ENSG00000136108	chr13	52455429	52476628	+	21200
## 4873	ENSG00000136111	chr13	75284665	75482114	-	197450
## 4874	ENSG00000136122	chr13	72727749	72756198	+	28450
## 4875	ENSG00000136141	chr13	46553168	46753040	+	199873
## 4876	ENSG00000136143	chr13	47936491	48001354	-	64864
## 4877	ENSG00000136144	chr13	49531946	49585583	-	53638
## 4878	ENSG00000136146	chr13	48053323	48095131	-	41809
## 4879	ENSG00000136147	chr13	49495610	49528987	+	33378
## 4880	ENSG00000136149	chr13	54440704	54441315	-	612
## 4881	ENSG00000136152	chr13	45464898	45536630	+	71733
## 4882	ENSG00000136153	chr13	75620434	75859870	+	239437
## 4883	ENSG00000136156	chr13	48233158	48270357	+	37200
## 4884	ENSG00000136158	chr13	80335976	80340951	-	4976
## 4885	ENSG00000136159	chr13	48037567	48047222	+	9656
## 4886	ENSG00000136161	chr13	48488959	48533256	-	44298
## 4887	ENSG00000136167	chr13	46125920	46211871	-	85952
## 4888	ENSG00000136169	chr13	49444374	49495003	+	50630
## 4889	ENSG00000136197	chr7	42908726	42912305	-	3580
## 4890	ENSG00000136213	chr7	2403560	2448483	+	44924
## 4891	ENSG00000136231	chr7	23310209	23470467	-	160259
## 4892	ENSG00000136235	chr7	23235967	23275108	+	39142
## 4893	ENSG00000136238	chr7	6374523	6403977	+	29455
## 4894	ENSG00000136240	chr7	6445953	6484242	-	38290
## 4895	ENSG00000136243	chr7	23181827	23201011	+	19185
## 4896	ENSG00000136247	chr7	6577434	6589374	+	11941
## 4897	ENSG00000136250	chr7	36512949	36724549	-	211601
## 4898	ENSG00000136261	chr7	16646131	16706523	+	60393
## 4899	ENSG00000136270	chr7	45100100	45112047	-	11948
## 4900	ENSG00000136271	chr7	44565417	44575051	-	9635
## 4901	ENSG00000136273	chr7	47695730	47979581	-	283852
## 4902	ENSG00000136279	chr7	44044640	44069456	+	24817
## 4903	ENSG00000136280	chr7	44999475	45076469	+	76995
## 4904	ENSG00000136286	chr7	44962662	44979098	-	16437
## 4905	ENSG00000136295	chr7	2631951	2664802	+	32852
## 4906	ENSG00000136305	chr14	24305096	24311430	-	6335
## 4907	ENSG00000136315	chr14	20919361	20920299	+	939
## 4908	ENSG00000136319	chr14	20256558	20305994	-	49437
## 4909	ENSG00000136367	chr14	23520855	23556192	-	35338
## 4910	ENSG00000136371	chr15	79833585	79897379	-	63795
## 4911	ENSG00000136378	chr15	78759203	78811431	-	52229
## 4912	ENSG00000136379	chr15	80679684	80755621	+	75938
## 4913	ENSG00000136381	chr15	78437431	78501456	+	64026
## 4914	ENSG00000136404	chr15	83107407	83144854	+	37448
## 4915	ENSG00000136436	chr17	48830988	48866522	+	35535
## 4916	ENSG00000136444	chr17	50478800	50485975	+	7176
## 4917	ENSG00000136448	chr17	45051610	45109016	+	57407
## 4918	ENSG00000136450	chr17	58003360	58007346	-	3987
## 4919	ENSG00000136451	chr17	57971547	57988259	-	16713
## 4920	ENSG00000136457	chr17	50464496	50468966	-	4471

## 4921	ENSG00000136463	chr17	63600872	63608365	+	7494
## 4922	ENSG00000136478	chr17	64147227	64263301	-	116075
## 4923	ENSG00000136485	chr17	63550461	63594266	+	43806
## 4924	ENSG00000136490	chr17	63695902	63701172	-	5271
## 4925	ENSG00000136492	chr17	61681266	61863521	-	182256
## 4926	ENSG00000136504	chr17	49788555	49835030	+	46476
## 4927	ENSG00000136518	chr3	179562880	179588408	+	25529
## 4928	ENSG00000136521	chr3	179604690	179627647	+	22958
## 4929	ENSG00000136522	chr3	179588285	179604654	-	16370
## 4930	ENSG00000136527	chr3	185915906	185938136	-	22231
## 4931	ENSG00000136536	chr2	159712457	159771027	+	58571
## 4932	ENSG00000136560	chr2	161136908	161236221	+	99314
## 4933	ENSG00000136603	chr3	170357678	170396835	+	39158
## 4934	ENSG00000136628	chr1	219968601	220046658	-	78058
## 4935	ENSG00000136630	chr1	220879400	220885059	+	5660
## 4936	ENSG00000136631	chr1	150067293	150145327	+	78035
## 4937	ENSG00000136636	chr1	215567392	215621807	+	54416
## 4938	ENSG00000136643	chr1	213051233	213274773	+	223541
## 4939	ENSG00000136682	chr2	113437691	113496189	+	58499
## 4940	ENSG00000136699	chr2	130151392	130182750	-	31359
## 4941	ENSG00000136709	chr2	127701022	127811187	-	110166
## 4942	ENSG00000136710	chr2	130338241	130342349	-	4109
## 4943	ENSG00000136715	chr2	127941217	128028120	-	86904
## 4944	ENSG00000136717	chr2	127048027	127107355	-	59329
## 4945	ENSG00000136718	chr2	130342225	130347810	+	5586
## 4946	ENSG00000136720	chr2	128236716	128318577	-	81862
## 4947	ENSG00000136731	chr2	128091200	128195677	+	104478
## 4948	ENSG00000136732	chr2	126655933	126696675	+	40743
## 4949	ENSG00000136738	chr10	17644125	17715914	+	71790
## 4950	ENSG00000136754	chr10	26746593	26861087	-	114495
## 4951	ENSG00000136758	chr10	27110112	27155266	-	45155
## 4952	ENSG00000136770	chr10	21756537	22003769	-	247233
## 4953	ENSG00000136783	chr9	104747688	104760122	+	12435
## 4954	ENSG00000136802	chr9	128882112	128918039	+	35928
## 4955	ENSG00000136807	chr9	127785679	127790787	+	5109
## 4956	ENSG00000136810	chr9	110243811	110256640	-	12830
## 4957	ENSG00000136811	chr9	128455186	128501292	+	46107
## 4958	ENSG00000136813	chr9	111360692	111484745	-	124054
## 4959	ENSG00000136816	chr9	129803153	129811281	+	8129
## 4960	ENSG00000136819	chr9	129827290	129835863	-	8574
## 4961	ENSG00000136824	chr9	104094260	104141417	+	47158
## 4962	ENSG00000136827	chr9	129812944	129824134	-	11191
## 4963	ENSG00000136828	chr9	126914774	127223166	+	308393
## 4964	ENSG00000136830	chr9	127505339	127578989	-	73651
## 4965	ENSG00000136840	chr9	127907886	127917038	-	9153
## 4966	ENSG00000136842	chr9	97501180	97601748	+	100569
## 4967	ENSG00000136861	chr9	120388869	120580170	-	191302
## 4968	ENSG00000136867	chr9	113150942	113164137	+	13196
## 4969	ENSG00000136868	chr9	113221562	113264492	+	42931
## 4970	ENSG00000136870	chr9	101398873	101410660	+	11788
## 4971	ENSG00000136874	chr9	99906633	99970341	+	63709
## 4972	ENSG00000136875	chr9	113275343	113292905	+	17563
## 4973	ENSG00000136877	chr9	127794597	127814327	+	19731
## 4974	ENSG00000136878	chr9	129834698	129881838	+	47141

## 4975	ENSG00000136888	chr9	114587746	114598373	+	10628
## 4976	ENSG00000136891	chr9	100302077	100352939	-	50863
## 4977	ENSG00000136895	chr9	127224265	127393660	+	169396
## 4978	ENSG00000136897	chr9	101387633	101398614	-	10982
## 4979	ENSG00000136908	chr9	127935099	127938484	-	3386
## 4980	ENSG00000136918	chr9	124853417	124857890	+	4474
## 4981	ENSG00000136925	chr9	97600080	97633575	-	33496
## 4982	ENSG00000136930	chr9	124353466	124415444	-	61979
## 4983	ENSG00000136931	chr9	124481236	124507430	-	26195
## 4984	ENSG00000136932	chr9	97904489	97922570	-	18082
## 4985	ENSG00000136933	chr9	125200542	125234158	+	33617
## 4986	ENSG00000136935	chr9	124878357	124948492	-	70136
## 4987	ENSG00000136936	chr9	97674909	97697357	-	22449
## 4988	ENSG00000136937	chr9	97633626	97673748	+	40123
## 4989	ENSG00000136938	chr9	97983361	98015943	+	32583
## 4990	ENSG00000136940	chr9	122798389	122828631	-	30243
## 4991	ENSG00000136942	chr9	124857880	124861981	-	4102
## 4992	ENSG00000136950	chr9	124862130	124877733	+	15604
## 4993	ENSG00000136982	chr8	119833976	119856010	-	22035
## 4994	ENSG00000136986	chr8	123013164	123042423	-	29260
## 4995	ENSG00000136997	chr8	127735434	127741434	+	6001
## 4996	ENSG00000137038	chr9	7796490	7888380	-	91891
## 4997	ENSG00000137040	chr9	6011043	6015625	-	4583
## 4998	ENSG00000137054	chr9	37485935	37503697	+	17763
## 4999	ENSG00000137055	chr9	26904083	26947463	-	43381
## 5000	ENSG00000137070	chr9	34650702	34661892	+	11191
## 5001	ENSG00000137073	chr9	33921693	34048949	-	127257
## 5002	ENSG00000137074	chr9	32972606	33025168	-	52563
## 5003	ENSG00000137075	chr9	36336396	36487548	-	151153
## 5004	ENSG00000137076	chr9	35696948	35732395	-	35448
## 5005	ENSG00000137098	chr9	35808045	35812272	-	4228
## 5006	ENSG00000137100	chr9	34613545	34620523	-	6979
## 5007	ENSG00000137101	chr9	35609533	35646810	-	37278
## 5008	ENSG00000137103	chr9	35814451	35854847	+	40397
## 5009	ENSG00000137106	chr9	37422666	37436990	+	14325
## 5010	ENSG00000137124	chr9	38392664	38398661	+	5998
## 5011	ENSG00000137133	chr9	35812960	35815354	-	2395
## 5012	ENSG00000137135	chr9	35658875	35675866	-	16992
## 5013	ENSG00000137145	chr9	19230435	19373545	+	143111
## 5014	ENSG00000137154	chr9	19375715	19380254	-	4540
## 5015	ENSG00000137161	chr6	42929192	42939287	+	10096
## 5016	ENSG00000137166	chr6	41546426	41602384	+	55959
## 5017	ENSG00000137168	chr6	36854827	36875024	-	20198
## 5018	ENSG00000137171	chr6	43040777	43075099	+	34323
## 5019	ENSG00000137185	chr6	28224886	28233482	+	8597
## 5020	ENSG00000137193	chr6	37170203	37175426	+	5224
## 5021	ENSG00000137200	chr6	37433219	37482827	+	49609
## 5022	ENSG00000137203	chr6	10393186	10419659	-	26474
## 5023	ENSG00000137207	chr6	43511827	43516990	-	5164
## 5024	ENSG00000137210	chr6	10747759	10852753	+	104995
## 5025	ENSG00000137216	chr6	44126914	44155519	+	28606
## 5026	ENSG00000137218	chr6	41770176	41786542	-	16367
## 5027	ENSG00000137221	chr6	43477523	43506556	+	29034
## 5028	ENSG00000137225	chr6	44158811	44184402	+	25592

## 5029	ENSG00000137266	chr6	3268962	3457022	-	188061
## 5030	ENSG00000137269	chr6	53794497	53924121	+	129625
## 5031	ENSG00000137274	chr6	3118374	3153578	+	35205
## 5032	ENSG00000137275	chr6	3063991	3115187	+	51197
## 5033	ENSG00000137288	chr6	33694293	33711727	-	17435
## 5034	ENSG00000137309	chr6	34236873	34246231	+	9359
## 5035	ENSG00000137310	chr6	31158542	31167159	+	8618
## 5036	ENSG00000137338	chr6	28281572	28302549	+	20978
## 5037	ENSG00000137364	chr6	18128311	18155074	-	26764
## 5038	ENSG00000137409	chr6	36968141	36986298	-	18158
## 5039	ENSG00000137413	chr6	42050513	42087461	+	36949
## 5040	ENSG00000137414	chr6	17600355	17611719	+	11365
## 5041	ENSG00000137449	chr4	15002674	15070153	+	67480
## 5042	ENSG00000137462	chr4	153701500	153705699	+	4200
## 5043	ENSG00000137474	chr11	77128264	77215239	+	86976
## 5044	ENSG00000137478	chr11	72836745	73142261	-	305517
## 5045	ENSG00000137486	chr11	75264182	75351705	-	87524
## 5046	ENSG00000137492	chr11	76349956	76380971	-	31016
## 5047	ENSG00000137494	chr11	83193739	83260694	+	66956
## 5048	ENSG00000137496	chr11	71998541	72005715	+	7175
## 5049	ENSG00000137497	chr11	72002864	72080693	-	77830
## 5050	ENSG00000137500	chr11	83259097	83286407	-	27311
## 5051	ENSG00000137504	chr11	85659708	85682908	-	23201
## 5052	ENSG00000137509	chr11	82823502	82970584	-	147083
## 5053	ENSG00000137513	chr11	78435961	78574874	-	138914
## 5054	ENSG00000137522	chr11	71928701	71997597	+	68897
## 5055	ENSG00000137547	chr8	54135210	54147901	+	12692
## 5056	ENSG00000137563	chr8	63015079	63039171	-	24093
## 5057	ENSG00000137571	chr8	69667047	69835064	-	168018
## 5058	ENSG00000137574	chr8	55773142	55825448	+	52307
## 5059	ENSG00000137575	chr8	58552924	58582860	+	29937
## 5060	ENSG00000137601	chr4	169393275	169612629	-	219355
## 5061	ENSG00000137628	chr4	168216293	168318807	-	102515
## 5062	ENSG00000137642	chr11	121452203	121633693	+	181491
## 5063	ENSG00000137656	chr11	116748170	116772988	-	24819
## 5064	ENSG00000137692	chr11	103062076	103092215	-	30140
## 5065	ENSG00000137700	chr11	119024114	119030906	-	6793
## 5066	ENSG00000137710	chr11	110174880	110296722	-	121843
## 5067	ENSG00000137713	chr11	111726908	111766427	-	39520
## 5068	ENSG00000137714	chr11	110429883	110464881	+	34999
## 5069	ENSG00000137720	chr11	111878935	111885975	+	7041
## 5070	ENSG00000137760	chr11	107502726	107565746	-	63021
## 5071	ENSG00000137764	chr15	67542709	67807123	+	264415
## 5072	ENSG00000137767	chr15	45631148	45691294	+	60147
## 5073	ENSG00000137770	chr15	44427234	44529038	+	101805
## 5074	ENSG00000137776	chr15	58879045	58933653	-	54609
## 5075	ENSG00000137802	chr15	41774434	41827855	+	53422
## 5076	ENSG00000137804	chr15	41332694	41381050	+	48357
## 5077	ENSG00000137806	chr15	41387349	41402519	-	15171
## 5078	ENSG00000137807	chr15	69414246	69448427	+	34182
## 5079	ENSG00000137812	chr15	40594020	40664342	+	70323
## 5080	ENSG00000137814	chr15	42548810	42569994	+	21185
## 5081	ENSG00000137815	chr15	41408408	41483563	+	75156
## 5082	ENSG00000137817	chr15	72241181	72272999	-	31819

## 5083	ENSG00000137818	chr15	69452784	69456194	+	3411
## 5084	ENSG00000137822	chr15	43369221	43409771	+	40551
## 5085	ENSG00000137824	chr15	40735884	40755851	-	19968
## 5086	ENSG00000137825	chr15	41493393	41503551	+	10159
## 5087	ENSG00000137834	chr15	66702228	66782848	+	80621
## 5088	ENSG00000137841	chr15	40278176	40307935	-	29760
## 5089	ENSG00000137842	chr15	43123279	43185146	+	61868
## 5090	ENSG00000137843	chr15	40238759	40277487	+	38729
## 5091	ENSG00000137845	chr15	58588807	58749978	-	161172
## 5092	ENSG00000137871	chr15	56630181	56918571	-	288391
## 5093	ENSG00000137876	chr15	55180806	55197067	-	16262
## 5094	ENSG00000137878	chr15	57591908	57714745	+	122838
## 5095	ENSG00000137942	chr1	93448131	93554661	+	106531
## 5096	ENSG00000137944	chr1	88935773	88992953	-	57181
## 5097	ENSG00000137947	chr1	88852932	88891944	-	39013
## 5098	ENSG00000137955	chr1	75786197	75795079	+	8883
## 5099	ENSG00000137970	chr1	96678874	96679620	-	747
## 5100	ENSG00000137992	chr1	100186919	100249834	-	62916
## 5101	ENSG00000137996	chr1	100266207	100292769	+	26563
## 5102	ENSG00000138002	chr2	27444371	27489789	-	45419
## 5103	ENSG00000138018	chr2	26308547	26395891	+	87345
## 5104	ENSG00000138028	chr2	27098889	27119115	-	20227
## 5105	ENSG00000138029	chr2	26243170	26290468	+	47299
## 5106	ENSG00000138030	chr2	27086747	27100772	+	14026
## 5107	ENSG00000138031	chr2	24819169	24919839	-	100671
## 5108	ENSG00000138032	chr2	44167969	44244384	+	76416
## 5109	ENSG00000138035	chr2	55634265	55693910	-	59646
## 5110	ENSG00000138036	chr2	43774039	43810010	+	35972
## 5111	ENSG00000138050	chr2	39736060	39779267	-	43208
## 5112	ENSG00000138068	chr2	37167820	37196598	-	28779
## 5113	ENSG00000138069	chr2	65070701	65130106	-	59406
## 5114	ENSG00000138071	chr2	65227753	65271253	+	43501
## 5115	ENSG00000138073	chr2	27130756	27134675	-	3920
## 5116	ENSG00000138074	chr2	27199587	27212958	-	13372
## 5117	ENSG00000138078	chr2	44316281	44361862	-	45582
## 5118	ENSG00000138079	chr2	44275458	44321494	+	46037
## 5119	ENSG00000138080	chr2	27078567	27086408	+	7842
## 5120	ENSG00000138081	chr2	47789316	47905793	-	116478
## 5121	ENSG00000138085	chr2	27212027	27217178	+	5152
## 5122	ENSG00000138092	chr2	24793136	24822376	+	29241
## 5123	ENSG00000138095	chr2	43886508	43996005	-	109498
## 5124	ENSG00000138100	chr2	27282392	27307439	+	25048
## 5125	ENSG00000138101	chr2	25377198	25673647	-	296450
## 5126	ENSG00000138107	chr10	102461881	102502711	-	40831
## 5127	ENSG00000138111	chr10	102461395	102477045	+	15651
## 5128	ENSG00000138134	chr10	88879734	88975153	+	95420
## 5129	ENSG00000138138	chr10	87751512	87841343	-	89832
## 5130	ENSG00000138160	chr10	92593286	92655395	+	62110
## 5131	ENSG00000138161	chr10	122832149	122850793	-	18645
## 5132	ENSG00000138166	chr10	110497838	110511544	+	13707
## 5133	ENSG00000138172	chr10	103446786	103452402	-	5617
## 5134	ENSG00000138175	chr10	102673731	102714407	-	40677
## 5135	ENSG00000138180	chr10	93496632	93529092	+	32461
## 5136	ENSG00000138182	chr10	89701610	89774939	+	73330



## 5137	ENSG00000138185	chr10	95711779	95869695	+	157917
## 5138	ENSG00000138190	chr10	92834713	93059493	+	224781
## 5139	ENSG00000138193	chr10	94030812	94332823	+	302012
## 5140	ENSG00000138231	chr3	138161012	138174949	-	13938
## 5141	ENSG00000138246	chr3	132417526	132539032	+	121507
## 5142	ENSG00000138279	chr10	73375101	73414076	-	38976
## 5143	ENSG00000138286	chr10	73168166	73244504	+	76339
## 5144	ENSG00000138303	chr10	72096032	72217134	-	121103
## 5145	ENSG00000138326	chr10	78033760	78056812	+	23053
## 5146	ENSG00000138336	chr10	68560656	68694482	+	133827
## 5147	ENSG00000138346	chr10	68414064	68472121	-	58058
## 5148	ENSG00000138363	chr2	215311817	215349773	+	37957
## 5149	ENSG00000138375	chr2	216412414	216483053	+	70640
## 5150	ENSG00000138376	chr2	214725646	214809711	-	84066
## 5151	ENSG00000138380	chr2	202912214	202987063	+	74850
## 5152	ENSG00000138381	chr2	189661385	189670831	+	9447
## 5153	ENSG00000138382	chr2	169810081	169824931	-	14851
## 5154	ENSG00000138385	chr2	169791933	169812064	+	20132
## 5155	ENSG00000138386	chr2	190646746	190692766	+	46021
## 5156	ENSG00000138398	chr2	169584340	169641406	+	57067
## 5157	ENSG00000138399	chr2	169529749	169573875	-	44127
## 5158	ENSG00000138413	chr2	208236227	208266074	-	29848
## 5159	ENSG00000138430	chr2	174072447	174248698	-	176252
## 5160	ENSG00000138433	chr2	174348022	174395715	-	47694
## 5161	ENSG00000138434	chr2	181891833	181930738	+	38906
## 5162	ENSG00000138439	chr2	202635188	202769757	+	134570
## 5163	ENSG00000138442	chr2	202874782	203014798	-	140017
## 5164	ENSG00000138443	chr2	203328219	203447723	+	119505
## 5165	ENSG00000138448	chr2	186590065	186680901	+	90837
## 5166	ENSG00000138449	chr2	189560579	189583758	-	23180
## 5167	ENSG00000138459	chr3	112561709	112585577	+	23869
## 5168	ENSG00000138463	chr3	122794795	122881139	+	86345
## 5169	ENSG00000138468	chr3	101324205	101513241	-	189037
## 5170	ENSG00000138495	chr3	119654513	119677454	-	22942
## 5171	ENSG00000138496	chr3	122527924	122564577	-	36654
## 5172	ENSG00000138587	chr15	56421544	56465137	-	43594
## 5173	ENSG00000138592	chr15	50424380	50514419	+	90040
## 5174	ENSG00000138593	chr15	48988476	49046563	-	58088
## 5175	ENSG00000138594	chr15	51829628	51947295	+	117668
## 5176	ENSG00000138600	chr15	50702266	50765808	-	63543
## 5177	ENSG00000138613	chr15	63276018	63309126	+	33109
## 5178	ENSG00000138614	chr15	65578753	65611289	-	32537
## 5179	ENSG00000138617	chr15	65234460	65300618	-	66159
## 5180	ENSG00000138621	chr15	75023555	75117462	+	93908
## 5181	ENSG00000138623	chr15	74409289	74434467	-	25179
## 5182	ENSG00000138629	chr15	74445977	74461182	-	15206
## 5183	ENSG00000138639	chr4	85475114	86002670	+	527557
## 5184	ENSG00000138640	chr4	88725955	89111398	-	385444
## 5185	ENSG00000138641	chr4	88521048	88708542	+	187495
## 5186	ENSG00000138642	chr4	88378739	88443111	+	64373
## 5187	ENSG00000138646	chr4	88457117	88506163	+	49047
## 5188	ENSG00000138658	chr4	112539333	112636995	-	97663
## 5189	ENSG00000138660	chr4	112231737	112270047	+	38311
## 5190	ENSG00000138663	chr4	83034447	83075818	+	41372

## 5191	ENSG00000138668	chr4	82352498	82374503	-	22006
## 5192	ENSG00000138674	chr4	82818661	82901166	-	82506
## 5193	ENSG00000138685	chr4	122826708	122898236	+	71529
## 5194	ENSG00000138686	chr4	121824440	121870497	-	46058
## 5195	ENSG00000138688	chr4	122152333	122362758	+	210426
## 5196	ENSG00000138698	chr4	98261384	98443861	+	182478
## 5197	ENSG00000138709	chr4	128061268	128222931	+	161664
## 5198	ENSG00000138722	chr4	89879532	89954629	+	75098
## 5199	ENSG00000138735	chr4	119494395	119628991	-	134597
## 5200	ENSG00000138738	chr4	120684919	120922870	-	237952
## 5201	ENSG00000138744	chr4	75913657	75941051	-	27395
## 5202	ENSG00000138750	chr4	76114659	76148515	-	33857
## 5203	ENSG00000138756	chr4	78776342	78916372	+	140031
## 5204	ENSG00000138757	chr4	75642782	75724525	-	81744
## 5205	ENSG00000138758	chr4	76949703	77040384	+	90682
## 5206	ENSG00000138760	chr4	76158737	76213893	-	55157
## 5207	ENSG00000138764	chr4	77157151	77433388	+	276238
## 5208	ENSG00000138767	chr4	77713387	77819615	-	106229
## 5209	ENSG00000138768	chr4	75724593	75814286	+	89694
## 5210	ENSG00000138772	chr4	78551519	78610451	+	58933
## 5211	ENSG00000138777	chr4	105369077	105474081	-	105005
## 5212	ENSG00000138778	chr4	103105806	103198409	-	92604
## 5213	ENSG00000138780	chr4	105708778	105847728	+	138951
## 5214	ENSG00000138785	chr4	105682627	105895986	-	213360
## 5215	ENSG00000138794	chr4	109688622	109703583	-	14962
## 5216	ENSG00000138795	chr4	108047545	108168956	-	121412
## 5217	ENSG00000138796	chr4	107989714	108035175	+	45462
## 5218	ENSG00000138801	chr4	107590276	107720452	-	130177
## 5219	ENSG00000138802	chr4	109433772	109540896	+	107125
## 5220	ENSG00000138814	chr4	101023409	101348278	-	324870
## 5221	ENSG00000138821	chr4	102251041	102431258	-	180218
## 5222	ENSG00000138829	chr5	128257909	128659185	-	401277
## 5223	ENSG00000138834	chr16	1706183	1770317	+	64135
## 5224	ENSG00000138835	chr9	113444731	113597743	+	153013
## 5225	ENSG00000138867	chr22	24540423	24555935	-	15513
## 5226	ENSG00000138942	chr22	31160183	31207019	+	46837
## 5227	ENSG00000138964	chr22	44172956	44219533	+	46578
## 5228	ENSG00000139055	chr12	14914035	14939082	-	25048
## 5229	ENSG00000139083	chr12	11649854	11895402	+	245549
## 5230	ENSG00000139112	chr12	10212458	10223130	+	10673
## 5231	ENSG00000139116	chr12	39293228	39443390	-	150163
## 5232	ENSG00000139131	chr12	32727490	32755902	-	28413
## 5233	ENSG00000139132	chr12	32399529	32646050	+	246522
## 5234	ENSG00000139133	chr12	34022281	34029694	+	7414
## 5235	ENSG00000139146	chr12	31280584	31327058	-	46475
## 5236	ENSG00000139154	chr12	19404045	19720801	+	316757
## 5237	ENSG00000139160	chr12	31647160	31673114	+	25955
## 5238	ENSG00000139163	chr12	22625075	22690665	+	65591
## 5239	ENSG00000139168	chr12	42312078	42326118	-	14041
## 5240	ENSG00000139173	chr12	43835967	44389762	+	553796
## 5241	ENSG00000139174	chr12	42456754	42590355	-	133602
## 5242	ENSG00000139178	chr12	7089587	7109273	-	19687
## 5243	ENSG00000139180	chr12	4649095	4694317	+	45223
## 5244	ENSG00000139182	chr12	7129698	7158945	+	29248

##	5245	ENSG00000139187	chr12	8950044	9010760	+	60717
##	5246	ENSG00000139190	chr12	6462237	6470987	-	8751
##	5247	ENSG00000139192	chr12	6451690	6466517	+	14828
##	5248	ENSG00000139193	chr12	6444867	6451718	+	6852
##	5249	ENSG00000139194	chr12	7123684	7128942	-	5259
##	5250	ENSG00000139197	chr12	7188685	7218574	+	29890
##	5251	ENSG00000139218	chr12	45919131	45992120	-	72990
##	5252	ENSG00000139233	chr12	66116555	66130768	-	14214
##	5253	ENSG00000139239	chr12	62965325	62965969	+	645
##	5254	ENSG00000139266	chr12	57755098	57760407	+	5310
##	5255	ENSG00000139278	chr12	75480680	75503853	+	23174
##	5256	ENSG00000139289	chr12	76025447	76033932	-	8486
##	5257	ENSG00000139291	chr12	71686087	71705046	+	18960
##	5258	ENSG00000139318	chr12	89347232	89353271	-	6040
##	5259	ENSG00000139323	chr12	89419718	89526024	-	106307
##	5260	ENSG00000139324	chr12	88142296	88199887	+	57592
##	5261	ENSG00000139343	chr12	95858928	95903828	+	44901
##	5262	ENSG00000139350	chr12	96907223	96953777	+	46555
##	5263	ENSG00000139351	chr12	101728648	101739472	-	10825
##	5264	ENSG00000139354	chr12	100573683	100628286	+	54604
##	5265	ENSG00000139370	chr12	128793191	128823983	-	30793
##	5266	ENSG00000139372	chr12	103965804	103988874	+	23071
##	5267	ENSG00000139405	chr12	113185526	113192368	+	6843
##	5268	ENSG00000139428	chr12	109553737	109573874	-	20138
##	5269	ENSG00000139433	chr12	109850943	109880488	-	29546
##	5270	ENSG00000139436	chr12	109929792	109996389	-	66598
##	5271	ENSG00000139437	chr12	109900264	109983841	+	83578
##	5272	ENSG00000139438	chr12	109714228	109770507	+	56280
##	5273	ENSG00000139496	chr13	25301524	25349800	+	48277
##	5274	ENSG00000139505	chr13	25246201	25288009	-	41809
##	5275	ENSG00000139508	chr13	28700064	28718970	-	18907
##	5276	ENSG00000139514	chr13	29509410	29595688	-	86279
##	5277	ENSG00000139517	chr13	27545911	27620404	-	74494
##	5278	ENSG00000139531	chr12	55997180	56006641	+	9462
##	5279	ENSG00000139537	chr12	48904110	48931840	+	27731
##	5280	ENSG00000139546	chr12	53500921	53506431	+	5511
##	5281	ENSG00000139572	chr12	54362445	54364487	-	2043
##	5282	ENSG00000139579	chr12	56222015	56229854	+	7840
##	5283	ENSG00000139597	chr13	32400723	32428311	-	27589
##	5284	ENSG00000139613	chr12	56162983	56189567	-	26585
##	5285	ENSG00000139618	chr13	32315474	32400266	+	84793
##	5286	ENSG00000139620	chr12	48653401	48682238	-	28838
##	5287	ENSG00000139624	chr12	50129306	50167533	-	38228
##	5288	ENSG00000139625	chr12	53479669	53500063	-	20395
##	5289	ENSG00000139626	chr12	53191318	53207307	-	15990
##	5290	ENSG00000139629	chr12	51351247	51392867	-	41621
##	5291	ENSG00000139631	chr12	53157663	53180909	-	23247
##	5292	ENSG00000139636	chr12	49096551	49110900	-	14350
##	5293	ENSG00000139637	chr12	53299686	53307177	+	7492
##	5294	ENSG00000139641	chr12	56118250	56144671	+	26422
##	5295	ENSG00000139644	chr12	49707725	49764934	+	57210
##	5296	ENSG00000139645	chr12	56237807	56258391	-	20585
##	5297	ENSG00000139651	chr12	53180700	53195141	+	14442
##	5298	ENSG00000139668	chr13	51584455	51767707	+	183253

## 5299	ENSG00000139675	chr13	52640786	52643796	+	3011
## 5300	ENSG00000139679	chr13	48389567	48444704	-	55138
## 5301	ENSG00000139684	chr13	46771256	46797232	-	25977
## 5302	ENSG00000139687	chr13	48303751	48481986	+	178236
## 5303	ENSG00000139697	chr12	123289109	123364843	-	75735
## 5304	ENSG00000139718	chr12	121804180	121832584	+	28405
## 5305	ENSG00000139719	chr12	122229564	122266521	-	36958
## 5306	ENSG00000139722	chr12	122865328	122896444	-	31117
## 5307	ENSG00000139725	chr12	121777754	121803403	-	25650
## 5308	ENSG00000139726	chr12	122752774	122771064	+	18291
## 5309	ENSG00000139734	chr13	59665583	60163987	-	498405
## 5310	ENSG00000139737	chr13	77697854	77764242	+	66389
## 5311	ENSG00000139746	chr13	79311824	79406477	-	94654
## 5312	ENSG00000139793	chr13	97221434	97394120	+	172687
## 5313	ENSG00000139826	chr13	108218379	108234255	+	15877
## 5314	ENSG00000139832	chr13	110523066	110561733	-	38668
## 5315	ENSG00000139842	chr13	113208193	113267108	+	58916
## 5316	ENSG00000139880	chr14	23047062	23057538	-	10477
## 5317	ENSG00000139899	chr14	24426532	24430954	-	4423
## 5318	ENSG00000139908	chr14	24205697	24208362	+	2666
## 5319	ENSG00000139921	chr14	51240162	51257546	+	17385
## 5320	ENSG00000139926	chr14	51489100	51730727	+	241628
## 5321	ENSG00000139971	chr14	57999735	58298139	-	298405
## 5322	ENSG00000139977	chr14	57390544	57415917	+	25374
## 5323	ENSG00000139990	chr14	69050881	69153150	-	102270
## 5324	ENSG00000139998	chr14	64945814	64972776	-	26963
## 5325	ENSG00000140006	chr14	63597039	63641861	-	44823
## 5326	ENSG00000140022	chr14	81260656	81436465	-	175810
## 5327	ENSG00000140025	chr14	89794669	89954777	-	160109
## 5328	ENSG00000140030	chr14	88005124	88014811	+	9688
## 5329	ENSG00000140043	chr14	73851844	73886827	+	34984
## 5330	ENSG00000140044	chr14	75427716	75474111	+	46396
## 5331	ENSG00000140104	chr14	104985775	105010482	+	24708
## 5332	ENSG00000140105	chr14	100333788	100376805	-	43018
## 5333	ENSG00000140153	chr14	102139503	102224847	+	85345
## 5334	ENSG00000140157	chr15	22838641	22868384	+	29744
## 5335	ENSG00000140199	chr15	34229996	34338060	-	108065
## 5336	ENSG00000140259	chr15	43804492	43824802	-	20311
## 5337	ENSG00000140262	chr15	56918623	57299281	+	380659
## 5338	ENSG00000140263	chr15	45023104	45077185	+	54082
## 5339	ENSG00000140264	chr15	43777087	43802589	+	25503
## 5340	ENSG00000140265	chr15	43358172	43371025	-	12854
## 5341	ENSG00000140280	chr15	51723011	51751585	-	28575
## 5342	ENSG00000140284	chr15	50182196	50236395	+	54200
## 5343	ENSG00000140299	chr15	59659146	59689534	-	30389
## 5344	ENSG00000140307	chr15	59638062	59657541	-	19480
## 5345	ENSG00000140319	chr15	40035739	40039188	-	3450
## 5346	ENSG00000140320	chr15	40439721	40468242	+	28522
## 5347	ENSG00000140323	chr15	40358235	40378639	+	20405
## 5348	ENSG00000140326	chr15	42723559	42737126	-	13568
## 5349	ENSG00000140332	chr15	70047790	70098176	-	50387
## 5350	ENSG00000140350	chr15	68778535	68820897	-	42363
## 5351	ENSG00000140365	chr15	75335891	75343224	+	7334
## 5352	ENSG00000140367	chr15	75843285	75901078	+	57794

## 5353	ENSG00000140368	chr15	76993359	77037332	+	43974
## 5354	ENSG00000140374	chr15	76215355	76311472	-	96118
## 5355	ENSG00000140382	chr15	77420412	77485607	+	65196
## 5356	ENSG00000140386	chr15	76347904	76905444	-	557541
## 5357	ENSG00000140391	chr15	77041404	77083984	-	42581
## 5358	ENSG00000140395	chr15	78277835	78299794	-	21960
## 5359	ENSG00000140396	chr8	70109762	70403805	-	294044
## 5360	ENSG00000140398	chr15	75346955	75357114	+	10160
## 5361	ENSG00000140400	chr15	75353611	75368630	-	15020
## 5362	ENSG00000140406	chr15	81000944	81005788	+	4845
## 5363	ENSG00000140443	chr15	98648971	98964530	+	315560
## 5364	ENSG00000140450	chr15	97960698	97973838	+	13141
## 5365	ENSG00000140451	chr15	64815632	64825668	-	10037
## 5366	ENSG00000140455	chr15	63504511	63594640	+	90130
## 5367	ENSG00000140463	chr15	72686179	72738476	+	52298
## 5368	ENSG00000140464	chr15	73994673	74047812	+	53140
## 5369	ENSG00000140471	chr15	100559369	100603230	-	43862
## 5370	ENSG00000140474	chr15	74836116	74843346	-	7231
## 5371	ENSG00000140479	chr15	101297142	101525202	-	228061
## 5372	ENSG00000140497	chr15	74843730	74873365	-	29636
## 5373	ENSG00000140521	chr15	89305198	89334861	-	29664
## 5374	ENSG00000140525	chr15	89243949	89317261	+	73313
## 5375	ENSG00000140526	chr15	89087459	89202360	+	114902
## 5376	ENSG00000140534	chr15	89575482	89631056	+	55575
## 5377	ENSG00000140543	chr15	88494440	88546675	-	52236
## 5378	ENSG00000140548	chr15	90001392	90082206	+	80815
## 5379	ENSG00000140553	chr15	90930180	90954093	+	23914
## 5380	ENSG00000140563	chr15	94231538	94483952	+	252415
## 5381	ENSG00000140564	chr15	90868592	90883458	+	14867
## 5382	ENSG00000140575	chr15	90388218	90502243	+	114026
## 5383	ENSG00000140577	chr15	90529925	90645345	+	115421
## 5384	ENSG00000140598	chr15	82130230	82262763	-	132534
## 5385	ENSG00000140612	chr15	84669538	84716716	-	47179
## 5386	ENSG00000140632	chr16	4803203	4847342	-	44140
## 5387	ENSG00000140650	chr16	8788823	8849331	+	60509
## 5388	ENSG00000140675	chr16	31483002	31490860	+	7859
## 5389	ENSG00000140678	chr16	31355134	31382997	+	27864
## 5390	ENSG00000140688	chr16	31489471	31509309	-	19839
## 5391	ENSG00000140691	chr16	31458080	31467166	+	9087
## 5392	ENSG00000140718	chr16	53701692	54158512	+	456821
## 5393	ENSG00000140740	chr16	21952660	21983660	+	31001
## 5394	ENSG00000140743	chr16	22345936	22437165	-	91230
## 5395	ENSG00000140750	chr16	24919385	25015666	-	96282
## 5396	ENSG00000140829	chr16	72093562	72112912	+	19351
## 5397	ENSG00000140830	chr16	72044289	72094431	-	50143
## 5398	ENSG00000140835	chr16	71525233	71538746	+	13514
## 5399	ENSG00000140836	chr16	72782885	73059698	-	276814
## 5400	ENSG00000140848	chr16	57092537	57148367	+	55831
## 5401	ENSG00000140853	chr16	56989485	57083531	+	94047
## 5402	ENSG00000140854	chr16	57735730	57757250	+	21521
## 5403	ENSG00000140876	chr16	77722492	77742260	+	19769
## 5404	ENSG00000140905	chr16	81081961	81096403	-	14443
## 5405	ENSG00000140931	chr16	66603874	66613892	+	10019
## 5406	ENSG00000140939	chr16	67170154	67175735	+	5582

## 5407	ENSG00000140941	chr16	87383995	87404779	+	20785
## 5408	ENSG00000140943	chr16	84053761	84116906	-	63146
## 5409	ENSG00000140948	chr16	87406246	87492045	-	85800
## 5410	ENSG00000140968	chr16	85898803	85922609	+	23807
## 5411	ENSG00000140983	chr16	668086	674174	+	6089
## 5412	ENSG00000140987	chr16	3382081	3401065	-	18985
## 5413	ENSG00000140988	chr16	1962052	1964860	-	2809
## 5414	ENSG00000140990	chr16	1959508	1961975	+	2468
## 5415	ENSG00000140992	chr16	2537964	2603188	+	65225
## 5416	ENSG00000140993	chr16	3298832	3305729	-	6898
## 5417	ENSG00000140995	chr16	89947925	89968060	+	20136
## 5418	ENSG00000141002	chr16	89873586	89911384	+	37799
## 5419	ENSG00000141012	chr16	88813734	88856970	-	43237
## 5420	ENSG00000141013	chr16	90019629	90044975	+	25347
## 5421	ENSG00000141026	chr17	17476986	17493226	+	16241
## 5422	ENSG00000141027	chr17	16029157	16218185	-	189029
## 5423	ENSG00000141030	chr17	17246820	17281293	-	34474
## 5424	ENSG00000141034	chr17	18039292	18068404	+	29113
## 5425	ENSG00000141068	chr17	27456714	27626438	+	169725
## 5426	ENSG00000141076	chr16	69131291	69231130	+	99840
## 5427	ENSG00000141084	chr16	67723066	67806652	-	83587
## 5428	ENSG00000141086	chr16	67927640	67932414	-	4775
## 5429	ENSG00000141098	chr16	67674531	67719421	-	44891
## 5430	ENSG00000141101	chr16	69741867	69754940	-	13074
## 5431	ENSG00000141127	chr17	18840085	18931287	+	91203
## 5432	ENSG00000141179	chr17	55750979	55842830	+	91852
## 5433	ENSG00000141198	chr17	54899387	54961956	+	62570
## 5434	ENSG00000141219	chr17	73232233	73248947	+	16715
## 5435	ENSG00000141232	chr17	50862223	50867978	-	5756
## 5436	ENSG00000141252	chr17	508668	721717	-	213050
## 5437	ENSG00000141258	chr17	2337498	2381058	+	43561
## 5438	ENSG00000141279	chr17	47522942	47623276	+	100335
## 5439	ENSG00000141294	chr17	47831627	47837713	+	6087
## 5440	ENSG00000141295	chr17	47837692	47841333	-	3642
## 5441	ENSG00000141298	chr17	29625938	29930276	-	304339
## 5442	ENSG00000141337	chr17	68259182	68422731	+	163550
## 5443	ENSG00000141349	chr17	44070735	44076344	+	5610
## 5444	ENSG00000141367	chr17	59619689	59696956	+	77268
## 5445	ENSG00000141376	chr17	60677453	61392838	+	715386
## 5446	ENSG00000141378	chr17	59674636	59707626	-	32991
## 5447	ENSG00000141380	chr18	26016253	26091217	-	74965
## 5448	ENSG00000141384	chr18	26225936	26391685	+	165750
## 5449	ENSG00000141385	chr18	12328944	12377314	-	48371
## 5450	ENSG00000141391	chr18	12407896	12432238	+	24343
## 5451	ENSG00000141401	chr18	11981025	12030883	+	49859
## 5452	ENSG00000141404	chr18	11688956	11885685	+	196730
## 5453	ENSG00000141424	chr18	36108532	36129385	-	20854
## 5454	ENSG00000141425	chr18	35984387	36067576	-	83190
## 5455	ENSG00000141428	chr18	35972083	35979286	+	7204
## 5456	ENSG00000141429	chr18	35581117	35711834	+	130718
## 5457	ENSG00000141446	chr18	21529281	21600884	-	71604
## 5458	ENSG00000141447	chr18	24162044	24397880	-	235837
## 5459	ENSG00000141452	chr18	23503470	23531807	+	28338
## 5460	ENSG00000141456	chr17	4669774	4704337	-	34564

## 5461	ENSG00000141458	chr18	23506184	23586898	-	80715
## 5462	ENSG00000141480	chr17	4710489	4721499	+	11011
## 5463	ENSG00000141499	chr17	7686071	7703502	+	17432
## 5464	ENSG00000141503	chr17	4833388	4898061	+	64674
## 5465	ENSG00000141504	chr17	7626234	7627876	-	1643
## 5466	ENSG00000141505	chr17	7173431	7179564	-	6134
## 5467	ENSG00000141506	chr17	8878911	8965712	-	86802
## 5468	ENSG00000141510	chr17	7661779	7687550	-	25772
## 5469	ENSG00000141522	chr17	81867721	81871406	-	3686
## 5470	ENSG00000141524	chr17	78110458	78132407	-	21950
## 5471	ENSG00000141526	chr17	82228397	82261129	+	32733
## 5472	ENSG00000141540	chr17	74213514	74262020	+	48507
## 5473	ENSG00000141542	chr17	82654973	82698728	-	43756
## 5474	ENSG00000141543	chr17	80135214	80147183	-	11970
## 5475	ENSG00000141551	chr17	82239023	82273731	-	34709
## 5476	ENSG00000141552	chr17	81890790	81900991	+	10202
## 5477	ENSG00000141556	chr17	82752064	82945922	+	193859
## 5478	ENSG00000141560	chr17	82716683	82730328	+	13646
## 5479	ENSG00000141562	chr17	82458180	82490537	+	32358
## 5480	ENSG00000141564	chr17	80544819	80966371	+	421553
## 5481	ENSG00000141568	chr17	82519713	82644662	+	124950
## 5482	ENSG00000141569	chr17	75880335	75897003	-	16669
## 5483	ENSG00000141570	chr17	79792132	79801683	-	9552
## 5484	ENSG00000141576	chr17	76142453	76240373	-	97921
## 5485	ENSG00000141577	chr17	81189593	81222999	-	33407
## 5486	ENSG00000141580	chr17	82614562	82648553	-	33992
## 5487	ENSG00000141582	chr17	79833156	79839429	-	6274
## 5488	ENSG00000141622	chr18	46326809	46463140	+	136332
## 5489	ENSG00000141627	chr18	49041474	49461347	-	419874
## 5490	ENSG00000141642	chr18	50967991	50988121	+	20131
## 5491	ENSG00000141644	chr18	50266882	50281774	-	14893
## 5492	ENSG00000141646	chr18	51028394	51085045	+	56652
## 5493	ENSG00000141664	chr18	62523007	62587709	+	64703
## 5494	ENSG00000141682	chr18	59899948	59904306	+	4359
## 5495	ENSG00000141696	chr17	41801947	41812604	-	10658
## 5496	ENSG00000141698	chr17	41825181	41836263	-	11083
## 5497	ENSG00000141699	chr17	42579513	42610623	-	31111
## 5498	ENSG00000141736	chr17	39687914	39730426	+	42513
## 5499	ENSG00000141741	chr17	39728496	39730787	-	2292
## 5500	ENSG00000141753	chr17	40443461	40457731	+	14271
## 5501	ENSG00000141759	chr18	79970811	80033949	-	63139
## 5502	ENSG00000141854	chr19	14072536	14075062	+	2527
## 5503	ENSG00000141858	chr19	14087840	14091036	-	3197
## 5504	ENSG00000141867	chr19	15235519	15332545	-	97027
## 5505	ENSG00000141873	chr19	2732204	2740152	-	7949
## 5506	ENSG00000141905	chr19	3359563	3469217	+	109655
## 5507	ENSG00000141933	chr19	507497	519654	+	12158
## 5508	ENSG00000141956	chr21	41798225	41879482	-	81258
## 5509	ENSG00000141959	chr21	44300051	44327376	+	27326
## 5510	ENSG00000141965	chr19	4791681	4801273	+	9593
## 5511	ENSG00000141968	chr19	6772714	6857366	+	84653
## 5512	ENSG00000141971	chr19	17405722	17433724	+	28003
## 5513	ENSG00000141979	chr19	16479067	16628204	-	149138
## 5514	ENSG00000141985	chr19	4360370	4400547	-	40178

## 5515	ENSG00000141994	chr19	5784832	5791238	-	6407
## 5516	ENSG00000142002	chr19	4675224	4724673	-	49450
## 5517	ENSG00000142039	chr19	41310189	41324883	+	14695
## 5518	ENSG00000142046	chr19	41350911	41384083	+	33173
## 5519	ENSG00000142065	chr19	36334453	36379199	-	44747
## 5520	ENSG00000142082	chr11	215458	236931	-	21474
## 5521	ENSG00000142089	chr11	319669	327537	-	7869
## 5522	ENSG00000142102	chr11	289135	296107	+	6973
## 5523	ENSG00000142149	chr21	31873315	32044633	+	171319
## 5524	ENSG00000142166	chr21	33324477	33359862	+	35386
## 5525	ENSG00000142168	chr21	31659622	31668931	+	9310
## 5526	ENSG00000142185	chr21	44350163	44443081	+	92919
## 5527	ENSG00000142186	chr11	65525077	65538704	+	13628
## 5528	ENSG00000142188	chr21	33432485	33480011	-	47527
## 5529	ENSG00000142192	chr21	25880550	26171128	-	290579
## 5530	ENSG00000142197	chr21	36156782	36294274	+	137493
## 5531	ENSG00000142207	chr21	32311018	32393026	-	82009
## 5532	ENSG00000142208	chr14	104769349	104795751	-	26403
## 5533	ENSG00000142227	chr19	48321509	48330553	+	9045
## 5534	ENSG00000142230	chr19	47113274	47210636	+	97363
## 5535	ENSG00000142252	chr19	45079195	45091524	+	12330
## 5536	ENSG00000142327	chr2	240565804	240581372	+	15569
## 5537	ENSG00000142330	chr2	240586716	240617705	+	30990
## 5538	ENSG00000142347	chr19	8520790	8577577	-	56788
## 5539	ENSG00000142396	chr19	58305319	58315663	+	10345
## 5540	ENSG00000142409	chr19	56087366	56121280	-	33915
## 5541	ENSG00000142444	chr19	10928733	10933535	+	4803
## 5542	ENSG00000142453	chr19	10871513	10923070	+	51558
## 5543	ENSG00000142459	chr19	7830233	7864976	+	34744
## 5544	ENSG00000142507	chr17	4796144	4798503	+	2360
## 5545	ENSG00000142512	chr19	51410021	51417803	-	7783
## 5546	ENSG00000142528	chr19	50025714	50053414	+	27701
## 5547	ENSG00000142530	chr19	50466785	50476753	-	9969
## 5548	ENSG00000142534	chr19	49496365	49499689	+	3325
## 5549	ENSG00000142539	chr19	50415799	50428409	+	12611
## 5550	ENSG00000142541	chr19	49487554	49492308	+	4755
## 5551	ENSG00000142544	chr19	51097606	51108370	-	10765
## 5552	ENSG00000142546	chr19	49555711	49590262	-	34552
## 5553	ENSG00000142552	chr19	49527618	49546962	+	19345
## 5554	ENSG00000142583	chr1	9035107	9088478	-	53372
## 5555	ENSG00000142599	chr1	8352397	8817643	-	465247
## 5556	ENSG00000142632	chr1	16197854	16212609	-	14756
## 5557	ENSG00000142634	chr1	15409895	15430343	+	20449
## 5558	ENSG00000142655	chr1	10472288	10630758	+	158471
## 5559	ENSG00000142657	chr1	10398592	10420144	+	21553
## 5560	ENSG00000142669	chr1	26279176	26281522	+	2347
## 5561	ENSG00000142675	chr1	26177403	26189886	+	12484
## 5562	ENSG00000142676	chr1	23691779	23696425	+	4647
## 5563	ENSG00000142684	chr1	26169871	26170873	+	1003
## 5564	ENSG00000142686	chr1	35713875	35719472	-	5598
## 5565	ENSG00000142687	chr1	35433490	35557950	-	124461
## 5566	ENSG00000142694	chr1	36322031	36324154	-	2124
## 5567	ENSG00000142731	chr4	127880861	127899195	+	18335
## 5568	ENSG00000142733	chr1	27355184	27366892	-	11709



## 5569	ENSG00000142751	chr1	26876133	26890297	-	14165
## 5570	ENSG00000142765	chr1	27342020	27353937	+	11918
## 5571	ENSG00000142784	chr1	27234516	27308633	+	74118
## 5572	ENSG00000142794	chr1	21440128	21485005	+	44878
## 5573	ENSG00000142798	chr1	21822245	21937297	-	115053
## 5574	ENSG00000142856	chr1	63440770	63593721	-	152952
## 5575	ENSG00000142864	chr1	67407810	67430415	-	22606
## 5576	ENSG00000142867	chr1	85266248	85277090	-	10843
## 5577	ENSG00000142871	chr1	85580761	85583962	+	3202
## 5578	ENSG00000142875	chr1	84078062	84238498	+	160437
## 5579	ENSG00000142892	chr1	77088990	77219430	-	130441
## 5580	ENSG00000142937	chr1	44775251	44778779	+	3529
## 5581	ENSG00000142945	chr1	44739818	44767767	+	27950
## 5582	ENSG00000142949	chr1	43525187	43623666	+	98480
## 5583	ENSG00000142961	chr1	46607715	46616891	-	9177
## 5584	ENSG00000143013	chr1	87328468	87348923	+	20456
## 5585	ENSG00000143033	chr1	93079235	93139081	+	59847
## 5586	ENSG00000143067	chr1	119619422	119647773	-	28352
## 5587	ENSG00000143093	chr1	110031577	110074641	+	43065
## 5588	ENSG00000143106	chr1	109399031	109426427	-	27397
## 5589	ENSG00000143110	chr1	111473792	111478512	+	4721
## 5590	ENSG00000143119	chr1	110873154	110899928	+	26775
## 5591	ENSG00000143126	chr1	109250019	109275750	+	25732
## 5592	ENSG00000143149	chr1	165662216	165698863	-	36648
## 5593	ENSG00000143153	chr1	169105697	169132722	+	27026
## 5594	ENSG00000143155	chr1	168178933	168202114	+	23182
## 5595	ENSG00000143156	chr1	169132531	169367967	-	235437
## 5596	ENSG00000143157	chr1	166839447	166856344	+	16898
## 5597	ENSG00000143158	chr1	167916729	167937040	-	20312
## 5598	ENSG00000143162	chr1	167529677	167553767	-	24091
## 5599	ENSG00000143164	chr1	167935783	168075843	+	140061
## 5600	ENSG00000143167	chr1	167052836	167166479	-	113644
## 5601	ENSG00000143178	chr1	168281040	168314426	+	33387
## 5602	ENSG00000143179	chr1	165827531	165911618	+	84088
## 5603	ENSG00000143183	chr1	165724293	165827755	-	103463
## 5604	ENSG00000143190	chr1	167220829	167427345	+	206517
## 5605	ENSG00000143198	chr1	165630861	165661796	+	30936
## 5606	ENSG00000143207	chr1	175944831	176207493	-	262663
## 5607	ENSG00000143222	chr1	161152776	161158856	+	6081
## 5608	ENSG00000143224	chr1	161166410	161178013	+	11604
## 5609	ENSG00000143226	chr1	161505430	161524013	+	18584
## 5610	ENSG00000143228	chr1	163266576	163355764	+	89189
## 5611	ENSG00000143252	chr1	161314257	161375340	+	61084
## 5612	ENSG00000143256	chr1	161100556	161118111	-	17556
## 5613	ENSG00000143257	chr1	161229666	161238302	-	8637
## 5614	ENSG00000143258	chr1	161159450	161165723	+	6274
## 5615	ENSG00000143294	chr1	156750610	156800817	+	50208
## 5616	ENSG00000143303	chr1	156728442	156736960	+	8519
## 5617	ENSG00000143314	chr1	156737303	156741590	-	4288
## 5618	ENSG00000143315	chr1	160027673	160031991	-	4319
## 5619	ENSG00000143319	chr1	156721891	156728799	-	6909
## 5620	ENSG00000143321	chr1	156742107	156766925	-	24819
## 5621	ENSG00000143322	chr1	179099327	179229684	-	130358
## 5622	ENSG00000143324	chr1	180632004	180890251	+	258248

## 5623	ENSG00000143333	chr1	182598623	182604408	-	5786
## 5624	ENSG00000143337	chr1	179882042	179925000	+	42959
## 5625	ENSG00000143353	chr1	219173844	219212865	+	39022
## 5626	ENSG00000143363	chr1	151008420	151035713	+	27294
## 5627	ENSG00000143368	chr1	149923317	149928344	-	5028
## 5628	ENSG00000143369	chr1	150508062	150513789	+	5728
## 5629	ENSG00000143373	chr1	151281618	151292180	+	10563
## 5630	ENSG00000143374	chr1	150487364	150507609	+	20246
## 5631	ENSG00000143376	chr1	151612065	151699091	+	87027
## 5632	ENSG00000143379	chr1	150926263	150964744	+	38482
## 5633	ENSG00000143382	chr1	150549369	150560937	+	11569
## 5634	ENSG00000143384	chr1	150574551	150579738	-	5188
## 5635	ENSG00000143387	chr1	150796208	150808323	-	12116
## 5636	ENSG00000143390	chr1	151340640	151347357	-	6718
## 5637	ENSG00000143393	chr1	151291797	151327715	-	35919
## 5638	ENSG00000143398	chr1	151197949	151249536	+	51588
## 5639	ENSG00000143401	chr1	150218417	150236156	-	17740
## 5640	ENSG00000143409	chr1	150996086	151008375	-	12290
## 5641	ENSG00000143412	chr1	150982017	150995634	+	13618
## 5642	ENSG00000143418	chr1	150960583	150975004	-	14422
## 5643	ENSG00000143420	chr1	150600851	150629612	-	28762
## 5644	ENSG00000143434	chr1	151131685	151146664	-	14980
## 5645	ENSG00000143436	chr1	151759643	151763564	-	3922
## 5646	ENSG00000143437	chr1	150809705	150876768	-	67064
## 5647	ENSG00000143442	chr1	151402724	151459465	-	56742
## 5648	ENSG00000143443	chr1	151047740	151051986	+	4247
## 5649	ENSG00000143450	chr1	151762899	151771334	+	8436
## 5650	ENSG00000143457	chr1	150646225	150697144	-	50920
## 5651	ENSG00000143458	chr1	151070578	151125542	+	54965
## 5652	ENSG00000143476	chr1	212035553	212107400	+	71848
## 5653	ENSG00000143479	chr1	206635536	206684419	+	48884
## 5654	ENSG00000143486	chr1	206571292	206612463	-	41172
## 5655	ENSG00000143493	chr1	211940399	212035542	-	95144
## 5656	ENSG00000143494	chr1	212950520	212992037	+	41518
## 5657	ENSG00000143498	chr1	222557902	222589933	-	32032
## 5658	ENSG00000143499	chr1	214281102	214337131	+	56030
## 5659	ENSG00000143507	chr1	221701424	221742176	-	40753
## 5660	ENSG00000143514	chr1	223779899	223845972	-	66074
## 5661	ENSG00000143515	chr1	154325553	154351307	+	25755
## 5662	ENSG00000143537	chr1	155050566	155062775	+	12210
## 5663	ENSG00000143543	chr1	153974269	153977688	-	3420
## 5664	ENSG00000143546	chr1	153390032	153391188	-	1157
## 5665	ENSG00000143549	chr1	154155304	154194648	-	39345
## 5666	ENSG00000143553	chr1	153658654	153661830	+	3177
## 5667	ENSG00000143569	chr1	154220179	154271510	+	51332
## 5668	ENSG00000143570	chr1	153959099	153968184	-	9086
## 5669	ENSG00000143575	chr1	154272511	154275875	+	3365
## 5670	ENSG00000143578	chr1	153967534	153974363	+	6830
## 5671	ENSG00000143590	chr1	155078872	155087538	+	8667
## 5672	ENSG00000143612	chr1	154206706	154220628	-	13923
## 5673	ENSG00000143614	chr1	153789030	153923360	-	134331
## 5674	ENSG00000143621	chr1	153661788	153671048	-	9261
## 5675	ENSG00000143622	chr1	155897808	155911404	-	13597
## 5676	ENSG00000143624	chr1	153728067	153774808	+	46742

## 5677	ENSG00000143633	chr1	231223763	231241187	-	17425
## 5678	ENSG00000143641	chr1	230057990	230282124	+	224135
## 5679	ENSG00000143643	chr1	230906243	230978875	-	72633
## 5680	ENSG00000143653	chr1	246724047	246768137	+	44091
## 5681	ENSG00000143669	chr1	235661041	235883640	-	222600
## 5682	ENSG00000143674	chr1	233327768	233385148	+	57381
## 5683	ENSG00000143702	chr1	243124428	243255348	-	130921
## 5684	ENSG00000143727	chr2	264140	278283	+	14144
## 5685	ENSG00000143740	chr1	227728539	227781231	+	52693
## 5686	ENSG00000143742	chr1	225777813	225790466	+	12654
## 5687	ENSG00000143748	chr1	224227334	224330387	-	103054
## 5688	ENSG00000143751	chr1	225982702	225999331	-	16630
## 5689	ENSG00000143753	chr1	224175756	224193441	+	17686
## 5690	ENSG00000143756	chr1	224114087	224162047	+	47961
## 5691	ENSG00000143761	chr1	228082660	228099212	+	16553
## 5692	ENSG00000143771	chr1	224356850	224379459	+	22610
## 5693	ENSG00000143772	chr1	226631690	226739323	-	107634
## 5694	ENSG00000143774	chr1	228139962	228148984	+	9023
## 5695	ENSG00000143786	chr1	224434660	224740549	+	305890
## 5696	ENSG00000143793	chr1	228100726	228105411	-	4686
## 5697	ENSG00000143797	chr2	8852690	9003813	-	151124
## 5698	ENSG00000143799	chr1	226360691	226408079	-	47389
## 5699	ENSG00000143801	chr1	226870184	226896105	+	25922
## 5700	ENSG00000143811	chr1	225919877	225924340	-	4464
## 5701	ENSG00000143815	chr1	225401502	225428925	-	27424
## 5702	ENSG00000143819	chr1	225810092	225845563	+	35472
## 5703	ENSG00000143847	chr1	203026498	203078740	+	52243
## 5704	ENSG00000143851	chr1	202147013	202161588	-	14576
## 5705	ENSG00000143862	chr1	202133404	202144743	-	11340
## 5706	ENSG00000143870	chr2	10783391	10837977	-	54587
## 5707	ENSG00000143878	chr2	20447074	20449445	+	2372
## 5708	ENSG00000143882	chr2	10721649	10785110	+	63462
## 5709	ENSG00000143889	chr2	38561978	38603586	-	41609
## 5710	ENSG00000143924	chr2	42169350	42332548	+	163199
## 5711	ENSG00000143933	chr2	47160082	47176601	-	16520
## 5712	ENSG00000143942	chr2	53767792	53775196	+	7405
## 5713	ENSG00000143947	chr2	55231903	55235853	+	3951
## 5714	ENSG00000143951	chr2	63121383	63827843	-	706461
## 5715	ENSG00000143952	chr2	63892146	64019072	-	126927
## 5716	ENSG00000143970	chr2	25733753	25878516	-	144764
## 5717	ENSG00000143971	chr2	67397319	67410545	+	13227
## 5718	ENSG00000143977	chr2	70281362	70293771	-	12410
## 5719	ENSG00000143994	chr2	27123789	27130812	+	7024
## 5720	ENSG00000144021	chr2	96266132	96273349	+	7218
## 5721	ENSG00000144026	chr2	95147330	95165413	-	18084
## 5722	ENSG00000144028	chr2	96274336	96305515	-	31180
## 5723	ENSG00000144029	chr2	95087207	95149434	-	62228
## 5724	ENSG00000144034	chr2	73729104	73737400	-	8297
## 5725	ENSG00000144036	chr2	72175984	72826041	-	650058
## 5726	ENSG00000144040	chr2	72942036	73075619	-	133584
## 5727	ENSG00000144043	chr2	70985938	70994945	-	9008
## 5728	ENSG00000144048	chr2	73762184	73780157	-	17974
## 5729	ENSG00000144118	chr2	120240064	120294713	+	54650
## 5730	ENSG00000144120	chr2	119679167	119686507	+	7341

## 5731	ENSG00000144130	chr2	112721486	112742879	+	21394
## 5732	ENSG00000144134	chr2	113627229	113643396	+	16168
## 5733	ENSG00000144136	chr2	112645857	112663827	+	17971
## 5734	ENSG00000144158	chr2	113657908	113658675	+	768
## 5735	ENSG00000144161	chr2	112211525	112255136	-	43612
## 5736	ENSG00000144182	chr2	99154955	99163157	+	8203
## 5737	ENSG00000144199	chr2	97083583	97094882	-	11300
## 5738	ENSG00000144218	chr2	99545419	100142739	-	597321
## 5739	ENSG00000144224	chr2	135741619	135785055	+	43437
## 5740	ENSG00000144228	chr2	138501801	138573547	+	71747
## 5741	ENSG00000144231	chr2	127843551	127858157	-	14607
## 5742	ENSG00000144233	chr2	127861630	127885922	-	24293
## 5743	ENSG00000144283	chr2	158456964	158682879	+	225916
## 5744	ENSG00000144306	chr2	174395730	174429575	+	33846
## 5745	ENSG00000144320	chr2	175923892	176002839	-	78948
## 5746	ENSG00000144354	chr2	173354820	173368997	+	14178
## 5747	ENSG00000144357	chr2	169827458	170084131	+	256674
## 5748	ENSG00000144362	chr2	169694454	169701708	+	7255
## 5749	ENSG00000144369	chr2	186693971	186765965	+	71995
## 5750	ENSG00000144381	chr2	197486581	197516737	-	30157
## 5751	ENSG00000144395	chr2	196639554	196763490	+	123937
## 5752	ENSG00000144401	chr2	207580631	207625928	-	45298
## 5753	ENSG00000144407	chr2	208359714	208854503	+	494790
## 5754	ENSG00000144426	chr2	203014879	203226378	+	211500
## 5755	ENSG00000144445	chr2	210021423	210171383	-	149961
## 5756	ENSG00000144455	chr3	3700814	4467281	-	766468
## 5757	ENSG00000144468	chr2	226835581	226999215	+	163635
## 5758	ENSG00000144485	chr2	238238267	238240662	-	2396
## 5759	ENSG00000144504	chr2	240479422	240569209	-	89788
## 5760	ENSG00000144524	chr2	231781671	231809254	+	27584
## 5761	ENSG00000144535	chr2	231961245	232344350	+	383106
## 5762	ENSG00000144554	chr3	10026414	10101930	+	75517
## 5763	ENSG00000144559	chr3	11790442	11846919	-	56478
## 5764	ENSG00000144560	chr3	11556070	11771350	-	215281
## 5765	ENSG00000144566	chr3	19947079	19985175	+	38097
## 5766	ENSG00000144567	chr2	219176225	219185479	+	9255
## 5767	ENSG00000144579	chr2	218398256	218405941	+	7686
## 5768	ENSG00000144580	chr2	218568580	218597080	+	28501
## 5769	ENSG00000144589	chr2	219597860	219616451	+	18592
## 5770	ENSG00000144591	chr2	219498867	219506989	+	8123
## 5771	ENSG00000144597	chr3	15427355	15450635	+	23281
## 5772	ENSG00000144635	chr3	32525971	32570874	-	44904
## 5773	ENSG00000144647	chr3	43079232	43106076	-	26845
## 5774	ENSG00000144649	chr3	42979267	43060211	+	80945
## 5775	ENSG00000144655	chr3	39141855	39154562	-	12708
## 5776	ENSG00000144659	chr3	39383348	39397351	+	14004
## 5777	ENSG00000144668	chr3	37452115	37823514	+	371400
## 5778	ENSG00000144674	chr3	37243177	37366751	+	123575
## 5779	ENSG00000144677	chr3	37861960	37984469	+	122510
## 5780	ENSG00000144711	chr3	12897220	13073117	-	175898
## 5781	ENSG00000144712	chr3	12796472	12871916	+	75445
## 5782	ENSG00000144713	chr3	12834485	12841588	-	7104
## 5783	ENSG00000144724	chr3	61561569	62297613	+	736045
## 5784	ENSG00000144736	chr3	72749277	72861914	-	112638

## 5785	ENSG00000144741	chr3	66133610	66388116	+	254507
## 5786	ENSG00000144744	chr3	69054730	69080408	-	25679
## 5787	ENSG00000144746	chr3	69084944	69106066	+	21123
## 5788	ENSG00000144747	chr3	69019827	69052303	-	32477
## 5789	ENSG00000144785	chr12	56285916	56316059	-	30144
## 5790	ENSG00000144791	chr3	45555394	45686338	+	130945
## 5791	ENSG00000144802	chr3	101827991	101861022	+	33032
## 5792	ENSG00000144815	chr3	101779202	101827392	+	48191
## 5793	ENSG00000144827	chr3	111979010	111993363	+	14354
## 5794	ENSG00000144840	chr3	120686681	120742993	-	56313
## 5795	ENSG00000144843	chr3	119579268	119589945	+	10678
## 5796	ENSG00000144848	chr3	112532509	112562046	-	29538
## 5797	ENSG00000144867	chr3	133784033	133825772	+	41740
## 5798	ENSG00000144893	chr3	151085697	151437072	+	351376
## 5799	ENSG00000144895	chr3	150546678	150584242	+	37565
## 5800	ENSG00000144909	chr3	125528858	125595090	-	66233
## 5801	ENSG00000144959	chr3	172630249	172711218	-	80970
## 5802	ENSG00000145012	chr3	188153284	188890671	+	737388
## 5803	ENSG00000145014	chr3	194587673	194633689	-	46017
## 5804	ENSG00000145016	chr3	197671393	197749727	-	78335
## 5805	ENSG00000145020	chr3	49416775	49422753	-	5979
## 5806	ENSG00000145022	chr3	49412206	49416475	+	4270
## 5807	ENSG00000145029	chr3	49422946	49429326	-	6381
## 5808	ENSG00000145041	chr3	51395867	51500002	-	104136
## 5809	ENSG00000145050	chr3	51385047	51389397	+	4351
## 5810	ENSG00000145075	chr3	180602858	180871005	-	268148
## 5811	ENSG00000145087	chr3	120908072	121424761	+	516690
## 5812	ENSG00000145088	chr3	121835183	121886526	+	51344
## 5813	ENSG00000145147	chr4	20253260	20620561	+	367302
## 5814	ENSG00000145191	chr3	184135038	184145311	+	10274
## 5815	ENSG00000145194	chr3	184249650	184293031	+	43382
## 5816	ENSG00000145214	chr4	958887	986895	-	28009
## 5817	ENSG00000145216	chr4	53377643	53460861	+	83219
## 5818	ENSG00000145217	chr4	979073	993440	-	14368
## 5819	ENSG00000145220	chr4	4267701	4290169	-	22469
## 5820	ENSG00000145241	chr4	67468748	67545606	-	76859
## 5821	ENSG00000145246	chr4	47485288	47593486	+	108199
## 5822	ENSG00000145247	chr4	48885019	48906937	-	21919
## 5823	ENSG00000145248	chr4	48483343	48489196	+	5854
## 5824	ENSG00000145284	chr4	82629539	82798857	-	169319
## 5825	ENSG00000145287	chr4	83090048	83137075	-	47028
## 5826	ENSG00000145293	chr4	82430562	82461091	+	30530
## 5827	ENSG00000145331	chr4	99546709	99564032	-	17324
## 5828	ENSG00000145332	chr4	87160103	87240314	-	80212
## 5829	ENSG00000145335	chr4	89724099	89838315	-	114217
## 5830	ENSG00000145337	chr4	88520985	88523813	-	2829
## 5831	ENSG00000145348	chr4	106041599	106321495	-	279897
## 5832	ENSG00000145349	chr4	113451032	113761927	-	310896
## 5833	ENSG00000145354	chr4	102868978	102889242	+	20265
## 5834	ENSG00000145362	chr4	112818109	113383740	+	565632
## 5835	ENSG00000145365	chr4	112274542	112285903	-	11362
## 5836	ENSG00000145375	chr4	122923074	123319450	+	396377
## 5837	ENSG00000145386	chr4	121816444	121823933	-	7490
## 5838	ENSG00000145388	chr4	118685368	118715433	+	30066

## 5839	ENSG00000145390	chr4	119212587	119295517	+	82931
## 5840	ENSG00000145391	chr4	139495941	139606699	-	110759
## 5841	ENSG00000145414	chr4	163110073	163166921	-	56849
## 5842	ENSG00000145416	chr4	163524298	164384050	-	859753
## 5843	ENSG00000145425	chr4	151099573	151104652	+	5080
## 5844	ENSG00000145428	chr4	153710125	153760235	-	50111
## 5845	ENSG00000145431	chr4	156760454	156971394	-	210941
## 5846	ENSG00000145439	chr4	168863770	169010275	-	146506
## 5847	ENSG00000145476	chr4	186191520	186213456	+	21937
## 5848	ENSG00000145494	chr5	1801400	1816605	+	15206
## 5849	ENSG00000145495	chr5	10353703	10440388	+	86686
## 5850	ENSG00000145545	chr5	6633343	6674386	+	41044
## 5851	ENSG00000145555	chr5	16661914	16936276	-	274363
## 5852	ENSG00000145569	chr5	14581775	14615007	+	33233
## 5853	ENSG00000145592	chr5	40825262	40835335	-	10074
## 5854	ENSG00000145604	chr5	36151989	36184319	+	32331
## 5855	ENSG00000145623	chr5	38845858	38945596	+	99739
## 5856	ENSG00000145632	chr5	58453982	58460260	-	6279
## 5857	ENSG00000145675	chr5	68215720	68301821	+	86102
## 5858	ENSG00000145685	chr5	78485215	78770021	-	284807
## 5859	ENSG00000145687	chr5	81413021	81751797	-	338777
## 5860	ENSG00000145703	chr5	76403249	76708132	+	304884
## 5861	ENSG00000145715	chr5	87267888	87391931	+	124044
## 5862	ENSG00000145723	chr5	103086000	103120151	-	34152
## 5863	ENSG00000145725	chr5	103120149	103212799	+	92651
## 5864	ENSG00000145730	chr5	102753981	103031105	+	277125
## 5865	ENSG00000145734	chr5	71455615	71567820	+	112206
## 5866	ENSG00000145736	chr5	71032670	71067689	-	35020
## 5867	ENSG00000145740	chr5	69093646	69131069	+	37424
## 5868	ENSG00000145741	chr5	73498408	73505635	+	7228
## 5869	ENSG00000145743	chr5	107859035	108382098	-	523064
## 5870	ENSG00000145779	chr5	119268692	119399688	+	130997
## 5871	ENSG00000145780	chr5	115520908	115544894	-	23987
## 5872	ENSG00000145781	chr5	116084991	116412762	+	327772
## 5873	ENSG00000145782	chr5	115828200	115841858	-	13659
## 5874	ENSG00000145817	chr5	144158159	144170714	-	12556
## 5875	ENSG00000145819	chr5	142770384	143229011	+	458628
## 5876	ENSG00000145833	chr5	134758771	134855133	+	96363
## 5877	ENSG00000145860	chr5	159157409	159210053	-	52645
## 5878	ENSG00000145868	chr5	148383935	148442836	+	58902
## 5879	ENSG00000145882	chr5	149358007	149369653	+	11647
## 5880	ENSG00000145901	chr5	151029945	151093577	-	63633
## 5881	ENSG00000145907	chr5	151771045	151812785	+	41741
## 5882	ENSG00000145908	chr5	150894392	150904983	-	10592
## 5883	ENSG00000145912	chr5	178149460	178153967	-	4508
## 5884	ENSG00000145916	chr5	178130996	178150565	+	19570
## 5885	ENSG00000145919	chr5	173607514	173616660	-	9147
## 5886	ENSG00000145979	chr6	13266542	13328583	-	62042
## 5887	ENSG00000145982	chr6	5261044	5771580	+	510537
## 5888	ENSG00000145990	chr6	13357830	13487662	-	129833
## 5889	ENSG00000145996	chr6	20534457	21232404	+	697948
## 5890	ENSG00000146007	chr5	140698680	140706676	+	7997
## 5891	ENSG00000146063	chr5	181222499	181235809	+	13311
## 5892	ENSG00000146066	chr5	176388747	176389771	+	1025

## 5893	ENSG00000146067	chr5	177519788	177554541	-	34754
## 5894	ENSG00000146072	chr6	47231532	47309905	-	78374
## 5895	ENSG00000146083	chr5	176526697	176538025	-	11329
## 5896	ENSG00000146085	chr6	49430360	49463191	-	32832
## 5897	ENSG00000146094	chr5	177501907	177511274	-	9368
## 5898	ENSG00000146109	chr6	26596952	26600744	+	3793
## 5899	ENSG00000146143	chr6	57314805	57646849	+	332045
## 5900	ENSG00000146223	chr6	42879618	42889925	+	10308
## 5901	ENSG00000146232	chr6	44258166	44265788	-	7623
## 5902	ENSG00000146242	chr6	82363206	82370828	+	7623
## 5903	ENSG00000146243	chr6	78867472	78946440	+	78969
## 5904	ENSG00000146247	chr6	78935867	79078236	-	142370
## 5905	ENSG00000146263	chr6	97142161	97283217	-	141057
## 5906	ENSG00000146278	chr6	89080751	89085160	+	4410
## 5907	ENSG00000146281	chr6	89146050	89165565	+	19516
## 5908	ENSG00000146282	chr6	87514378	87590003	-	75626
## 5909	ENSG00000146350	chr6	121079494	121334745	-	255252
## 5910	ENSG00000146376	chr6	129576132	129710225	-	134094
## 5911	ENSG00000146386	chr6	139028682	139043302	+	14621
## 5912	ENSG00000146410	chr6	136231024	136250335	-	19312
## 5913	ENSG00000146414	chr6	145864245	145964423	-	100179
## 5914	ENSG00000146416	chr6	143060496	143340304	+	279809
## 5915	ENSG00000146425	chr6	158636474	158644739	-	8266
## 5916	ENSG00000146426	chr6	154832697	155257723	+	425027
## 5917	ENSG00000146433	chr6	158536436	158635428	+	98993
## 5918	ENSG00000146457	chr6	159725585	159756319	+	30735
## 5919	ENSG00000146463	chr1	35268967	35422058	+	153092
## 5920	ENSG00000146476	chr6	151452258	151470101	+	17844
## 5921	ENSG00000146530	chr7	12330885	12403941	-	73057
## 5922	ENSG00000146535	chr7	2728112	2844324	-	116213
## 5923	ENSG00000146540	chr7	996986	1138260	-	141275
## 5924	ENSG00000146556	chr2	113588550	113599043	+	10494
## 5925	ENSG00000146574	chr7	6794134	6826770	-	32637
## 5926	ENSG00000146576	chr7	6590017	6608726	+	18710
## 5927	ENSG00000146587	chr7	5045821	5069488	+	23668
## 5928	ENSG00000146670	chr11	65066300	65084164	-	17865
## 5929	ENSG00000146676	chr7	44876293	44885361	-	9069
## 5930	ENSG00000146677	chr7	44467897	44468304	+	408
## 5931	ENSG00000146700	chr7	76389334	76409695	-	20362
## 5932	ENSG00000146701	chr7	76048051	76067508	+	19458
## 5933	ENSG00000146729	chr7	55951793	56000181	+	48389
## 5934	ENSG00000146731	chr7	56051630	56063989	+	12360
## 5935	ENSG00000146733	chr7	56011051	56051604	-	40554
## 5936	ENSG00000146757	chr7	65373799	65401135	+	27337
## 5937	ENSG00000146776	chr7	105605067	105876604	-	271538
## 5938	ENSG00000146802	chr7	112762382	112790592	-	28211
## 5939	ENSG00000146826	chr7	100154420	100158715	-	4296
## 5940	ENSG00000146828	chr7	100826820	100867009	+	40190
## 5941	ENSG00000146830	chr7	100679507	100689448	-	9942
## 5942	ENSG00000146833	chr7	99876958	99919600	-	42643
## 5943	ENSG00000146834	chr7	100428790	100434126	+	5337
## 5944	ENSG00000146842	chr7	130164715	130207770	-	43056
## 5945	ENSG00000146858	chr7	139025706	139036029	-	10324
## 5946	ENSG00000146859	chr7	135148072	135166215	+	18144

## 5947	ENSG00000146872	chr17	62458658	62615481	+	156824
## 5948	ENSG00000146904	chr7	143390289	143408892	-	18604
## 5949	ENSG00000146909	chr7	156949723	156973182	+	23460
## 5950	ENSG00000146918	chr7	158631311	158704829	-	73519
## 5951	ENSG00000146963	chr7	139340359	139423457	+	83099
## 5952	ENSG00000146966	chr7	140518420	140673993	-	155574
## 5953	ENSG00000147010	chrX	19533975	19887601	-	353627
## 5954	ENSG00000147036	chrX	37571569	37684463	+	112895
## 5955	ENSG00000147044	chrX	41514934	41923463	-	408530
## 5956	ENSG00000147050	chrX	44873177	45112602	+	239426
## 5957	ENSG00000147065	chrX	65588377	65741931	+	153555
## 5958	ENSG00000147082	chrX	50202713	50351910	+	149198
## 5959	ENSG00000147099	chrX	72329516	72573103	-	243588
## 5960	ENSG00000147100	chrX	74421461	74533917	+	112457
## 5961	ENSG00000147118	chrX	47974851	48003978	-	29128
## 5962	ENSG00000147119	chrX	46573784	46598408	+	24625
## 5963	ENSG00000147121	chrX	46446857	46497422	+	50566
## 5964	ENSG00000147123	chrX	47142216	47145504	-	3289
## 5965	ENSG00000147124	chrX	47445879	47482946	-	37068
## 5966	ENSG00000147130	chrX	71239624	71255146	-	15523
## 5967	ENSG00000147133	chrX	71366239	71532374	+	166136
## 5968	ENSG00000147140	chrX	71283192	71301168	+	17977
## 5969	ENSG00000147144	chrX	49053572	49069857	+	16286
## 5970	ENSG00000147155	chrX	48521158	48528716	+	7559
## 5971	ENSG00000147162	chrX	71533083	71575897	+	42815
## 5972	ENSG00000147164	chrX	71056332	71073426	-	17095
## 5973	ENSG00000147168	chrX	71107404	71112108	-	4705
## 5974	ENSG00000147180	chrX	85244032	85273362	+	29331
## 5975	ENSG00000147202	chrX	96684663	97604997	+	920335
## 5976	ENSG00000147206	chrX	103075810	103093125	-	17316
## 5977	ENSG00000147224	chrX	107628424	107651026	+	22603
## 5978	ENSG00000147251	chrX	118495898	118686163	+	190266
## 5979	ENSG00000147274	chrX	136848004	136880764	-	32761
## 5980	ENSG00000147316	chr8	6406592	6648504	+	241913
## 5981	ENSG00000147324	chr8	8783354	8893645	-	110292
## 5982	ENSG00000147364	chr8	406428	477967	+	71540
## 5983	ENSG00000147383	chrX	152830967	152869729	+	38763
## 5984	ENSG00000147394	chrX	152914442	152973480	+	59039
## 5985	ENSG00000147400	chrX	152826973	152830777	-	3805
## 5986	ENSG00000147403	chrX	154389955	154409168	+	19214
## 5987	ENSG00000147416	chr8	20197367	20226819	+	29453
## 5988	ENSG00000147419	chr8	27733311	27772653	-	39343
## 5989	ENSG00000147421	chr8	28890394	29064764	+	174371
## 5990	ENSG00000147439	chr8	22620418	22669148	-	48731
## 5991	ENSG00000147443	chr8	21908873	21913860	-	4988
## 5992	ENSG00000147454	chr8	23528805	23575463	+	46659
## 5993	ENSG00000147457	chr8	23243637	23262000	+	18364
## 5994	ENSG00000147465	chr8	38143649	38151265	-	7617
## 5995	ENSG00000147471	chr8	37762593	37779767	+	17175
## 5996	ENSG00000147475	chr8	37736599	37759101	+	22503
## 5997	ENSG00000147488	chr8	52110839	52460959	-	350121
## 5998	ENSG00000147526	chr8	38728186	38853028	+	124843
## 5999	ENSG00000147533	chr8	41490396	41510980	+	20585
## 6000	ENSG00000147535	chr8	38263130	38269243	-	6114



## 6001	ENSG00000147536	chr8	41529206	41545046	+	15841
## 6002	ENSG00000147548	chr8	38269697	38382272	-	112576
## 6003	ENSG00000147570	chr8	66021560	66100526	+	78967
## 6004	ENSG00000147576	chr8	66430185	66471601	+	41417
## 6005	ENSG00000147586	chr8	79918717	80030289	-	111573
## 6006	ENSG00000147592	chr8	70635318	70669174	-	33857
## 6007	ENSG00000147601	chr8	73008864	73048122	+	39259
## 6008	ENSG00000147604	chr8	73290267	73295789	-	5523
## 6009	ENSG00000147649	chr8	97644179	97728770	+	84592
## 6010	ENSG00000147650	chr8	104489231	104589024	-	99794
## 6011	ENSG00000147654	chr8	109539711	109565996	+	26286
## 6012	ENSG00000147669	chr8	100150584	100154002	+	3419
## 6013	ENSG00000147677	chr8	116642130	116766925	-	124796
## 6014	ENSG00000147679	chr8	116766503	116849463	+	82961
## 6015	ENSG00000147684	chr8	124539103	124568510	+	29408
## 6016	ENSG00000147687	chr8	124488485	124539458	-	50974
## 6017	ENSG00000147789	chr8	144827464	144847509	+	20046
## 6018	ENSG00000147799	chr8	144529179	144605816	-	76638
## 6019	ENSG00000147804	chr8	144409742	144416895	-	7154
## 6020	ENSG00000147813	chr8	143574785	143578649	-	3865
## 6021	ENSG00000147852	chr9	2621834	2660053	+	38220
## 6022	ENSG00000147853	chr9	4709559	4742043	-	32485
## 6023	ENSG00000147854	chr9	6413151	6507054	+	93904
## 6024	ENSG00000147872	chr9	19108375	19149290	-	40916
## 6025	ENSG00000147874	chr9	19053143	19103119	-	49977
## 6026	ENSG00000147889	chr9	21967753	21995301	-	27549
## 6027	ENSG00000147894	chr9	27546545	27573866	-	27322
## 6028	ENSG00000147905	chr9	37120539	37358149	+	237611
## 6029	ENSG00000147912	chr9	37510892	37576349	-	65458
## 6030	ENSG00000147955	chr9	34634722	34637809	-	3088
## 6031	ENSG00000147996	chr9	65668805	65734041	+	65237
## 6032	ENSG00000148019	chr9	78236062	78279690	+	43629
## 6033	ENSG00000148090	chr9	91213815	91361913	-	148099
## 6034	ENSG00000148110	chr9	94374551	94461042	+	86492
## 6035	ENSG00000148120	chr9	94726701	95087218	+	360518
## 6036	ENSG00000148153	chr9	112683926	112718236	-	34311
## 6037	ENSG00000148154	chr9	111896766	111935369	+	38604
## 6038	ENSG00000148158	chr9	112750838	112881671	+	130834
## 6039	ENSG00000148175	chr9	121338988	121370304	-	31317
## 6040	ENSG00000148180	chr9	121207794	121332843	+	125050
## 6041	ENSG00000148187	chr9	122264603	122331343	+	66741
## 6042	ENSG00000148200	chr9	124517275	124771310	-	254036
## 6043	ENSG00000148204	chr9	123356170	123380324	+	24155
## 6044	ENSG00000148218	chr9	113386317	113401333	-	15017
## 6045	ENSG00000148225	chr9	113313222	113340298	-	27077
## 6046	ENSG00000148229	chr9	113407235	113410672	-	3438
## 6047	ENSG00000148248	chr9	133361449	133376166	-	14718
## 6048	ENSG00000148288	chr9	133152948	133163945	-	10998
## 6049	ENSG00000148290	chr9	133351755	133356676	-	4922
## 6050	ENSG00000148291	chr9	133356552	133361169	+	4618
## 6051	ENSG00000148296	chr9	133328774	133336398	-	7625
## 6052	ENSG00000148297	chr9	133338323	133348131	-	9809
## 6053	ENSG00000148300	chr9	133406059	133418096	-	12038
## 6054	ENSG00000148303	chr9	133348214	133351426	+	3213

## 6055	ENSG00000148308	chr9	133030675	133058503	+	27829
## 6056	ENSG00000148331	chr9	129634604	129642169	-	7566
## 6057	ENSG00000148334	chr9	128120693	128128462	-	7770
## 6058	ENSG00000148335	chr9	129608884	129636131	+	27248
## 6059	ENSG00000148337	chr9	128166064	128204383	-	38320
## 6060	ENSG00000148339	chr9	128068201	128109245	+	41045
## 6061	ENSG00000148341	chr9	129007036	129028303	-	21268
## 6062	ENSG00000148343	chr9	129036621	129072082	+	35462
## 6063	ENSG00000148356	chr9	127451486	127503501	+	52016
## 6064	ENSG00000148358	chr9	130053426	130140169	+	86744
## 6065	ENSG00000148362	chr9	136992418	136993984	+	1567
## 6066	ENSG00000148377	chr10	1018907	1025859	-	6953
## 6067	ENSG00000148384	chr9	136428619	136439823	-	11205
## 6068	ENSG00000148396	chr9	136440096	136483759	-	43664
## 6069	ENSG00000148399	chr9	137554904	137578935	-	24032
## 6070	ENSG00000148400	chr9	136494444	136545862	-	51419
## 6071	ENSG00000148426	chr10	11823339	11872277	+	48939
## 6072	ENSG00000148429	chr10	11453946	11611754	-	157809
## 6073	ENSG00000148444	chr10	22315974	22320308	+	4335
## 6074	ENSG00000148450	chr10	23095506	23122013	+	26508
## 6075	ENSG00000148459	chr10	26697659	26746798	+	49140
## 6076	ENSG00000148468	chr10	15211643	15371062	-	159420
## 6077	ENSG00000148481	chr10	15778170	15860520	-	82351
## 6078	ENSG00000148484	chr10	16590611	16817528	-	226918
## 6079	ENSG00000148498	chr10	34109560	34815325	-	705766
## 6080	ENSG00000148516	chr10	31318495	31529814	+	211320
## 6081	ENSG00000148572	chr10	63133247	63155031	+	21785
## 6082	ENSG00000148606	chr10	77969251	78029545	-	60295
## 6083	ENSG00000148634	chr10	67921899	68075348	-	153450
## 6084	ENSG00000148660	chr10	73812501	73874591	-	62091
## 6085	ENSG00000148671	chr10	86968192	86983934	+	15743
## 6086	ENSG00000148672	chr10	87050486	87094866	-	44381
## 6087	ENSG00000148688	chr10	90871716	90908553	+	36838
## 6088	ENSG00000148690	chr10	93667883	93702572	-	34690
## 6089	ENSG00000148700	chr10	109996368	110135565	+	139198
## 6090	ENSG00000148719	chr10	72332830	72355230	-	22401
## 6091	ENSG00000148730	chr10	70404379	70428618	+	24240
## 6092	ENSG00000148737	chr10	112950250	113167678	+	217429
## 6093	ENSG00000148773	chr10	128096659	128126385	-	29727
## 6094	ENSG00000148798	chr10	103277163	103290351	+	13189
## 6095	ENSG00000148803	chr10	133355154	133358035	-	2882
## 6096	ENSG00000148814	chr10	132332154	132379918	+	47765
## 6097	ENSG00000148824	chr10	133394094	133421307	+	27214
## 6098	ENSG00000148826	chr10	132783179	132786052	-	2874
## 6099	ENSG00000148834	chr10	104235356	104267459	+	32104
## 6100	ENSG00000148835	chr10	103367967	103389065	+	21099
## 6101	ENSG00000148840	chr10	102132994	102150331	+	17338
## 6102	ENSG00000148841	chr10	104309698	104338404	-	28707
## 6103	ENSG00000148842	chr10	102918293	103090221	+	171929
## 6104	ENSG00000148843	chr10	103396648	103446292	+	49645
## 6105	ENSG00000148848	chr10	126012381	126388455	-	376075
## 6106	ENSG00000148908	chr10	119499828	119542708	-	42881
## 6107	ENSG00000148925	chr11	13388001	13463297	-	75297
## 6108	ENSG00000148935	chr11	22625642	22813055	+	187414

## 6109	ENSG00000148943	chr11	27494576	27506773	-	12198
## 6110	ENSG00000148950	chr11	31432401	31509645	-	77245
## 6111	ENSG00000148985	chr11	3797724	3826371	+	28648
## 6112	ENSG00000149016	chr11	62575045	62592177	-	17133
## 6113	ENSG00000149084	chr11	43680558	43856617	+	176060
## 6114	ENSG00000149089	chr11	34853094	34916499	-	63406
## 6115	ENSG00000149091	chr11	46332905	46380554	+	47650
## 6116	ENSG00000149100	chr11	32583798	32606262	+	22465
## 6117	ENSG00000149115	chr11	57299638	57324952	-	25315
## 6118	ENSG00000149136	chr11	57325985	57335877	-	9893
## 6119	ENSG00000149150	chr11	57484534	57515786	-	31253
## 6120	ENSG00000149177	chr11	47980558	48170841	+	190284
## 6121	ENSG00000149179	chr11	46936689	47164385	+	227697
## 6122	ENSG00000149182	chr11	47164299	47177125	-	12827
## 6123	ENSG00000149187	chr11	47465944	47565569	-	99626
## 6124	ENSG00000149196	chr11	86302211	86345931	+	43721
## 6125	ENSG00000149201	chr11	86374736	86423109	+	48374
## 6126	ENSG00000149212	chr11	95165513	95232541	-	67029
## 6127	ENSG00000149218	chr11	95089810	95132645	+	42836
## 6128	ENSG00000149231	chr11	96352769	96389923	-	37155
## 6129	ENSG00000149243	chr11	75422394	75430629	-	8236
## 6130	ENSG00000149257	chr11	75562056	75572783	+	10728
## 6131	ENSG00000149260	chr11	77066932	77126155	+	59224
## 6132	ENSG00000149262	chr11	77878720	77994678	-	115959
## 6133	ENSG00000149269	chr11	77321707	77474635	-	152929
## 6134	ENSG00000149273	chr11	75399486	75422280	+	22795
## 6135	ENSG00000149308	chr11	108157215	108222642	-	65428
## 6136	ENSG00000149311	chr11	108222484	108369102	+	146619
## 6137	ENSG00000149313	chr11	106075501	106098710	+	23210
## 6138	ENSG00000149346	chr20	10435303	10636829	+	201527
## 6139	ENSG00000149357	chr11	72085895	72103387	-	17493
## 6140	ENSG00000149380	chr11	74235801	74311657	-	75857
## 6141	ENSG00000149418	chr11	130159562	130210376	+	50815
## 6142	ENSG00000149428	chr11	119044189	119057202	-	13014
## 6143	ENSG00000149474	chr20	18138118	18188387	+	50270
## 6144	ENSG00000149476	chr11	61333210	61353295	+	20086
## 6145	ENSG00000149480	chr11	62593214	62601840	-	8627
## 6146	ENSG00000149483	chr11	61362001	61369509	+	7509
## 6147	ENSG00000149485	chr11	61799625	61829318	-	29694
## 6148	ENSG00000149489	chr11	62611722	62615120	+	3399
## 6149	ENSG00000149499	chr11	62602218	62612765	-	10548
## 6150	ENSG00000149503	chr11	62123973	62153163	+	29191
## 6151	ENSG00000149516	chr11	60056587	60071128	+	14542
## 6152	ENSG00000149531	chr20	30377372	30399257	+	21886
## 6153	ENSG00000149532	chr11	61402641	61430031	-	27391
## 6154	ENSG00000149541	chr11	62615296	62622175	-	6880
## 6155	ENSG00000149547	chr11	125569216	125584687	+	15472
## 6156	ENSG00000149548	chr11	124954121	125041489	+	87369
## 6157	ENSG00000149554	chr11	125625136	125676255	+	51120
## 6158	ENSG00000149564	chr11	124752583	124762290	-	9708
## 6159	ENSG00000149577	chr11	117178733	117197445	+	18713
## 6160	ENSG00000149591	chr11	117199321	117204782	+	5462
## 6161	ENSG00000149600	chr20	32702691	32743997	-	41307
## 6162	ENSG00000149636	chr20	36751791	36773818	-	22028

## 6163	ENSG00000149639	chr20	36777442	36863686	-	86245
## 6164	ENSG00000149646	chr20	35954564	36030700	+	76137
## 6165	ENSG00000149657	chr20	62122461	62135378	+	12918
## 6166	ENSG00000149658	chr20	63195429	63216234	-	20806
## 6167	ENSG00000149679	chr20	62388632	62407285	-	18654
## 6168	ENSG00000149716	chr11	69653076	69675416	-	22341
## 6169	ENSG00000149743	chr11	64223799	64226254	-	2456
## 6170	ENSG00000149761	chr11	64225941	64230686	+	4746
## 6171	ENSG00000149781	chr11	64206678	64223886	+	17209
## 6172	ENSG00000149782	chr11	64251523	64269150	+	17628
## 6173	ENSG00000149792	chr11	65122183	65127371	+	5189
## 6174	ENSG00000149806	chr11	65120628	65122473	-	1846
## 6175	ENSG00000149809	chr11	65111845	65116384	+	4540
## 6176	ENSG00000149823	chr11	65089324	65111860	+	22537
## 6177	ENSG00000149923	chr16	30075978	30085377	+	9400
## 6178	ENSG00000149925	chr16	30053090	30070457	+	17368
## 6179	ENSG00000149927	chr16	30005509	30023270	-	17762
## 6180	ENSG00000149929	chr16	29992321	29996436	-	4116
## 6181	ENSG00000149930	chr16	29973641	29992261	+	18621
## 6182	ENSG00000149932	chr16	29940885	29973052	+	32168
## 6183	ENSG00000149948	chr12	65824131	65966295	+	142165
## 6184	ENSG00000149970	chrX	21374418	21654695	+	280278
## 6185	ENSG00000150093	chr10	32900319	33005792	-	105474
## 6186	ENSG00000150316	chr11	94962622	94973612	-	10991
## 6187	ENSG00000150337	chr1	149782671	149792518	+	9848
## 6188	ENSG00000150401	chr13	113455819	113490952	-	35134
## 6189	ENSG00000150403	chr13	113490995	113554590	+	63596
## 6190	ENSG00000150433	chr11	125096545	125111763	-	15219
## 6191	ENSG00000150455	chr11	126283065	126298845	+	15781
## 6192	ENSG00000150456	chr13	20728731	20773958	-	45228
## 6193	ENSG00000150457	chr13	20973032	21061547	-	88516
## 6194	ENSG00000150459	chr13	21140514	21149084	+	8571
## 6195	ENSG00000150471	chr4	61201258	62078335	+	877078
## 6196	ENSG00000150477	chr18	36829106	37232172	+	403067
## 6197	ENSG00000150527	chr14	39265284	39388513	+	123230
## 6198	ENSG00000150593	chr10	110871795	110900006	+	28212
## 6199	ENSG00000150594	chr10	111077163	111080907	+	3745
## 6200	ENSG00000150636	chr18	68715209	69055189	+	339981
## 6201	ENSG00000150681	chr1	192158457	192185815	+	27359
## 6202	ENSG00000150712	chr5	32226994	32313009	-	86016
## 6203	ENSG00000150753	chr5	10249921	10266412	+	16492
## 6204	ENSG00000150756	chr5	10226330	10249897	-	23568
## 6205	ENSG00000150764	chr11	111927144	112022584	+	95441
## 6206	ENSG00000150768	chr11	112024814	112064390	+	39577
## 6207	ENSG00000150773	chr11	112064010	112074274	-	10265
## 6208	ENSG00000150776	chr11	112074086	112085150	+	11065
## 6209	ENSG00000150779	chr11	112084800	112086798	-	1999
## 6210	ENSG00000150782	chr11	112143251	112164117	-	20867
## 6211	ENSG00000150787	chr11	112226365	112269955	+	43591
## 6212	ENSG00000150867	chr10	22534849	22714555	-	179707
## 6213	ENSG00000150907	chr13	40469953	40666597	-	196645
## 6214	ENSG00000150961	chr4	118722823	118838683	-	115861
## 6215	ENSG00000150967	chr12	122920951	122981649	-	60699
## 6216	ENSG00000150977	chr12	123410683	123436717	-	26035

## 6217	ENSG00000150990	chr12	124946825	124989122	-	42298
## 6218	ENSG00000150991	chr12	124911604	124917368	-	5765
## 6219	ENSG00000150995	chr3	4493348	4847840	+	354493
## 6220	ENSG00000151006	chr16	31083425	31089628	-	6204
## 6221	ENSG00000151012	chr4	138164097	138242349	-	78253
## 6222	ENSG00000151014	chr4	139015789	139045939	+	30151
## 6223	ENSG00000151062	chr12	1791957	1918836	-	126880
## 6224	ENSG00000151065	chr12	1946054	2004535	-	58482
## 6225	ENSG00000151067	chr12	1970786	2697950	+	727165
## 6226	ENSG00000151092	chr3	25718944	25790039	-	71096
## 6227	ENSG00000151093	chr3	25782917	25794534	+	11618
## 6228	ENSG00000151116	chr11	18529609	18588747	-	59139
## 6229	ENSG00000151131	chr12	104986310	105074197	+	87888
## 6230	ENSG00000151135	chr12	106955719	106978778	+	23060
## 6231	ENSG00000151148	chr12	109477402	109536705	+	59304
## 6232	ENSG00000151151	chr10	58191517	58267934	-	76418
## 6233	ENSG00000151164	chr12	110501655	110532086	+	30432
## 6234	ENSG00000151176	chr12	113358566	113391625	+	33060
## 6235	ENSG00000151224	chr10	80271820	80289684	-	17865
## 6236	ENSG00000151229	chr12	39755021	40106089	-	351069
## 6237	ENSG00000151233	chr12	42081845	42144879	-	63035
## 6238	ENSG00000151239	chr12	43793723	43806375	-	12653
## 6239	ENSG00000151247	chr4	98871684	98930637	-	58954
## 6240	ENSG00000151276	chr3	65353525	66038834	-	685310
## 6241	ENSG00000151287	chr13	102765990	102773811	-	7822
## 6242	ENSG00000151292	chr5	123512099	123617045	+	104947
## 6243	ENSG00000151304	chr5	121961961	122075570	+	113610
## 6244	ENSG00000151327	chr14	35044907	35113130	+	68224
## 6245	ENSG00000151332	chr14	36298558	36320676	-	22119
## 6246	ENSG00000151348	chr11	44095549	44245429	+	149881
## 6247	ENSG00000151353	chr2	667335	677439	-	10105
## 6248	ENSG00000151366	chr11	78068304	78080219	-	11916
## 6249	ENSG00000151376	chr11	86441108	86672636	-	231529
## 6250	ENSG00000151413	chr14	31489956	31861224	+	371269
## 6251	ENSG00000151414	chr1	198156963	198322420	+	165458
## 6252	ENSG00000151422	chr5	108747822	109196841	+	449020
## 6253	ENSG00000151445	chr14	77426675	77457952	-	31278
## 6254	ENSG00000151458	chr4	124664052	124712732	-	48681
## 6255	ENSG00000151461	chr10	11920022	12043170	-	123149
## 6256	ENSG00000151465	chr10	12195965	12250589	+	54625
## 6257	ENSG00000151466	chr4	128864921	129093607	-	228687
## 6258	ENSG00000151470	chr4	129093317	129116640	+	23324
## 6259	ENSG00000151474	chr10	13643706	14462142	-	818437
## 6260	ENSG00000151491	chr12	15620158	15882329	-	262172
## 6261	ENSG00000151498	chr11	134253495	134265855	+	12361
## 6262	ENSG00000151500	chr11	134248279	134253370	-	5092
## 6263	ENSG00000151502	chr11	134224645	134247792	+	23148
## 6264	ENSG00000151503	chr11	134150119	134225454	-	75336
## 6265	ENSG00000151532	chr10	112446998	112818744	+	371747
## 6266	ENSG00000151552	chr4	17460261	17512234	-	51974
## 6267	ENSG00000151553	chr10	114821744	114899832	+	78089
## 6268	ENSG00000151575	chr15	56244009	56445997	+	201989
## 6269	ENSG00000151576	chr3	114005833	114088422	+	82590
## 6270	ENSG00000151611	chr4	145618263	145660035	+	41773

## 6271	ENSG00000151612	chr4	145757627	145938635	-	181009
## 6272	ENSG00000151623	chr4	148078762	148444698	-	365937
## 6273	ENSG00000151651	chr10	133262403	133276868	-	14466
## 6274	ENSG00000151657	chr10	7750962	7787981	-	37020
## 6275	ENSG00000151665	chr2	46580937	46617119	-	36183
## 6276	ENSG00000151687	chr2	189674290	189761193	+	86904
## 6277	ENSG00000151689	chr2	190343470	190371665	+	28196
## 6278	ENSG00000151690	chr2	190408355	190509205	+	100851
## 6279	ENSG00000151692	chr2	6917392	7068286	+	150895
## 6280	ENSG00000151694	chr2	9488486	9555792	-	67307
## 6281	ENSG00000151702	chr11	128686535	128813267	+	126733
## 6282	ENSG00000151718	chr4	183099293	183320777	+	221485
## 6283	ENSG00000151725	chr4	184694618	184734133	-	39516
## 6284	ENSG00000151726	chr4	184755595	184826818	-	71224
## 6285	ENSG00000151729	chr4	185143241	185150382	+	7142
## 6286	ENSG00000151743	chr12	31671137	31729174	-	58038
## 6287	ENSG00000151746	chr12	32106835	32383633	+	276799
## 6288	ENSG00000151748	chr14	50632058	50668331	-	36274
## 6289	ENSG00000151779	chr2	15166909	15561330	-	394422
## 6290	ENSG00000151806	chr4	44678427	44700926	+	22500
## 6291	ENSG00000151835	chr13	23328826	23411513	-	82688
## 6292	ENSG00000151838	chr14	59504539	59576831	-	72293
## 6293	ENSG00000151846	chr13	25095868	25099254	+	3387
## 6294	ENSG00000151849	chr13	24882284	24922889	-	40606
## 6295	ENSG00000151876	chr5	41925254	41941743	+	16490
## 6296	ENSG00000151881	chr5	43444252	43483893	-	39642
## 6297	ENSG00000151882	chr5	43376645	43412391	-	35747
## 6298	ENSG00000151883	chr5	50665899	50846522	+	180624
## 6299	ENSG00000151893	chr10	118674167	118755249	-	81083
## 6300	ENSG00000151914	chr6	56457987	56954628	-	496642
## 6301	ENSG00000151923	chr10	119571802	119597029	-	25228
## 6302	ENSG00000151929	chr10	119651370	119677819	+	26450
## 6303	ENSG00000152061	chr1	174159410	174995308	+	835899
## 6304	ENSG00000152082	chr2	130181737	130190729	+	8993
## 6305	ENSG00000152102	chr2	131047876	131093460	-	45585
## 6306	ENSG00000152104	chr1	214348696	214552449	-	203754
## 6307	ENSG00000152117	chr2	131492813	131521573	+	28761
## 6308	ENSG00000152127	chr2	134119983	134454621	+	334639
## 6309	ENSG00000152128	chr2	134455759	134719000	-	263242
## 6310	ENSG00000152133	chr2	37084451	37099244	+	14794
## 6311	ENSG00000152147	chr2	38751534	38785000	+	33467
## 6312	ENSG00000152192	chr13	78598362	78603560	-	5199
## 6313	ENSG00000152193	chr13	78614291	78659179	-	44889
## 6314	ENSG00000152213	chr13	49628299	49633872	+	5574
## 6315	ENSG00000152219	chr11	30323051	30338227	+	15177
## 6316	ENSG00000152223	chr18	45847609	45967274	-	119666
## 6317	ENSG00000152229	chr18	45983536	46072272	-	88737
## 6318	ENSG00000152234	chr18	46080248	46104334	-	24087
## 6319	ENSG00000152240	chr18	46104332	46128333	+	24002
## 6320	ENSG00000152242	chr18	46173553	46266991	+	93439
## 6321	ENSG00000152253	chr2	168834132	168913371	-	79240
## 6322	ENSG00000152256	chr2	172555373	172608669	+	53297
## 6323	ENSG00000152270	chr11	14643723	14872044	+	228322
## 6324	ENSG00000152291	chr2	85318020	85328425	-	10406

## 6325	ENSG00000152332	chr1	162497251	162529629	+	32379
## 6326	ENSG00000152348	chr5	81972025	82276857	+	304833
## 6327	ENSG00000152359	chr5	75674124	75717481	-	43358
## 6328	ENSG00000152382	chr1	166856510	166876327	-	19818
## 6329	ENSG00000152404	chr11	107326345	107457844	-	131500
## 6330	ENSG00000152409	chr5	79236189	79327215	+	91027
## 6331	ENSG00000152413	chr5	79372636	79514217	-	141582
## 6332	ENSG00000152422	chr5	83077498	83353787	+	276290
## 6333	ENSG00000152433	chr19	57363477	57379565	+	16089
## 6334	ENSG00000152439	chr19	57499915	57518404	+	18490
## 6335	ENSG00000152443	chr19	57746796	57758159	+	11364
## 6336	ENSG00000152454	chr19	57940833	57947675	-	6843
## 6337	ENSG00000152455	chr10	14878820	14904315	+	25496
## 6338	ENSG00000152457	chr10	14897359	14954432	-	57074
## 6339	ENSG00000152464	chr10	15097180	15139818	+	42639
## 6340	ENSG00000152465	chr10	15102584	15168693	-	66110
## 6341	ENSG00000152475	chr19	58367618	58381060	-	13443
## 6342	ENSG00000152484	chr13	27066142	27171896	-	105755
## 6343	ENSG00000152492	chr3	191329077	191398670	+	69594
## 6344	ENSG00000152503	chr5	115124762	115180546	-	55785
## 6345	ENSG00000152518	chr2	43222402	43226609	-	4208
## 6346	ENSG00000152520	chr13	28138506	28295335	+	156830
## 6347	ENSG00000152556	chr12	48105139	48146404	+	41266
## 6348	ENSG00000152558	chr11	102396332	102470384	-	74053
## 6349	ENSG00000152580	chr3	151425384	151458709	-	33326
## 6350	ENSG00000152582	chr5	35617844	35814611	+	196768
## 6351	ENSG00000152601	chr3	152243828	152465780	+	221953
## 6352	ENSG00000152620	chr5	36192592	36242279	-	49688
## 6353	ENSG00000152642	chr3	32105689	32168713	+	63025
## 6354	ENSG00000152683	chr2	32165841	32224379	+	58539
## 6355	ENSG00000152684	chr5	52787940	52804046	+	16107
## 6356	ENSG00000152689	chr2	33436324	33564750	+	128427
## 6357	ENSG00000152700	chr5	134601144	134649271	-	48128
## 6358	ENSG00000152749	chr13	94601903	94634645	+	32743
## 6359	ENSG00000152760	chr1	66752459	66778787	+	26329
## 6360	ENSG00000152766	chr10	88822132	88851818	-	29687
## 6361	ENSG00000152767	chr13	98142562	98455176	+	312615
## 6362	ENSG00000152782	chr10	89579497	89645572	-	66076
## 6363	ENSG00000152784	chr4	80183879	80204329	+	20451
## 6364	ENSG00000152795	chr4	82422564	82430408	-	7845
## 6365	ENSG00000152804	chr10	92689951	92695646	+	5696
## 6366	ENSG00000152818	chr6	144285701	144853034	+	567334
## 6367	ENSG00000152904	chr1	235327350	235344532	+	17183
## 6368	ENSG00000152926	chr7	64971776	65006684	-	34909
## 6369	ENSG00000152942	chr5	69369293	69414801	+	45509
## 6370	ENSG00000152944	chr12	27022546	27066343	+	43798
## 6371	ENSG00000152952	chr3	146069440	146163653	-	94214
## 6372	ENSG00000152953	chr4	5051442	5500998	+	449557
## 6373	ENSG00000152990	chr4	22345071	22516054	-	170984
## 6374	ENSG00000153006	chr5	64718144	64768685	-	50542
## 6375	ENSG00000153015	chr5	64768930	65018763	+	249834
## 6376	ENSG00000153029	chr1	181033425	181061938	+	28514
## 6377	ENSG00000153037	chr5	112861222	112869788	+	8567
## 6378	ENSG00000153044	chr5	69189548	69210357	+	20810

## 6379	ENSG00000153046	chr6	4706159	4955551	+	249393
## 6380	ENSG00000153048	chr16	8852942	8869012	-	16071
## 6381	ENSG00000153064	chr4	101411286	102074812	+	663527
## 6382	ENSG00000153066	chr16	11679080	11742878	-	63799
## 6383	ENSG00000153071	chr5	39371675	39462300	-	90626
## 6384	ENSG00000153094	chr2	111119378	111168447	+	49070
## 6385	ENSG00000153107	chr2	111766271	111884690	-	118420
## 6386	ENSG00000153113	chr5	96525267	96779595	+	254329
## 6387	ENSG00000153130	chr4	140257286	140385726	+	128441
## 6388	ENSG00000153132	chr4	140388455	140427968	-	39514
## 6389	ENSG00000153140	chr5	90392261	90409786	-	17526
## 6390	ENSG00000153147	chr4	143513463	143557486	+	44024
## 6391	ENSG00000153165	chr2	106391290	106468376	-	77087
## 6392	ENSG00000153179	chr12	64507001	64697567	+	190567
## 6393	ENSG00000153187	chr1	244840638	244864542	-	23905
## 6394	ENSG00000153201	chr2	108719481	108785811	+	66331
## 6395	ENSG00000153207	chr1	246839098	246931978	-	92881
## 6396	ENSG00000153214	chr2	112055223	112119318	+	64096
## 6397	ENSG00000153234	chr2	156324432	156342348	-	17917
## 6398	ENSG00000153250	chr2	160272151	160493794	-	221644
## 6399	ENSG00000153283	chr3	111292719	111665750	+	373032
## 6400	ENSG00000153310	chr8	129839593	130017129	-	177537
## 6401	ENSG00000153317	chr8	130052104	130443660	-	391557
## 6402	ENSG00000153339	chr18	31829173	31953136	-	123964
## 6403	ENSG00000153363	chr1	211382803	211435333	+	52531
## 6404	ENSG00000153391	chr18	35452230	35497991	-	45762
## 6405	ENSG00000153395	chr5	1456480	1523977	-	67498
## 6406	ENSG00000153443	chr16	4608883	4615027	-	6145
## 6407	ENSG00000153487	chr13	110712736	110723339	+	10604
## 6408	ENSG00000153531	chr13	113399610	113453524	-	53915
## 6409	ENSG00000153551	chr3	32391671	32483067	+	91397
## 6410	ENSG00000153560	chr3	33388336	33441371	-	53036
## 6411	ENSG00000153561	chr2	86720173	86778041	+	57869
## 6412	ENSG00000153563	chr2	86784610	86808396	-	23787
## 6413	ENSG00000153574	chr2	88691644	88750935	+	59292
## 6414	ENSG00000153721	chr6	154387504	154510659	-	123156
## 6415	ENSG00000153767	chr3	120742637	120783069	+	40433
## 6416	ENSG00000153774	chr16	75293698	75433485	-	139788
## 6417	ENSG00000153786	chr16	84974181	85011535	-	37355
## 6418	ENSG00000153790	chr7	25134697	25180356	-	45660
## 6419	ENSG00000153815	chr16	81445170	81711762	+	266593
## 6420	ENSG00000153827	chr2	229763838	229923239	-	159402
## 6421	ENSG00000153879	chr19	33373330	33382686	+	9357
## 6422	ENSG00000153885	chr19	33795933	33815763	+	19831
## 6423	ENSG00000153896	chr19	34758076	34773229	-	15154
## 6424	ENSG00000153898	chr1	84925583	84997113	-	71531
## 6425	ENSG00000153904	chr1	85318481	85578363	-	259883
## 6426	ENSG00000153914	chr5	66139971	66183615	+	43645
## 6427	ENSG00000153922	chr5	98853985	98928957	-	74973
## 6428	ENSG00000153933	chr17	56834099	56869567	+	35469
## 6429	ENSG00000153936	chr1	86914648	87109998	+	195351
## 6430	ENSG00000153944	chr17	57255851	57684685	+	428835
## 6431	ENSG00000153975	chr6	116635618	116668794	-	33177
## 6432	ENSG00000153976	chr17	13495689	13601927	-	106239



## 6433	ENSG00000153989	chr6	117675502	117710640	+	35139
## 6434	ENSG00000154001	chr14	63371357	63543374	-	172018
## 6435	ENSG00000154016	chr17	19020673	19047637	-	26965
## 6436	ENSG00000154025	chr17	18950345	19022595	+	72251
## 6437	ENSG00000154059	chr18	24426616	24453535	+	26920
## 6438	ENSG00000154079	chr6	70566917	70589569	+	22653
## 6439	ENSG00000154099	chr16	84145287	84178767	+	33481
## 6440	ENSG00000154102	chr16	85690084	85751129	-	61046
## 6441	ENSG00000154114	chr11	121024072	121090775	+	66704
## 6442	ENSG00000154122	chr5	14704804	14871778	-	166975
## 6443	ENSG00000154124	chr5	14664664	14699711	+	35048
## 6444	ENSG00000154127	chr11	122655675	122814473	+	158799
## 6445	ENSG00000154144	chr11	124622836	124635398	+	12563
## 6446	ENSG00000154146	chr11	124739846	124747210	+	7365
## 6447	ENSG00000154174	chr3	100363431	100401398	-	37968
## 6448	ENSG00000154188	chr8	107249482	107498055	-	248574
## 6449	ENSG00000154217	chr17	67377281	67697261	+	319981
## 6450	ENSG00000154222	chr1	52345723	52366193	-	20471
## 6451	ENSG00000154229	chr17	66302636	66810743	+	508108
## 6452	ENSG00000154237	chr15	100919215	101078254	+	159040
## 6453	ENSG00000154274	chr4	37453941	37623495	+	169555
## 6454	ENSG00000154305	chr1	222618086	222668012	+	49927
## 6455	ENSG00000154328	chr8	11769639	11787346	+	17708
## 6456	ENSG00000154358	chr1	228208130	228378874	+	170745
## 6457	ENSG00000154359	chr8	12721894	12756073	-	34180
## 6458	ENSG00000154370	chr1	228393673	228406840	-	13168
## 6459	ENSG00000154429	chr1	229321005	229343294	-	22290
## 6460	ENSG00000154447	chr4	169094256	169271105	-	176850
## 6461	ENSG00000154473	chr10	123154277	123170467	+	16191
## 6462	ENSG00000154511	chr1	92832737	92961522	-	128786
## 6463	ENSG00000154518	chr2	175176258	175184607	-	8350
## 6464	ENSG00000154582	chr8	73939169	73972287	-	33119
## 6465	ENSG00000154608	chr4	118467590	118554100	+	86511
## 6466	ENSG00000154640	chr21	17593653	17612947	-	19295
## 6467	ENSG00000154642	chr21	17788967	17819386	-	30420
## 6468	ENSG00000154710	chr7	66682164	66811464	+	129301
## 6469	ENSG00000154719	chr21	25585656	25607517	-	21862
## 6470	ENSG00000154723	chr21	25716503	25735673	-	19171
## 6471	ENSG00000154727	chr21	25734570	25772460	+	37891
## 6472	ENSG00000154734	chr21	26835747	26845409	-	9663
## 6473	ENSG00000154743	chr3	12484432	12539623	+	55192
## 6474	ENSG00000154767	chr3	14145147	14178783	-	33637
## 6475	ENSG00000154781	chr3	14651746	14672659	+	20914
## 6476	ENSG00000154803	chr17	17212212	17237188	-	24977
## 6477	ENSG00000154813	chr3	16257978	16264972	-	6995
## 6478	ENSG00000154814	chr3	16265160	16350299	+	85140
## 6479	ENSG00000154822	chr3	16802651	17090594	+	287944
## 6480	ENSG00000154832	chr18	50282343	50288304	-	5962
## 6481	ENSG00000154845	chr18	9546791	9615240	-	68450
## 6482	ENSG00000154889	chr18	11882622	11909223	-	26602
## 6483	ENSG00000154917	chr3	133824239	133895836	-	71598
## 6484	ENSG00000154920	chr17	50373220	50381483	+	8264
## 6485	ENSG00000154930	chr20	25006230	25058980	-	52751
## 6486	ENSG00000154945	chr17	50693190	50707924	-	14735

## 6487	ENSG00000154957	chr17	11977439	11997510	-	20072
## 6488	ENSG00000154978	chr7	55436056	55572988	-	136933
## 6489	ENSG00000155008	chrX	85003826	85093316	+	89491
## 6490	ENSG00000155016	chr4	107931369	107953457	+	22089
## 6491	ENSG00000155026	chr7	5925550	5970683	-	45134
## 6492	ENSG00000155034	chr7	5431335	5513798	-	82464
## 6493	ENSG00000155085	chr6	109492856	109691217	-	198362
## 6494	ENSG00000155090	chr8	102648779	102655902	-	7124
## 6495	ENSG00000155096	chr8	102826357	102893864	-	67508
## 6496	ENSG00000155097	chr8	103021063	103073051	+	51989
## 6497	ENSG00000155099	chr8	90993796	91041064	-	47269
## 6498	ENSG00000155100	chr8	91070196	91087095	+	16900
## 6499	ENSG00000155111	chr6	110609978	110815958	-	205981
## 6500	ENSG00000155115	chr6	110958560	110967890	+	9331
## 6501	ENSG00000155189	chr8	6708357	6759666	+	51310
## 6502	ENSG00000155229	chr10	97458324	97498794	-	40471
## 6503	ENSG00000155252	chr10	97640686	97676434	+	35749
## 6504	ENSG00000155254	chr10	97713173	97718152	+	4980
## 6505	ENSG00000155256	chr10	97737121	97760907	+	23787
## 6506	ENSG00000155275	chr4	8436140	8493531	+	57392
## 6507	ENSG00000155287	chr10	99610522	99620609	-	10088
## 6508	ENSG00000155304	chr21	14371115	14383484	-	12370
## 6509	ENSG00000155307	chr21	14485228	14583402	-	98175
## 6510	ENSG00000155313	chr21	15730025	15880069	+	150045
## 6511	ENSG00000155329	chr5	132996985	133026604	-	29620
## 6512	ENSG00000155330	chr16	46796607	46831411	-	34805
## 6513	ENSG00000155363	chr1	112673141	112700746	+	27606
## 6514	ENSG00000155366	chr1	112701106	112707434	-	6329
## 6515	ENSG00000155368	chr2	119366921	119372560	+	5640
## 6516	ENSG00000155380	chr1	112911847	112957013	-	45167
## 6517	ENSG00000155393	chr16	50065941	50106387	+	40447
## 6518	ENSG00000155438	chr2	121726945	121736923	-	9979
## 6519	ENSG00000155463	chr14	22766522	22773041	+	6520
## 6520	ENSG00000155506	chr5	154712902	154817607	+	104706
## 6521	ENSG00000155508	chr5	154857553	154876793	+	19241
## 6522	ENSG00000155542	chr5	56909260	56925532	+	16273
## 6523	ENSG00000155545	chr5	56919602	56971675	-	52074
## 6524	ENSG00000155561	chr7	135557919	135648757	+	90839
## 6525	ENSG00000155592	chr16	25236001	25257931	-	21931
## 6526	ENSG00000155621	chr9	71911510	71986054	+	74545
## 6527	ENSG00000155629	chr10	96593312	96720514	-	127203
## 6528	ENSG00000155636	chr2	178112424	178139011	+	26588
## 6529	ENSG00000155657	chr2	178525989	178830802	-	304814
## 6530	ENSG00000155659	chrX	66021738	66040125	-	18388
## 6531	ENSG00000155660	chr7	149003062	149028641	-	25580
## 6532	ENSG00000155666	chr16	27203495	27221768	+	18274
## 6533	ENSG00000155729	chr2	200488952	200519784	-	30833
## 6534	ENSG00000155744	chr2	200973718	201071671	-	97954
## 6535	ENSG00000155755	chr2	201620184	201643570	-	23387
## 6536	ENSG00000155760	chr2	202034587	202038445	+	3859
## 6537	ENSG00000155761	chr1	117953861	118185223	-	231363
## 6538	ENSG00000155792	chr8	119873717	120050913	+	177197
## 6539	ENSG00000155827	chr9	101533851	101563344	+	29494
## 6540	ENSG00000155846	chr5	149730298	149855022	+	124725

## 6541	ENSG00000155849	chr7	36854361	37449249	-	594889
## 6542	ENSG00000155850	chr5	149960737	149993455	+	32719
## 6543	ENSG00000155858	chr5	157743695	157760709	+	17015
## 6544	ENSG00000155868	chr5	157137412	157159019	-	21608
## 6545	ENSG00000155876	chr9	19049395	19050983	+	1589
## 6546	ENSG00000155893	chr3	141228726	141367753	+	139028
## 6547	ENSG00000155903	chr3	141487047	141615342	+	128296
## 6548	ENSG00000155906	chr6	151404763	151452181	-	47419
## 6549	ENSG00000155926	chr8	133036724	133103054	-	66331
## 6550	ENSG00000155957	chr12	66135846	66170072	-	34227
## 6551	ENSG00000155959	chrX	155197007	155239817	+	42811
## 6552	ENSG00000155961	chrX	155258241	155264589	-	6349
## 6553	ENSG00000155966	chrX	148500619	149000663	+	500045
## 6554	ENSG00000155974	chr12	66347431	66804186	-	456756
## 6555	ENSG00000155975	chr8	17246571	17302427	+	55857
## 6556	ENSG00000156011	chr8	18527301	19084730	-	557430
## 6557	ENSG00000156017	chr9	74981020	75028423	-	47404
## 6558	ENSG00000156026	chr10	72692131	72887694	+	195564
## 6559	ENSG00000156030	chr14	73715122	73790285	-	75164
## 6560	ENSG00000156050	chr14	73931501	73950414	-	18914
## 6561	ENSG00000156052	chr9	77716087	78031458	-	315372
## 6562	ENSG00000156110	chr10	74151185	74709303	+	558119
## 6563	ENSG00000156127	chr14	75522425	75547015	+	24591
## 6564	ENSG00000156136	chr4	70992538	71030914	+	38377
## 6565	ENSG00000156140	chr4	72280969	72569386	-	288418
## 6566	ENSG00000156150	chr1	110059994	110070700	-	10707
## 6567	ENSG00000156162	chr8	94719703	94793836	+	74134
## 6568	ENSG00000156170	chr8	94895767	95116455	+	220689
## 6569	ENSG00000156171	chr1	111117333	111140216	-	22884
## 6570	ENSG00000156172	chr8	95244919	95269201	-	24283
## 6571	ENSG00000156232	chr15	82809628	82836108	+	26481
## 6572	ENSG00000156239	chr21	28872191	28885371	-	13181
## 6573	ENSG00000156253	chr21	29004384	29019378	-	14995
## 6574	ENSG00000156256	chr21	29024629	29054488	+	29860
## 6575	ENSG00000156261	chr21	29055805	29073797	-	17993
## 6576	ENSG00000156273	chr21	29194071	29630751	+	436681
## 6577	ENSG00000156298	chrX	38561370	38688920	+	127551
## 6578	ENSG00000156299	chr21	31118416	31559977	-	441562
## 6579	ENSG00000156304	chr21	31671033	31732075	-	61043
## 6580	ENSG00000156313	chrX	38269163	38327564	-	58402
## 6581	ENSG00000156374	chr10	103302796	103351134	-	48339
## 6582	ENSG00000156381	chr14	102501760	102509799	-	8040
## 6583	ENSG00000156384	chr10	104122058	104126385	+	4328
## 6584	ENSG00000156398	chr10	102714538	102743492	+	28955
## 6585	ENSG00000156411	chr14	103912288	103928269	-	15982
## 6586	ENSG00000156467	chr8	96225920	96235634	-	9715
## 6587	ENSG00000156469	chr8	96239398	96261610	-	22213
## 6588	ENSG00000156471	chr8	96261715	96336995	+	75281
## 6589	ENSG00000156482	chr8	98024851	98046469	-	21619
## 6590	ENSG00000156500	chrX	134796789	134854610	+	57822
## 6591	ENSG00000156502	chr10	69180232	69209099	+	28868
## 6592	ENSG00000156504	chrX	134769566	134797232	-	27667
## 6593	ENSG00000156508	chr6	73515750	73523797	-	8048
## 6594	ENSG00000156509	chr8	100133360	100145800	-	12441

## 6595	ENSG00000156515	chr10	69269984	69401882	+	131899
## 6596	ENSG00000156521	chr10	70137981	70146676	-	8696
## 6597	ENSG00000156531	chrX	134373253	134428791	+	55539
## 6598	ENSG00000156535	chr6	73695785	73828316	+	132532
## 6599	ENSG00000156587	chr11	57551656	57568284	-	16629
## 6600	ENSG00000156599	chr11	57667747	57701187	+	33441
## 6601	ENSG00000156603	chr11	57703714	57712221	-	8508
## 6602	ENSG00000156639	chr6	37819499	38154624	+	335126
## 6603	ENSG00000156642	chr15	73560014	73634134	-	74121
## 6604	ENSG00000156650	chr10	74825582	75032622	+	207041
## 6605	ENSG00000156671	chr10	75099586	75182123	+	82538
## 6606	ENSG00000156675	chr8	37858618	37899467	-	40850
## 6607	ENSG00000156697	chrX	129906121	129929761	+	23641
## 6608	ENSG00000156709	chrX	130129362	130165887	-	36526
## 6609	ENSG00000156711	chr6	36127809	36144524	+	16716
## 6610	ENSG00000156735	chr8	38176533	38213301	+	36769
## 6611	ENSG00000156787	chr8	123041968	123152153	+	110186
## 6612	ENSG00000156795	chr8	123416725	123467230	+	50506
## 6613	ENSG00000156802	chr8	123319850	123416350	-	96501
## 6614	ENSG00000156804	chr8	123497889	123541206	-	43318
## 6615	ENSG00000156831	chr8	125091679	125367120	+	275442
## 6616	ENSG00000156853	chr16	30602558	30624012	-	21455
## 6617	ENSG00000156858	chr16	30650717	30656440	+	5724
## 6618	ENSG00000156860	chr16	30658431	30670814	+	12384
## 6619	ENSG00000156869	chr1	99708703	99766631	-	57929
## 6620	ENSG00000156873	chr16	30748270	30761176	+	12907
## 6621	ENSG00000156875	chr1	100038097	100083377	+	45281
## 6622	ENSG00000156876	chr1	100083563	100132955	-	49393
## 6623	ENSG00000156928	chr7	23298739	23311729	+	12991
## 6624	ENSG00000156931	chr3	184812143	185052614	+	240472
## 6625	ENSG00000156958	chr15	49155656	49367869	+	212214
## 6626	ENSG00000156970	chr15	40161023	40221136	+	60114
## 6627	ENSG00000156973	chr2	231732425	231786272	-	53848
## 6628	ENSG00000156976	chr3	186783205	186789900	+	6696
## 6629	ENSG00000156983	chr3	9731729	9748018	+	16290
## 6630	ENSG00000156990	chr3	9837849	9844602	-	6754
## 6631	ENSG00000157014	chr3	10248023	10281218	+	33196
## 6632	ENSG00000157017	chr3	10285675	10292947	-	7273
## 6633	ENSG00000157020	chr3	10293131	10321178	-	28048
## 6634	ENSG00000157036	chr3	38496127	38542161	+	46035
## 6635	ENSG00000157077	chr1	52142094	52346686	+	204593
## 6636	ENSG00000157106	chr16	18804853	18926454	-	121602
## 6637	ENSG00000157107	chr5	72955981	73090522	+	134542
## 6638	ENSG00000157152	chr3	12004402	12191400	+	186999
## 6639	ENSG00000157181	chr1	186375838	186421378	+	45541
## 6640	ENSG00000157184	chr1	53196429	53214197	+	17769
## 6641	ENSG00000157191	chr1	16440672	16460078	+	19407
## 6642	ENSG00000157193	chr1	53242364	53328070	-	85707
## 6643	ENSG00000157212	chr7	154943687	155003084	-	59398
## 6644	ENSG00000157216	chr1	54225432	54413479	-	188048
## 6645	ENSG00000157224	chr7	90383721	90513402	+	129682
## 6646	ENSG00000157227	chr14	22836557	22849027	+	12471
## 6647	ENSG00000157240	chr7	91264364	91271326	+	6963
## 6648	ENSG00000157259	chr7	92447453	92458836	+	11384

## 6649	ENSG00000157306	chr14	23511760	23560778	+	49019
## 6650	ENSG00000157326	chr14	23953586	23969279	+	15694
## 6651	ENSG00000157349	chr16	70289663	70335283	+	45621
## 6652	ENSG00000157350	chr16	70375978	70439237	-	63260
## 6653	ENSG00000157353	chr16	70454421	70480274	+	25854
## 6654	ENSG00000157379	chr14	24290598	24299833	-	9236
## 6655	ENSG00000157404	chr4	54657918	54740715	+	82798
## 6656	ENSG00000157426	chr4	56338287	56387508	-	49222
## 6657	ENSG00000157429	chr16	71464555	71565089	-	100535
## 6658	ENSG00000157450	chr15	58865175	59097419	+	232245
## 6659	ENSG00000157456	chr15	59105078	59125045	+	19968
## 6660	ENSG00000157500	chr3	57227737	57273468	+	45732
## 6661	ENSG00000157514	chrX	107713221	107777342	-	64122
## 6662	ENSG00000157538	chr21	37223420	37267919	-	44500
## 6663	ENSG00000157540	chr21	37365790	37517450	+	151661
## 6664	ENSG00000157551	chr21	38157034	38307357	+	150324
## 6665	ENSG00000157554	chr21	38380027	38661780	-	281754
## 6666	ENSG00000157557	chr21	38805307	38824955	+	19649
## 6667	ENSG00000157570	chr11	44726465	44932421	+	205957
## 6668	ENSG00000157593	chr6	44254096	44257890	-	3795
## 6669	ENSG00000157600	chrX	110002631	110182734	+	180104
## 6670	ENSG00000157613	chr11	46277661	46321422	+	43762
## 6671	ENSG00000157625	chrX	30827442	30975084	-	147643
## 6672	ENSG00000157637	chr17	81245000	81295547	-	50548
## 6673	ENSG00000157653	chr9	113410054	113429684	+	19631
## 6674	ENSG00000157657	chr9	113876282	114056591	+	180310
## 6675	ENSG00000157693	chr9	114611206	114646422	+	35217
## 6676	ENSG00000157703	chr7	138594285	138701352	-	107068
## 6677	ENSG00000157734	chr15	64151715	64157481	+	5767
## 6678	ENSG00000157741	chr7	139230356	139308236	+	77881
## 6679	ENSG00000157764	chr7	140719327	140924764	-	205438
## 6680	ENSG00000157778	chr7	1567330	1571005	-	3676
## 6681	ENSG00000157796	chr4	39182404	39285810	+	103407
## 6682	ENSG00000157800	chr7	140293693	140404433	-	110741
## 6683	ENSG00000157823	chr15	89830599	89894638	-	64040
## 6684	ENSG00000157827	chr2	152335237	152649834	+	314598
## 6685	ENSG00000157833	chr2	26173091	26189663	+	16573
## 6686	ENSG00000157837	chr12	120762510	120904371	-	141862
## 6687	ENSG00000157869	chr4	13361354	13484365	-	123012
## 6688	ENSG00000157895	chr12	121000486	121016502	-	16017
## 6689	ENSG00000157911	chr1	2403964	2413797	-	9834
## 6690	ENSG00000157916	chr1	2391775	2405444	+	13670
## 6691	ENSG00000157927	chr7	4797055	4883719	-	86665
## 6692	ENSG00000157933	chr1	2228695	2310119	+	81425
## 6693	ENSG00000157954	chr7	5190188	5233826	+	43639
## 6694	ENSG00000157978	chr1	25543580	25568886	+	25307
## 6695	ENSG00000157992	chr2	27442366	27446481	+	4116
## 6696	ENSG00000158006	chr1	25959767	25998157	-	38391
## 6697	ENSG00000158019	chr2	27889941	28338901	+	448961
## 6698	ENSG00000158042	chr11	6680782	6683401	-	2620
## 6699	ENSG00000158050	chr2	96143166	96145440	-	2275
## 6700	ENSG00000158062	chr1	26281328	26318363	-	37036
## 6701	ENSG00000158079	chr9	94030794	94109856	+	79063
## 6702	ENSG00000158089	chr2	30910467	31155202	-	244736

## 6703	ENSG00000158092	chr3	136862208	136949823	+	87616
## 6704	ENSG00000158109	chr1	3625002	3630127	+	5126
## 6705	ENSG00000158113	chr12	122167738	122203471	+	35734
## 6706	ENSG00000158122	chr9	96639577	96655303	-	15727
## 6707	ENSG00000158156	chr1	27959462	27968096	+	8635
## 6708	ENSG00000158158	chr2	96760902	96811891	+	50990
## 6709	ENSG00000158161	chr1	27970344	28088696	-	118353
## 6710	ENSG00000158163	chr3	138061990	138115818	-	53829
## 6711	ENSG00000158164	chrX	102513676	102516784	-	3109
## 6712	ENSG00000158169	chr9	95099054	95426796	-	327743
## 6713	ENSG00000158186	chr3	138347648	138405534	+	57887
## 6714	ENSG00000158195	chr1	27404226	27490158	-	85933
## 6715	ENSG00000158201	chr18	21650897	21704805	-	53909
## 6716	ENSG00000158220	chr3	138434586	138481686	+	47101
## 6717	ENSG00000158246	chr1	27005020	27012836	-	7817
## 6718	ENSG00000158286	chr1	6205475	6221299	+	15825
## 6719	ENSG00000158290	chrX	120524609	120575794	-	51186
## 6720	ENSG00000158292	chr1	6247346	6260975	-	13630
## 6721	ENSG00000158301	chrX	102712176	102717733	+	5558
## 6722	ENSG00000158402	chr5	138285265	138338355	-	53091
## 6723	ENSG00000158411	chr2	99161427	99181058	-	19632
## 6724	ENSG00000158417	chr2	99337353	99401326	+	63974
## 6725	ENSG00000158427	chrX	103918896	103966712	+	47817
## 6726	ENSG00000158435	chr2	101252802	101270316	+	17515
## 6727	ENSG00000158457	chr7	129144892	129169697	+	24806
## 6728	ENSG00000158467	chr7	129225023	129430211	+	205189
## 6729	ENSG00000158470	chr20	49632945	49713878	-	80934
## 6730	ENSG00000158480	chr20	49903391	49915508	-	12118
## 6731	ENSG00000158483	chr11	71787510	71801236	+	13727
## 6732	ENSG00000158526	chrX	54440401	54445487	+	5087
## 6733	ENSG00000158545	chr16	88570381	88631966	+	61586
## 6734	ENSG00000158552	chr2	219195237	219209651	+	14415
## 6735	ENSG00000158555	chr11	75434640	75525903	-	91264
## 6736	ENSG00000158604	chr7	44577894	44582287	-	4394
## 6737	ENSG00000158615	chr1	204403387	204411791	-	8405
## 6738	ENSG00000158623	chr7	130506238	130668748	-	162511
## 6739	ENSG00000158636	chr11	76444923	76553025	+	108103
## 6740	ENSG00000158669	chr8	41577187	41625001	+	47815
## 6741	ENSG00000158691	chr6	28378955	28399734	-	20780
## 6742	ENSG00000158710	chr1	159918107	159925732	-	7626
## 6743	ENSG00000158711	chr1	205597556	205631962	-	34407
## 6744	ENSG00000158714	chr1	159826750	159837249	+	10500
## 6745	ENSG00000158715	chr1	205657851	205680459	-	22609
## 6746	ENSG00000158716	chr1	159780932	159782543	+	1612
## 6747	ENSG00000158717	chr16	88696495	88706421	-	9927
## 6748	ENSG00000158747	chr1	19640554	19658456	+	17903
## 6749	ENSG00000158769	chr1	160995211	161021348	-	26138
## 6750	ENSG00000158773	chr1	161039251	161045977	-	6727
## 6751	ENSG00000158792	chr16	89696343	89701705	-	5363
## 6752	ENSG00000158793	chr1	161118086	161125445	+	7360
## 6753	ENSG00000158796	chr1	161120974	161132688	-	11715
## 6754	ENSG00000158805	chr16	89720400	89740903	+	20504
## 6755	ENSG00000158813	chrX	69616067	70039469	+	423403
## 6756	ENSG00000158828	chr1	20633455	20651511	+	18057

## 6757	ENSG00000158850	chr1	161171310	161177968	-	6659
## 6758	ENSG00000158863	chr8	22089159	22104898	+	15740
## 6759	ENSG00000158864	chr1	161197104	161214395	+	17292
## 6760	ENSG00000158869	chr1	161215234	161220699	+	5466
## 6761	ENSG00000158882	chr1	161225939	161230744	+	4806
## 6762	ENSG00000158887	chr1	161304735	161309972	-	5238
## 6763	ENSG00000158941	chr8	22604632	22621514	+	16883
## 6764	ENSG00000158985	chr5	131245493	131398447	+	152955
## 6765	ENSG00000158987	chr5	131423921	131635236	-	211316
## 6766	ENSG00000159023	chr1	28887091	29120046	+	232956
## 6767	ENSG00000159055	chr21	32268219	32279069	-	10851
## 6768	ENSG00000159063	chr11	78100936	78139660	-	38725
## 6769	ENSG00000159069	chr9	136940435	136944696	-	4262
## 6770	ENSG00000159079	chr21	32592079	32612866	-	20788
## 6771	ENSG00000159082	chr21	32628759	32728048	-	99290
## 6772	ENSG00000159086	chr21	32733899	32771858	-	37960
## 6773	ENSG00000159110	chr21	33229901	33265675	+	35775
## 6774	ENSG00000159111	chr17	47823272	47831534	-	8263
## 6775	ENSG00000159128	chr21	33402896	33479348	+	76453
## 6776	ENSG00000159131	chr21	33503931	33543491	-	39561
## 6777	ENSG00000159140	chr21	33542618	33577481	+	34864
## 6778	ENSG00000159147	chr21	33559542	33588708	-	29167
## 6779	ENSG00000159164	chr1	149903318	149917882	-	14565
## 6780	ENSG00000159176	chr1	201483530	201509456	-	25927
## 6781	ENSG00000159199	chr17	48892765	48895871	+	3107
## 6782	ENSG00000159200	chr21	34513142	34615142	-	102001
## 6783	ENSG00000159202	chr17	48908369	48929056	+	20688
## 6784	ENSG00000159208	chr1	150282543	150287093	+	4551
## 6785	ENSG00000159210	chr17	48929316	48945117	-	15802
## 6786	ENSG00000159216	chr21	34787801	36004667	-	1216867
## 6787	ENSG00000159256	chr21	36320189	36386148	+	65960
## 6788	ENSG00000159259	chr21	36385378	36419015	+	33638
## 6789	ENSG00000159267	chr21	36750888	36990236	-	239349
## 6790	ENSG00000159307	chr22	43197283	43343388	-	146106
## 6791	ENSG00000159322	chr15	72751369	72785846	-	34478
## 6792	ENSG00000159335	chr12	6765516	6770952	+	5437
## 6793	ENSG00000159346	chr1	202940823	202958572	-	17750
## 6794	ENSG00000159348	chr1	202961869	202967280	-	5412
## 6795	ENSG00000159352	chr1	151254703	151267479	+	12777
## 6796	ENSG00000159363	chr1	16985958	17011928	-	25971
## 6797	ENSG00000159374	chr2	74557883	74648338	-	90456
## 6798	ENSG00000159377	chr1	151399534	151401944	+	2411
## 6799	ENSG00000159399	chr2	74833981	74893359	+	59379
## 6800	ENSG00000159423	chr1	18871430	18902781	-	31352
## 6801	ENSG00000159433	chr15	42575659	42720981	+	145323
## 6802	ENSG00000159450	chr1	152106317	152115454	-	9138
## 6803	ENSG00000159459	chr15	42942897	43106113	-	163217
## 6804	ENSG00000159461	chr16	56361452	56425538	-	64087
## 6805	ENSG00000159479	chr1	43383917	43389808	-	5892
## 6806	ENSG00000159496	chr22	23688136	23699176	+	11041
## 6807	ENSG00000159579	chr16	57186137	57240475	+	54339
## 6808	ENSG00000159588	chr1	45620044	45624057	-	4014
## 6809	ENSG00000159592	chr1	45627304	45688113	-	60810
## 6810	ENSG00000159593	chr16	66802875	66873256	-	70382

##	6811	ENSG00000159596	chr1	45687214	45694443	+	7230
##	6812	ENSG00000159618	chr16	57542421	57591681	+	49261
##	6813	ENSG00000159625	chr16	57694793	57731805	+	37013
##	6814	ENSG00000159658	chr1	46675159	46719064	-	43906
##	6815	ENSG00000159674	chr4	1166932	1208962	-	42031
##	6816	ENSG00000159685	chr3	126704220	126960406	+	256187
##	6817	ENSG00000159692	chr4	1211448	1249953	-	38506
##	6818	ENSG00000159720	chr16	67438014	67481237	-	43224
##	6819	ENSG00000159753	chr16	67644919	67657569	+	12651
##	6820	ENSG00000159761	chr16	67666816	67668758	+	1943
##	6821	ENSG00000159788	chr4	3293028	3439913	+	146886
##	6822	ENSG00000159792	chr16	67893272	67929678	+	36407
##	6823	ENSG00000159840	chr7	143381080	143391111	+	10032
##	6824	ENSG00000159873	chr22	28772674	28789301	+	16628
##	6825	ENSG00000159882	chr19	44002948	44013926	+	10979
##	6826	ENSG00000159884	chr9	35658290	35661511	+	3222
##	6827	ENSG00000159885	chr19	44025342	44033112	+	7771
##	6828	ENSG00000159899	chr9	35792154	35809732	+	17579
##	6829	ENSG00000159905	chr19	43951223	43967709	+	16487
##	6830	ENSG00000159917	chr19	44228729	44305046	-	76318
##	6831	ENSG00000159921	chr9	36214441	36277056	-	62616
##	6832	ENSG00000159958	chr22	41922023	41926818	-	4796
##	6833	ENSG00000160007	chr19	46918676	47005077	+	86402
##	6834	ENSG00000160013	chr19	46620468	46625118	-	4651
##	6835	ENSG00000160014	chr19	46601074	46610793	+	9720
##	6836	ENSG00000160049	chr1	10456522	10472526	-	16005
##	6837	ENSG00000160050	chr1	32200386	32205387	+	5002
##	6838	ENSG00000160051	chr1	32205661	32208687	+	3027
##	6839	ENSG00000160055	chr1	32214472	32222359	-	7888
##	6840	ENSG00000160058	chr1	32365103	32394731	-	29629
##	6841	ENSG00000160062	chr1	32539427	32605939	+	66513
##	6842	ENSG00000160072	chr1	1471769	1497848	+	26080
##	6843	ENSG00000160075	chr1	1541673	1574869	-	33197
##	6844	ENSG00000160087	chr1	1253909	1273885	-	19977
##	6845	ENSG00000160094	chr1	33256545	33300719	+	44175
##	6846	ENSG00000160113	chr19	17231883	17245940	-	14058
##	6847	ENSG00000160117	chr19	17281645	17287646	+	6002
##	6848	ENSG00000160124	chr3	122359591	122383231	-	23641
##	6849	ENSG00000160131	chrX	151396515	151409364	+	12850
##	6850	ENSG00000160172	chr11	67791648	67805336	-	13689
##	6851	ENSG00000160190	chr21	42496008	42581440	+	85433
##	6852	ENSG00000160193	chr21	42843094	42879568	-	36475
##	6853	ENSG00000160194	chr21	42879644	42913304	+	33661
##	6854	ENSG00000160199	chr21	42974510	43033931	+	59422
##	6855	ENSG00000160201	chr21	43092956	43107587	-	14632
##	6856	ENSG00000160208	chr21	43659548	43696079	+	36532
##	6857	ENSG00000160209	chr21	43719094	43762307	+	43214
##	6858	ENSG00000160211	chrX	154531391	154547572	-	16182
##	6859	ENSG00000160213	chr21	43772512	43776445	-	3934
##	6860	ENSG00000160214	chr21	43789513	43805293	+	15781
##	6861	ENSG00000160216	chr21	43865186	43986536	+	121351
##	6862	ENSG00000160218	chr21	44012319	44106552	+	94234
##	6863	ENSG00000160219	chrX	154675249	154751583	-	76335
##	6864	ENSG00000160221	chr21	44133605	44145723	+	12119



## 6865	ENSG00000160223	chr21	44222991	44240966	-	17976
## 6866	ENSG00000160226	chr21	44328944	44339402	-	10459
## 6867	ENSG00000160233	chr21	44455486	44462196	+	6711
## 6868	ENSG00000160255	chr21	44885953	44931989	-	46037
## 6869	ENSG00000160256	chr21	44940010	44976989	+	36980
## 6870	ENSG00000160271	chr9	133097720	133149334	-	51615
## 6871	ENSG00000160284	chr21	46161148	46184476	-	23329
## 6872	ENSG00000160285	chr21	46188141	46228824	-	40684
## 6873	ENSG00000160294	chr21	46235126	46286297	-	51172
## 6874	ENSG00000160298	chr21	46300181	46323875	-	23695
## 6875	ENSG00000160299	chr21	46324122	46445769	+	121648
## 6876	ENSG00000160305	chr21	46458899	46569852	+	110954
## 6877	ENSG00000160307	chr21	46598962	46605208	-	6247
## 6878	ENSG00000160310	chr21	46635167	46665124	+	29958
## 6879	ENSG00000160323	chr9	133414358	133459402	+	45045
## 6880	ENSG00000160352	chr19	21082159	21125270	+	43112
## 6881	ENSG00000160392	chr19	40319536	40348527	-	28992
## 6882	ENSG00000160401	chr9	127706989	127716002	+	9014
## 6883	ENSG00000160404	chr9	127731524	127735317	-	3794
## 6884	ENSG00000160408	chr9	127885321	127905408	-	20088
## 6885	ENSG00000160410	chr19	40576851	40591399	+	14549
## 6886	ENSG00000160445	chr9	128729786	128772414	-	42629
## 6887	ENSG00000160446	chr9	128720869	128724127	-	3259
## 6888	ENSG00000160447	chr9	128702523	128720918	+	18396
## 6889	ENSG00000160551	chr17	29390464	29551904	+	161441
## 6890	ENSG00000160563	chr9	131860107	132079908	-	219802
## 6891	ENSG00000160570	chr19	42198598	42220140	-	21543
## 6892	ENSG00000160584	chr11	116843402	117098437	-	255036
## 6893	ENSG00000160602	chr17	28725897	28743455	+	17559
## 6894	ENSG00000160606	chr17	28724348	28727935	-	3588
## 6895	ENSG00000160613	chr11	117204337	117232525	-	28189
## 6896	ENSG00000160633	chr19	5623035	5668478	+	45444
## 6897	ENSG00000160678	chr1	153627926	153632039	+	4114
## 6898	ENSG00000160679	chr1	153633982	153646306	+	12325
## 6899	ENSG00000160683	chr11	118883766	118897799	+	14034
## 6900	ENSG00000160685	chr1	155002630	155018522	+	15893
## 6901	ENSG00000160688	chr1	154983338	154993111	+	9774
## 6902	ENSG00000160691	chr1	154962298	154974395	-	12098
## 6903	ENSG00000160695	chr11	119067692	119081978	+	14287
## 6904	ENSG00000160703	chr11	119166568	119184016	+	17449
## 6905	ENSG00000160710	chr1	154582062	154627999	-	45938
## 6906	ENSG00000160712	chr1	154405193	154469450	+	64258
## 6907	ENSG00000160714	chr1	154548577	154559028	-	10452
## 6908	ENSG00000160741	chr1	153947669	153958625	-	10957
## 6909	ENSG00000160746	chr3	43354859	43691594	-	336736
## 6910	ENSG00000160752	chr1	155308748	155320666	+	11919
## 6911	ENSG00000160753	chr1	155320896	155331114	+	10219
## 6912	ENSG00000160781	chr1	156243321	156248117	-	4797
## 6913	ENSG00000160783	chr1	156212993	156240042	+	27050
## 6914	ENSG00000160785	chr1	156193932	156212796	+	18865
## 6915	ENSG00000160789	chr1	156082573	156140089	+	57517
## 6916	ENSG00000160796	chr3	46979683	47009703	+	30021
## 6917	ENSG00000160799	chr3	46921726	46982010	-	60285
## 6918	ENSG00000160803	chr1	156035301	156053794	-	18494

## 6919	ENSG00000160813	chr7	100435282	100436565	-	1284
## 6920	ENSG00000160818	chr1	156594487	156601496	-	7010
## 6921	ENSG00000160877	chr19	13118103	13141141	+	23039
## 6922	ENSG00000160888	chr19	13150415	13154908	+	4494
## 6923	ENSG00000160908	chr7	99486519	99500324	-	13806
## 6924	ENSG00000160917	chr7	99438922	99457371	+	18450
## 6925	ENSG00000160932	chr8	143017982	143023832	+	5851
## 6926	ENSG00000160948	chr8	144423601	144428563	-	4963
## 6927	ENSG00000160949	chr8	144428775	144444444	-	15670
## 6928	ENSG00000160953	chr19	1354711	1378431	+	23721
## 6929	ENSG00000160957	chr8	144511288	144517845	-	6558
## 6930	ENSG00000160959	chr8	144517992	144525178	+	7187
## 6931	ENSG00000160961	chr19	14689801	14733746	+	43946
## 6932	ENSG00000160972	chr8	144477969	144502121	+	24153
## 6933	ENSG00000160973	chr8	144473412	144476335	-	2924
## 6934	ENSG00000160991	chr7	102433106	102456821	+	23716
## 6935	ENSG00000160993	chr7	102456238	102464876	-	8639
## 6936	ENSG00000160999	chr7	102285091	102321711	+	36621
## 6937	ENSG00000161010	chr5	179835133	179862173	-	27041
## 6938	ENSG00000161011	chr5	179806398	179838078	+	31681
## 6939	ENSG00000161013	chr5	179797597	179806952	-	9356
## 6940	ENSG00000161016	chr8	144789765	144792587	-	2823
## 6941	ENSG00000161021	chr5	179732850	179796511	+	63662
## 6942	ENSG00000161036	chr7	102464929	102473168	+	8240
## 6943	ENSG00000161055	chr5	180590103	180591540	-	1438
## 6944	ENSG00000161057	chr7	103344254	103369395	+	25142
## 6945	ENSG00000161091	chr19	3538261	3574290	-	36030
## 6946	ENSG00000161179	chr22	21628089	21630064	-	1976
## 6947	ENSG00000161202	chr3	184155388	184173610	+	18223
## 6948	ENSG00000161203	chr3	184174689	184184091	+	9403
## 6949	ENSG00000161204	chr3	184186023	184194012	+	7990
## 6950	ENSG00000161217	chr3	196214222	196287957	-	73736
## 6951	ENSG00000161265	chr19	35742464	35745445	-	2982
## 6952	ENSG00000161267	chr3	197509783	197573323	-	63541
## 6953	ENSG00000161277	chr19	36034985	36054762	-	19778
## 6954	ENSG00000161298	chr19	36604817	36634113	+	29297
## 6955	ENSG00000161395	chr17	39671122	39696797	-	25676
## 6956	ENSG00000161513	chr17	74862497	74873031	-	10535
## 6957	ENSG00000161526	chr17	75667116	75708062	+	40947
## 6958	ENSG00000161533	chr17	75941507	75979363	-	37857
## 6959	ENSG00000161542	chr17	76309486	76384521	-	75036
## 6960	ENSG00000161547	chr17	76734115	76737374	-	3260
## 6961	ENSG00000161558	chr19	48332356	48364237	-	31882
## 6962	ENSG00000161618	chr19	49453169	49471048	+	17880
## 6963	ENSG00000161638	chr12	54395261	54419460	-	24200
## 6964	ENSG00000161642	chr12	54369133	54391298	-	22166
## 6965	ENSG00000161654	chr17	44034635	44067619	-	32985
## 6966	ENSG00000161664	chr17	44170447	44179083	+	8637
## 6967	ENSG00000161671	chr19	50476400	50490870	+	14471
## 6968	ENSG00000161677	chr19	50505998	50511353	-	5356
## 6969	ENSG00000161681	chr19	50661827	50719450	-	57624
## 6970	ENSG00000161682	chr17	44353215	44363875	-	10661
## 6971	ENSG00000161692	chr17	44708608	44752264	+	43657
## 6972	ENSG00000161714	chr17	45108967	45133354	-	24388

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## 6974	ENSG00000161800	chr12	49976923	50033136	-	56214
## 6975	ENSG00000161813	chr12	50392383	50480004	+	87622
## 6976	ENSG00000161847	chr19	10316212	10333640	-	17429
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## 6979	ENSG00000161904	chr6	33771202	33789136	-	17935
## 6980	ENSG00000161912	chr6	41101022	41140835	+	39814
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## 6983	ENSG00000161939	chr17	7012635	7017520	+	4886
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## 6990	ENSG00000161981	chr16	53010	57669	+	4660
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## 7067	ENSG00000162704	chr1	183620846	183635757	-	14912
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## 7080	ENSG00000162804	chr2	240998838	241095568	+	96731

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## 7102	ENSG00000162961	chr2	31867809	32039812	-	172004
## 7103	ENSG00000162971	chr2	199929975	199955736	-	25762
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## 7119	ENSG00000163093	chr2	169479178	169506655	+	27478
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## 7135	ENSG00000163170	chr2	74135398	74147994	-	12597
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## 79	IBTK
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## 381	TBC1D23
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## 383	CYP46A1
## 384	ZZZ3
## 385	USP2
## 386	TUBG2
## 387	RPL26L1
## 388	NSUN2
## 389	FBX042
## 390	MFAP3
## 391	MRI1
## 392	METTL1
## 393	AGA
## 394	PI4K2B
## 395	BOD1L1
## 396	MAT2B
## 397	EDC4
## 398	TRIO
## 399	CLEC16A
## 400	MTREX
## 401	ZFYVE16
## 402	RIPOR1
## 403	PNKP
## 404	PHLPP2
## 405	SPDL1
## 406	STAU2
## 407	SLC66A1
## 408	CTNS
## 409	RTN4R
## 410	PHF23
## 411	INPP4A
## 412	RAB27B
## 413	PSMA4
## 414	LSG1
## 415	PARP3
## 416	THAP3
## 417	TDP1
## 418	SPATA7
## 419	MED17
## 420	RETSAT
## 421	CAPG
## 422	AP2S1
## 423	DCUN1D1

## 424	JADE2
## 425	LCP2
## 426	TRIT1
## 427	CUL7
## 428	CTNNA1
## 429	PHKA2
## 430	CNTLN
## 431	HSPA5
## 432	DSG2
## 433	GEMIN8
## 434	OFD1
## 435	WDR37
## 436	YTHDC2
## 437	CTPS2
## 438	ATP6V1H
## 439	POLR2B
## 440	FAM214A
## 441	ARAP2
## 442	TPR
## 443	CP
## 444	KIAA0556
## 445	DTNBP1
## 446	XK
## 447	C12orf4
## 448	WWC3
## 449	FAM184B
## 450	MAP4
## 451	GOPC
## 452	USP28
## 453	HDAC9
## 454	TSPAN17
## 455	NOP16
## 456	CC2D2A
## 457	RRM2B
## 458	ZNF800
## 459	SNX29
## 460	MRPS10
## 461	RSF1
## 462	VPS13D
## 463	CELF2
## 464	FAM120A
## 465	R3HDM1
## 466	COL9A2
## 467	ERCC8
## 468	H6PD
## 469	VAMP3
## 470	PER3
## 471	UTS2
## 472	RCN1
## 473	ELN
## 474	RFC2
## 475	ARID1B
## 476	CLPTM1L
## 477	NEDD4L

## 478	PPP1R3F
## 479	HEXB
## 480	PTCD2
## 481	NEXMIF
## 482	JKAMP
## 483	NFE2L3
## 484	MCUR1
## 485	LIMA1
## 486	LETMD1
## 487	LAMC3
## 488	MAPK9
## 489	COL23A1
## 490	FAM160A2
## 491	HERPUD1
## 492	HOMER3
## 493	RAD51
## 494	POLQ
## 495	PIK3CB
## 496	CYBA
## 497	THOC3
## 498	HEBP2
## 499	MPHOSPH9
## 500	PLEKHA5
## 501	SIKE1
## 502	RRP12
## 503	FNIP2
## 504	MSM01
## 505	TTC17
## 506	FOXN3
## 507	AKR7A2
## 508	MRT04
## 509	USE1
## 510	MCF2L2
## 511	NRIP2
## 512	AP5M1
## 513	ANAPC4
## 514	TRAPPC3
## 515	THRAP3
## 516	PHPT1
## 517	LY75
## 518	ARID4B
## 519	OPN3
## 520	SDCCAG8
## 521	KIF1B
## 522	FOXC1
## 523	TBC1D22A
## 524	FAM168A
## 525	RELT
## 526	GALC
## 527	NOP58
## 528	SZRD1
## 529	CUL1
## 530	FAM114A2
## 531	TAB2

## 532	GINM1
## 533	EIF2AK2
## 534	USP36
## 535	KMT2C
## 536	PUM2
## 537	MRPL43
## 538	ITIH4
## 539	HPF1
## 540	ZFR
## 541	ZNF280C
## 542	TRAF1
## 543	RC3H2
## 544	IL17RB
## 545	TRAF3IP2
## 546	DCBLD2
## 547	SOAT1
## 548	PKP2
## 549	GDI2
## 550	PRDM1
## 551	ATG5
## 552	PITHD1
## 553	USP13
## 554	ATP11B
## 555	CDK14
## 556	SEC61A1
## 557	PPP1R12A
## 558	CROCC
## 559	POLR3E
## 560	ATP2B4
## 561	ZC3H11A
## 562	RIOK2
## 563	YIPF1
## 564	NDC1
## 565	DGKG
## 566	FLYWCH1
## 567	UNKL
## 568	TBXAS1
## 569	PARP12
## 570	ALDH18A1
## 571	TARBP1
## 572	GATB
## 573	MXD1
## 574	CDK17
## 575	DNAJC25
## 576	SLC2A3
## 577	PSD
## 578	CTDP1
## 579	YBX3
## 580	STYK1
## 581	WNK1
## 582	CCAR1
## 583	OGFR
## 584	GNA15
## 585	PIGV



## 586	SNRNP40
## 587	QSER1
## 588	MPC1
## 589	ACAA1
## 590	BCAT1
## 591	HDAC7
## 592	SPAG4
## 593	NCKAP1
## 594	MRPS35
## 595	GUCY1B1
## 596	SFSWAP
## 597	TNK2
## 598	MON2
## 599	GPBP1
## 600	DGAT2
## 601	CS
## 602	MRPS24
## 603	ELMO2
## 604	WAPL
## 605	VMP1
## 606	APPBP2
## 607	POLD1
## 608	EIF4B
## 609	SLC6A16
## 610	BICRA
## 611	SPHK2
## 612	RPL18
## 613	CA11
## 614	ISOC2
## 615	U2AF2
## 616	EPN1
## 617	MED29
## 618	AHRR
## 619	ZNF275
## 620	MTMR1
## 621	ADCK1
## 622	HAGH
## 623	RNF4
## 624	CASP8
## 625	INTS13
## 626	TM7SF3
## 627	SPA17
## 628	TSPAN32
## 629	ST3GAL6
## 630	TAF2
## 631	HIPK2
## 632	TNPO3
## 633	BORCS8-MEF2B
## 634	RFXANK
## 635	TMEM161A
## 636	LPAR2
## 637	CTSA
## 638	SUGP2
## 639	SLC12A2

## 640	CNN2
## 641	ABCA7
## 642	DDX20
## 643	BTBD1
## 644	FAR2
## 645	SBN02
## 646	PMS1
## 647	HMG20B
## 648	TAF11
## 649	ANKS1A
## 650	AP3D1
## 651	ZNF76
## 652	SLC9A3R2
## 653	NTHL1
## 654	UHRF1BP1
## 655	GNAI3
## 656	IPO5
## 657	OAT
## 658	WDR3
## 659	PKN2
## 660	WDR18
## 661	TRAM2
## 662	NTN1
## 663	MCM10
## 664	DGKA
## 665	ANKRD44
## 666	KARS1
## 667	ADAT1
## 668	PDIA5
## 669	TBC1D22B
## 670	NDUFB4
## 671	SPEN
## 672	ZC3H15
## 673	MAP2K4
## 674	PACC1
## 675	SLK
## 676	CYB5R4
## 677	GSTO2
## 678	SEC61A2
## 679	PRKCQ
## 680	ASB1
## 681	FAM107B
## 682	TBC1D1
## 683	CDK13
## 684	MTHFD2
## 685	SLC9A7
## 686	FOXJ2
## 687	YBX1
## 688	PDE4A
## 689	PPP2R5A
## 690	ELAVL1
## 691	DIP2B
## 692	SMARCD1
## 693	KDM4A

## 694	NFYC
## 695	SLC9A3
## 696	ASPM
## 697	CD84
## 698	ELOVL1
## 699	SPI1
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## 701	ATXN3
## 702	GOLGA5
## 703	LRRC40
## 704	ISOC1
## 705	TRMT11
## 706	THUMPD1
## 707	MSANTD3
## 708	ATG2B
## 709	ARFGEF1
## 710	ZFAT
## 711	MTFR1
## 712	STAG3
## 713	FECH
## 714	MYO9A
## 715	PFKP
## 716	IDI1
## 717	SP100
## 718	KLF6
## 719	PLPP1
## 720	TRAM1
## 721	PHKA1
## 722	TNFRSF1A
## 723	CACNB1
## 724	EVI5
## 725	STOML1
## 726	PKM
## 727	DHX29
## 728	DNTTIP2
## 729	METTL22
## 730	TP53BP1
## 731	TR0
## 732	RRP15
## 733	RHOA
## 734	DHX8
## 735	PMS2P4
## 736	IARS2
## 737	IDH3G
## 738	ROGDI
## 739	ROCK1
## 740	CBFB
## 741	PDK3
## 742	HYAL2
## 743	HDAC4
## 744	RASSF1
## 745	IFI35
## 746	HEATR6
## 747	COASY

## 748	PLEKHH3
## 749	MEF2A
## 750	OTUD5
## 751	TFE3
## 752	TBC1D25
## 753	ACSL4
## 754	INPP5A
## 755	GPKOW
## 756	GRIPAP1
## 757	FTSJ1
## 758	PRR11
## 759	ATP11A
## 760	POLR1A
## 761	LAPTM4A
## 762	TTC7A
## 763	IP6K2
## 764	SRBD1
## 765	KIF2A
## 766	RASGRP2
## 767	PSME4
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## 769	SIRT2
## 770	ERLEC1
## 771	PPP2R5B
## 772	MAST4
## 773	NUP133
## 774	NUCKS1
## 775	VPS35
## 776	DNAJA2
## 777	BCL3
## 778	KCNAB2
## 779	GAL
## 780	CLEC2D
## 781	FUNDC1
## 782	ATP1B3
## 783	NEDD4
## 784	PIGB
## 785	MAPK6
## 786	RAB27A
## 787	HDHD5
## 788	UFD1
## 789	LRP6
## 790	PHRF1
## 791	ELP1
## 792	NUCB2
## 793	PFN2
## 794	SPTB
## 795	DAPP1
## 796	TMEM260
## 797	SMG6
## 798	EXOC5
## 799	CLTCL1
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## 801	DGCR2

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## 803	MNT
## 804	ZXDC
## 805	JMJD6
## 806	POLB
## 807	WIP11
## 808	GBA2
## 809	NDST1
## 810	ASNS
## 811	AP3M2
## 812	PABPC1
## 813	TESK2
## 814	CFAP20
## 815	CSNK2A2
## 816	EIF2B3
## 817	TCOF1
## 818	CDC42
## 819	OSBPL3
## 820	RAD18
## 821	ATP2B1
## 822	NCK2
## 823	MAP4K4
## 824	MGAT4A
## 825	RPL31
## 826	WDR1
## 827	SNX13
## 828	ARHGAP10
## 829	RPS6KA2
## 830	ING3
## 831	VASH1
## 832	LMCD1
## 833	BUD23
## 834	SEL1L
## 835	TRIP13
## 836	ATP6AP1
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## 838	TRIB2
## 839	DAZAP1
## 840	MBD3
## 841	HLTF
## 842	FAM50A
## 843	FAM3A
## 844	CPSF1
## 845	CYBRD1
## 846	PDCD2
## 847	RDH11
## 848	PRKACA
## 849	ADGRL1
## 850	ACTN1
## 851	ZFYVE26
## 852	EPN2
## 853	PTPN18
## 854	LNX1
## 855	ALDH3A2

## 856	TFRC
## 857	SREBF1
## 858	AFF4
## 859	UBE2D1
## 860	MPP5
## 861	RHOBTB1
## 862	SMC1A
## 863	HSD17B10
## 864	MARK2
## 865	HMMR
## 866	CHFR
## 867	P4HA2
## 868	NFATC3
## 869	TRNT1
## 870	ACADVL
## 871	STK10
## 872	FBXW11
## 873	ACAP1
## 874	CRMP1
## 875	EVC
## 876	DERL2
## 877	TMEM38A
## 878	AP1M1
## 879	PVR
## 880	XRCC1
## 881	SCARB1
## 882	MCM2
## 883	SELEN00
## 884	ALPK1
## 885	LLGL2
## 886	PDE8A
## 887	NLE1
## 888	SDHA
## 889	SMARCE1
## 890	FNDCC8
## 891	GSDMB
## 892	KDM5A
## 893	ADAM11
## 894	DHRS9
## 895	IGF2BP2
## 896	MAP3K13
## 897	ST6GAL1
## 898	VDAC1P1
## 899	FRY
## 900	PICALM
## 901	NSF
## 902	CLASP1
## 903	MRPS34
## 904	NOTCH3
## 905	CLNS1A
## 906	EED
## 907	TSG101
## 908	NCBP3
## 909	ATP2A3

## 910	MGLL
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## 912	DPP8
## 913	SLC24A1
## 914	LMAN1
## 915	HACD3
## 916	IPCEF1
## 917	ZZEF1
## 918	ENO1
## 919	MYDGF
## 920	ANO8
## 921	TUBE1
## 922	TXK
## 923	ACTR6
## 924	TIPIN
## 925	SRI
## 926	EIF4G3
## 927	NUP37
## 928	GTSE1
## 929	TTC38
## 930	ACAT1
## 931	GRAMD4
## 932	CELSR1
## 933	ZNF638
## 934	SLC25A40
## 935	TIMM21
## 936	RASAL2
## 937	VPS9D1
## 938	ZNF37A
## 939	MARK3
## 940	SLC25A3
## 941	FNDC3B
## 942	FOSL2
## 943	FRYL
## 944	TMEM131
## 945	FSCN1
## 946	ACTB
## 947	PLD1
## 948	WDR62
## 949	DLG1
## 950	RAB7A
## 951	BCAP29
## 952	SEC31B
## 953	SART3
## 954	ARHGAP15
## 955	EXOSC7
## 956	KIFAP3
## 957	MKRN2
## 958	MCM6
## 959	REXO2
## 960	RBM7
## 961	RBMS2
## 962	BAZ2A
## 963	PTPN23

## 964	MLH1
## 965	UNG
## 966	KLHL20
## 967	SLC46A1
## 968	SPAG5
## 969	ANKRD13A
## 970	ACACB
## 971	TRAF4
## 972	PAG1
## 973	GPATCH1
## 974	ICAM3
## 975	NT5C2
## 976	MBNL3
## 977	XAB2
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## 979	STXBP2
## 980	MAP2K7
## 981	DGKD
## 982	TOP2B
## 983	TM9SF3
## 984	NFKB2
## 985	UBE2T
## 986	PPP1R12B
## 987	DNAJC10
## 988	GTF3C1
## 989	IL4R
## 990	USP33
## 991	SNRPA
## 992	EXOSC5
## 993	DYNC1I2
## 994	APBB1IP
## 995	LRCH4
## 996	FAM76B
## 997	SIRT6
## 998	POLD3
## 999	CAPZB
## 1000	GPR137B
## 1001	JADE1
## 1002	SLC25A43
## 1003	UBE2A
## 1004	FGFR1
## 1005	CST7
## 1006	PIAS2
## 1007	ARAF
## 1008	MCCC1
## 1009	ACER3
## 1010	UBE2K
## 1011	PIK3C3
## 1012	N4BP2
## 1013	TIGAR
## 1014	TULP3
## 1015	SYNJ2
## 1016	PPP2R5C
## 1017	PMS2P1



## 1018	GNB1
## 1019	MLLT10
## 1020	ZCWPW1
## 1021	ITM2A
## 1022	NRDC
## 1023	VDAC3
## 1024	PCM1
## 1025	TNRC6C
## 1026	CBFA2T2
## 1027	ITCH
## 1028	PKD2L2
## 1029	TP53INP2
## 1030	SDF4
## 1031	TOLLIP
## 1032	UBE2D4
## 1033	RUNX1T1
## 1034	THOC1
## 1035	FKBP7
## 1036	XRCC5
## 1037	LXN
## 1038	MKNK1
## 1039	TNS1
## 1040	REX01
## 1041	SAR1A
## 1042	CDC14A
## 1043	RAPGEF3
## 1044	SENP1
## 1045	CIC
## 1046	LIPE
## 1047	FDFT1
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## 1051	PGM1
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## 1053	DNM2
## 1054	EPB41L2
## 1055	STX7
## 1056	RABL2B
## 1057	KEAP1
## 1058	SLC35C2
## 1059	CRYBG3
## 1060	RIF1
## 1061	RAB21
## 1062	SMARCA2
## 1063	SESN1
## 1064	MID2
## 1065	SRCAP
## 1066	PUM3
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## 1070	CLDND1
## 1071	HSP90AA1

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## 1073	DLGAP4
## 1074	CROCCP3
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## 1078	MAGI3
## 1079	OSTM1
## 1080	PCNP
## 1081	EXD2
## 1082	ARG2
## 1083	MEF2C
## 1084	PTPRC
## 1085	UBA5
## 1086	STK17B
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## 1088	ZNF506
## 1089	JMJD4
## 1090	DUSP12
## 1091	AACS
## 1092	DELE1
## 1093	PCDHGA2
## 1094	HSPB11
## 1095	PHLPP1
## 1096	IL12RB2
## 1097	SMARCD3
## 1098	WDR70
## 1099	FYB1
## 1100	STRADB
## 1101	BZW1
## 1102	C1QTNF3
## 1103	ME2
## 1104	C5orf22
## 1105	CCNT2
## 1106	FAM135A
## 1107	MRPL22
## 1108	GEMIN5
## 1109	NFE2L1
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## 1111	ERC1
## 1112	XP01
## 1113	RNF13
## 1114	PALB2
## 1115	DOP1A
## 1116	LYRM2
## 1117	BCKDHB
## 1118	KAT6A
## 1119	TUT7
## 1120	TNP01
## 1121	PLOD1
## 1122	P2RX5
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## 1124	DIS3
## 1125	PIBF1

## 1126	TDRD3
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## 1133	ZNF324
## 1134	ZNF671
## 1135	ZNF416
## 1136	ZNF586
## 1137	ZNF446
## 1138	ZNF264
## 1139	RPS5
## 1140	YTHDC1
## 1141	CHMP2B
## 1142	SMAP2
## 1143	PPIE
## 1144	ZMPSTE24
## 1145	STARD7
## 1146	NOA1
## 1147	REST
## 1148	HAL
## 1149	SSH1
## 1150	GSTP1
## 1151	APLP2
## 1152	FAM234B
## 1153	WBP11
## 1154	EIF3I
## 1155	TXLNA
## 1156	NCOA1
## 1157	AGBL5
## 1158	KIF3C
## 1159	RAB10
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## 1161	CAD
## 1162	CD59
## 1163	CD82
## 1164	BCORL1
## 1165	ATRX
## 1166	AK6
## 1167	MYNN
## 1168	SCAMP1
## 1169	PREP
## 1170	HACE1
## 1171	SEH1L
## 1172	WDR47
## 1173	WDFY1
## 1174	SLC25A24
## 1175	MAP3K4
## 1176	PILRA
## 1177	ABCB1
## 1178	ZNF213
## 1179	AKR1B1

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## 1186	EPS15
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## 1188	MGST2
## 1189	CHERP
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## 1191	USP40
## 1192	POMGNT1
## 1193	RAD54L
## 1194	MAST2
## 1195	DNAJA1
## 1196	B4GALT1
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## 1204	SEPHS1
## 1205	MRPL28
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## 1207	ITPKC
## 1208	CEACAM6
## 1209	RBM22
## 1210	TMED2
## 1211	ERO1B
## 1212	ZFAND6
## 1213	TXLNG
## 1214	LAT2
## 1215	HUWE1
## 1216	ZW10
## 1217	ALG9
## 1218	ACOX3
## 1219	MTMR2
## 1220	PPP1R15A
## 1221	TRIP6
## 1222	FTL
## 1223	SRRT
## 1224	BAX
## 1225	NLK
## 1226	PIGS
## 1227	ATXN7L3
## 1228	PGS1
## 1229	PSMC5
## 1230	UIMC1
## 1231	LPCAT2
## 1232	OGFOD1
## 1233	SH3BP2

## 1234	NOP14
## 1235	ADD1
## 1236	L2HGDH
## 1237	TXNDC16
## 1238	RTRAF
## 1239	NID2
## 1240	GMCL1
## 1241	SF3B2
## 1242	KLHL42
## 1243	GNAS
## 1244	DNM1L
## 1245	ERGIC2
## 1246	AURKA
## 1247	CASS4
## 1248	PIR
## 1249	AAMDC
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## 1252	ALG6
## 1253	CNOT3
## 1254	PTPN4
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## 1258	EDEM2
## 1259	DNMT3B
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## 1261	PDRG1
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## 1276	LZTS3
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## 1278	KIZ
## 1279	DYNLL1
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## 1281	SNX5
## 1282	RPL6
## 1283	MAPKAPK5
## 1284	P2RX7
## 1285	ESF1
## 1286	RBBP9
## 1287	ANAPC5

## 1288	SLC23A2
## 1289	SLC8B1
## 1290	TMEM230
## 1291	KDM2B
## 1292	TASP1
## 1293	GCN1
## 1294	RPLP0
## 1295	PXN
## 1296	KIF16B
## 1297	TRMT6
## 1298	PEBP1
## 1299	BRAP
## 1300	ERP29
## 1301	FUS
## 1302	IGBP1
## 1303	FXVD5
## 1304	ZNF302
## 1305	GRAMD1A
## 1306	CDIP1
## 1307	CMTM1
## 1308	KCNH4
## 1309	GANAB
## 1310	GMIP
## 1311	RBM41
## 1312	BIRC5
## 1313	LAG3
## 1314	MLF2
## 1315	DDX24
## 1316	ZBTB25
## 1317	NECAP1
## 1318	ARHGAP4
## 1319	DHX32
## 1320	RCOR1
## 1321	GPATCH2L
## 1322	LTBP4
## 1323	BLVRB
## 1324	SLC9A1
## 1325	SPTLC1
## 1326	PAPOLA
## 1327	CCNK
## 1328	PCBP4
## 1329	MRPS33
## 1330	NDUFB2
## 1331	NUDC
## 1332	MAEA
## 1333	ICAM1
## 1334	STRN4
## 1335	IRAK3
## 1336	LYZ
## 1337	MUL1
## 1338	TFAP4
## 1339	PDCD7
## 1340	SPG21
## 1341	DNAJB11

## 1342	FLT3LG
## 1343	GNPTG
## 1344	ZNF268
## 1345	GOLGA3
## 1346	PABPC4
## 1347	CERS4
## 1348	MCOLN1
## 1349	USP48
## 1350	EFNB1
## 1351	PDPR
## 1352	AARS1
## 1353	GLG1
## 1354	KIF4A
## 1355	TNRC6A
## 1356	PLEKHG2
## 1357	DLL3
## 1358	NAT14
## 1359	PITPNM2
## 1360	EXOC1
## 1361	RBM27
## 1362	OSBPL8
## 1363	DTX2
## 1364	NLRC4
## 1365	PUS7
## 1366	LAMB1
## 1367	DLD
## 1368	WDR7
## 1369	TXNL1
## 1370	CMTM6
## 1371	ITGA6
## 1372	MAP3K20
## 1373	FH
## 1374	CDV3
## 1375	ALKBH5
## 1376	SPAG7
## 1377	ORC6
## 1378	ZC3HC1
## 1379	TMEM101
## 1380	CD200
## 1381	PSME1
## 1382	PPP2R3C
## 1383	HAUS4
## 1384	CEBPE
## 1385	OSGEP
## 1386	RNF31
## 1387	SCFD1
## 1388	G2E3
## 1389	HECTD1
## 1390	HNRNPC
## 1391	SUPT16H
## 1392	TOX4
## 1393	GEMIN2
## 1394	TGM1
## 1395	TINF2

## 1396	TRPM7
## 1397	WDR76
## 1398	CAPN3
## 1399	SNAP23
## 1400	PHGDH
## 1401	COL9A3
## 1402	EZR
## 1403	MYL6
## 1404	AGO1
## 1405	CLSPN
## 1406	RFFL
## 1407	UNC13D
## 1408	MFSD11
## 1409	DPYSL2
## 1410	GPATCH2
## 1411	NUP50
## 1412	CDC45
## 1413	COMT
## 1414	ADA2
## 1415	AC016026.1
## 1416	ECHDC1
## 1417	LRRFIP2
## 1418	SEC22C
## 1419	XYLB
## 1420	HDAC6
## 1421	CDC6
## 1422	UPRT
## 1423	CDC23
## 1424	AAAS
## 1425	CBX5
## 1426	SUCO
## 1427	MSH2
## 1428	MAP3K1
## 1429	DHPS
## 1430	HOOK2
## 1431	ARCN1
## 1432	TMEM38B
## 1433	PSMD5
## 1434	PTGS1
## 1435	NUP188
## 1436	CRAT
## 1437	SH2D3C
## 1438	NANS
## 1439	CWF19L1
## 1440	SEMA4G
## 1441	BTAF1
## 1442	IKZF5
## 1443	WAC
## 1444	CREM
## 1445	NUBP2
## 1446	TPSD1
## 1447	SMIM24
## 1448	HIVEP1
## 1449	FKBP5



## 1450	SRPK1
## 1451	BRPF3
## 1452	MRPS18A
## 1453	TMEM14A
## 1454	EFHC1
## 1455	HSP90AB1
## 1456	CDC5L
## 1457	ITPR3
## 1458	ZNF184
## 1459	SIRT1
## 1460	HNRNPH3
## 1461	IFT74
## 1462	JAK2
## 1463	ABL1
## 1464	ACOT7
## 1465	SH3GLB1
## 1466	CDC7
## 1467	SYDE2
## 1468	SCD
## 1469	TMED1
## 1470	ABLIM1
## 1471	ERMP1
## 1472	RAB18
## 1473	NRP1
## 1474	HSD17B7P2
## 1475	PRTFDC1
## 1476	TSPAN15
## 1477	WASHC2A
## 1478	MAST3
## 1479	MZF1
## 1480	OCEL1
## 1481	MYO9B
## 1482	KCNK6
## 1483	PSMD8
## 1484	FBXL19
## 1485	SETD1A
## 1486	BCL7C
## 1487	CIRBP
## 1488	ATP5F1D
## 1489	HNRNPM
## 1490	MARCH2
## 1491	NDUFB7
## 1492	TECR
## 1493	TIMM13
## 1494	CDC34
## 1495	MTAP
## 1496	POLR2E
## 1497	POLRMT
## 1498	HCN2
## 1499	IZUM04
## 1500	GADD45B
## 1501	PALM
## 1502	MKNK2
## 1503	ARVCF

## 1504	TRMT2A
## 1505	RANBP1
## 1506	ZDHHC8
## 1507	KLHL22
## 1508	MED15
## 1509	SNAP29
## 1510	CRKL
## 1511	LZTR1
## 1512	CECR2
## 1513	SMARCB1
## 1514	BCL2L13
## 1515	OSM
## 1516	CABIN1
## 1517	TBC1D10A
## 1518	SF3A1
## 1519	GGT5
## 1520	RNF215
## 1521	SPECC1L
## 1522	PPIL2
## 1523	YPEL1
## 1524	SNRPD3
## 1525	PES1
## 1526	MAPK1
## 1527	GGT1
## 1528	PPM1F
## 1529	TOP3B
## 1530	CYTH4
## 1531	ESS2
## 1532	CRYBB2P1
## 1533	MFNG
## 1534	LRP5L
## 1535	SLC25A1
## 1536	GRK3
## 1537	GGA1
## 1538	HIRA
## 1539	SH3BP1
## 1540	LGALS1
## 1541	HPS4
## 1542	PIK3IP1
## 1543	Z83844.1
## 1544	SRRD
## 1545	PATZ1
## 1546	TRIOBP
## 1547	TFIP11
## 1548	GCAT
## 1549	ANKRD54
## 1550	EIF3L
## 1551	SNU13
## 1552	MICALL1
## 1553	POLR2F
## 1554	CCDC134
## 1555	DEPDC5
## 1556	TTC28
## 1557	CENPM

## 1558	DDX17
## 1559	HSCB
## 1560	CBY1
## 1561	TOMM22
## 1562	XBP1
## 1563	RTCB
## 1564	JOSD1
## 1565	FBX07
## 1566	GTPBP1
## 1567	POLDIP3
## 1568	PPP6R2
## 1569	SBF1
## 1570	SUN2
## 1571	CYB5R3
## 1572	DNAL4
## 1573	LMF2
## 1574	RHBDD3
## 1575	PACSIN2
## 1576	TTLL1
## 1577	AP1B1
## 1578	HMGXB4
## 1579	TOM1
## 1580	CHKB
## 1581	BIK
## 1582	MCAT
## 1583	THOC5
## 1584	MCM5
## 1585	ARSA
## 1586	TSP0
## 1587	TTLL12
## 1588	CBX7
## 1589	CABP7
## 1590	RPL3
## 1591	ZMAT5
## 1592	RBFOX2
## 1593	SYNGR1
## 1594	TAB1
## 1595	ASCC2
## 1596	MTMR3
## 1597	MIEF1
## 1598	PNPLA3
## 1599	MYH9
## 1600	SAMM50
## 1601	TXN2
## 1602	FOXRED2
## 1603	EIF3D
## 1604	TNRC6B
## 1605	SGSM3
## 1606	IFT27
## 1607	KIAA0930
## 1608	NCF4
## 1609	CSF2RB
## 1610	SLC25A17
## 1611	UPK3A

## 1612	FAM118A
## 1613	KCTD17
## 1614	ST13
## 1615	RBX1
## 1616	EP300
## 1617	L3MBTL2
## 1618	CHADL
## 1619	RANGAP1
## 1620	ZC3H7B
## 1621	PHF5A
## 1622	ACO2
## 1623	POLR3H
## 1624	TRMU
## 1625	PMM1
## 1626	DESI1
## 1627	CERK
## 1628	BRD1
## 1629	ZBED4
## 1630	MLC1
## 1631	HDAC10
## 1632	ABHD4
## 1633	KHNYN
## 1634	FKBP3
## 1635	SDR39U1
## 1636	CTSG
## 1637	RBM23
## 1638	PRMT5
## 1639	COCH
## 1640	AP4S1
## 1641	POLE2
## 1642	VCPKMT
## 1643	SOS2
## 1644	CDKL1
## 1645	NIN
## 1646	PYGL
## 1647	PSMC6
## 1648	GNPNAT1
## 1649	DDHD1
## 1650	CDKN3
## 1651	CNIH1
## 1652	CGRRF1
## 1653	ATP6V1D
## 1654	PIGH
## 1655	PSMA3
## 1656	VTI1B
## 1657	TIMM9
## 1658	GSTZ1
## 1659	KIAA0586
## 1660	TMED8
## 1661	AHSA1
## 1662	DAAM1
## 1663	SPTLC2
## 1664	RIN3
## 1665	ALKBH1

## 1666	SNW1
## 1667	ITPK1
## 1668	DHRS7
## 1669	PPM1A
## 1670	SIX4
## 1671	CEP128
## 1672	ERH
## 1673	HIF1A
## 1674	SUSD6
## 1675	SRSF5
## 1676	EIF5
## 1677	DICER1
## 1678	ZFYVE21
## 1679	MTHFD1
## 1680	ZC3H14
## 1681	TELO2
## 1682	PCNX1
## 1683	GSKIP
## 1684	VRK1
## 1685	PSMC1
## 1686	PAPLN
## 1687	RPS6KA5
## 1688	PPP4R3A
## 1689	C14orf93
## 1690	PSMB5
## 1691	YY1
## 1692	ACIN1
## 1693	CCNB1IP1
## 1694	TRIP11
## 1695	APEX1
## 1696	PABPN1
## 1697	ARHGAP5
## 1698	CINP
## 1699	SRP54
## 1700	CHD8
## 1701	PCK2
## 1702	PRORP
## 1703	DCAF11
## 1704	PSMA6
## 1705	NFKBIA
## 1706	EMC9
## 1707	PSME2
## 1708	BRMS1L
## 1709	REC8
## 1710	TM9SF1
## 1711	SEC23A
## 1712	GMPR2
## 1713	PNN
## 1714	RABGGTA
## 1715	PLTP
## 1716	PCIF1
## 1717	GSS
## 1718	TRPC4AP
## 1719	PYGB

## 1720	ABHD12
## 1721	PROCR
## 1722	GINS1
## 1723	NINL
## 1724	UQCC1
## 1725	ZMYND8
## 1726	IFT52
## 1727	MYBL2
## 1728	NDRG3
## 1729	SLA2
## 1730	RAB5IF
## 1731	NFATC2
## 1732	PABPC1L
## 1733	STK4
## 1734	ADNP
## 1735	PFDN4
## 1736	CSTF1
## 1737	RAE1
## 1738	TPD52L2
## 1739	DNAJC5
## 1740	NELFCD
## 1741	CTSZ
## 1742	PRPF6
## 1743	PRELID3B
## 1744	MTG2
## 1745	PSMA7
## 1746	SLC04A1
## 1747	NTSR1
## 1748	MRGBP
## 1749	TCFL5
## 1750	DID01
## 1751	GID8
## 1752	SLC17A9
## 1753	ARFGAP1
## 1754	GMEB2
## 1755	C20orf27
## 1756	CDC25B
## 1757	RNF24
## 1758	ARFRP1
## 1759	NDUFAF5
## 1760	TRIB3
## 1761	RASSF2
## 1762	CSNK2A1
## 1763	SLC52A3
## 1764	CDS2
## 1765	HM13
## 1766	MYLK2
## 1767	SIRPB1
## 1768	SEC23B
## 1769	FERMT1
## 1770	HCK
## 1771	TM9SF4
## 1772	TLDC2
## 1773	CRNKL1

## 1774	POFUT1
## 1775	SAMHD1
## 1776	KIF3B
## 1777	MROH8
## 1778	NOP56
## 1779	MANBAL
## 1780	IDH3B
## 1781	MAPRE1
## 1782	JAG1
## 1783	CDK5RAP1
## 1784	TTI1
## 1785	E2F1
## 1786	RPRD1B
## 1787	PXMP4
## 1788	CHMP4B
## 1789	BPI
## 1790	CST3
## 1791	ACTR5
## 1792	AHCY
## 1793	FAM83D
## 1794	DHX35
## 1795	DNTTIP1
## 1796	PIGU
## 1797	ACOT8
## 1798	APMAP
## 1799	ZNF516
## 1800	CDH20
## 1801	ADNP2
## 1802	RBFA
## 1803	USP14
## 1804	VAPA
## 1805	METTL4
## 1806	LPIN2
## 1807	SMCHD1
## 1808	MYL12A
## 1809	CEP76
## 1810	ST8SIA5
## 1811	CEP192
## 1812	RNMT
## 1813	SMAD7
## 1814	RNF125
## 1815	ANKRD12
## 1816	POLI
## 1817	MIB1
## 1818	RBBP8
## 1819	RIOK3
## 1820	CSTF2
## 1821	PSMD10
## 1822	ATG4A
## 1823	STS
## 1824	TBL1X
## 1825	PGRMC1
## 1826	POLA1
## 1827	NKAP

## 1828	NXT2
## 1829	MCTS2P
## 1830	ALG13
## 1831	PRPS2
## 1832	MOSPD1
## 1833	AMMECR1
## 1834	CHRD1
## 1835	WDR13
## 1836	SUV39H1
## 1837	SRPX
## 1838	XIAP
## 1839	STAG2
## 1840	ATP11C
## 1841	ABCD1
## 1842	CCDC22
## 1843	SYP
## 1844	PLP2
## 1845	PLS3
## 1846	NAA10
## 1847	RENB
## 1848	ELF4
## 1849	MTMR8
## 1850	ZC3H12B
## 1851	RBBP7
## 1852	SLC25A14
## 1853	FMR1
## 1854	PIM2
## 1855	SCML2
## 1856	SLC35A2
## 1857	PQBP1
## 1858	EMD
## 1859	TAZ
## 1860	PGK1
## 1861	MAGT1
## 1862	SMS
## 1863	UBL4A
## 1864	CD99L2
## 1865	EEA1
## 1866	RP2
## 1867	JADE3
## 1868	CDK16
## 1869	USP11
## 1870	HTATSF1
## 1871	TIMP1
## 1872	FGD1
## 1873	PIN4
## 1874	PORCN
## 1875	MAGED2
## 1876	RBM3
## 1877	CENPI
## 1878	PBDC1
## 1879	GLA
## 1880	ARMCX3
## 1881	TNFSF13B



## 1882	FNDC3A
## 1883	CDADC1
## 1884	CAB39L
## 1885	KLF5
## 1886	STK24
## 1887	DNAJC3
## 1888	ARHGEF7
## 1889	PARP4
## 1890	SUPT20H
## 1891	MRPS31
## 1892	SLC25A15
## 1893	KPNA3
## 1894	FLT1
## 1895	RGCC
## 1896	VWA8
## 1897	DGKH
## 1898	KATNAL1
## 1899	INTS6
## 1900	DHRS12
## 1901	TSC22D1
## 1902	CLN5
## 1903	OLFM4
## 1904	MGRN1
## 1905	ZNF629
## 1906	TRADD
## 1907	HSF4
## 1908	CORO1A
## 1909	MAPK3
## 1910	ELMO3
## 1911	PHKB
## 1912	LYRM1
## 1913	NUTF2
## 1914	NUP93
## 1915	CENPT
## 1916	TSNAXIP1
## 1917	NFAT5
## 1918	LONP2
## 1919	N4BP1
## 1920	ARL2BP
## 1921	PLLP
## 1922	DHODH
## 1923	CTCF
## 1924	ACD
## 1925	POLR2C
## 1926	PARD6A
## 1927	ZNF821
## 1928	MMP15
## 1929	USB1
## 1930	CYB5B
## 1931	NME3
## 1932	PSMD7
## 1933	SETD6
## 1934	SLC38A7
## 1935	VAC14

## 1936	HAS3
## 1937	TANGO6
## 1938	COG4
## 1939	SMPD3
## 1940	SLC7A6OS
## 1941	SLC7A6
## 1942	PLA2G15
## 1943	WDR59
## 1944	MON1B
## 1945	CMC2
## 1946	AXIN1
## 1947	HCFC1R1
## 1948	NPRL3
## 1949	MLYCD
## 1950	MPG
## 1951	HSDL1
## 1952	TAF1C
## 1953	NAGPA
## 1954	SEC14L5
## 1955	COTL1
## 1956	USP10
## 1957	TSC2
## 1958	ZNF500
## 1959	NME4
## 1960	ABCC1
## 1961	NOMO3
## 1962	LMF1
## 1963	CIAO3
## 1964	MTHFSD
## 1965	CLCN7
## 1966	HAGHL
## 1967	ANTKMT
## 1968	SLC7A5
## 1969	METR1
## 1970	FBXO31
## 1971	STUB1
## 1972	NUBP1
## 1973	UBE2I
## 1974	EEF2K
## 1975	CAPN15
## 1976	PIEZ01
## 1977	GSPT1
## 1978	ZNF174
## 1979	CLUAP1
## 1980	UBFD1
## 1981	EARS2
## 1982	ELOB
## 1983	GGA2
## 1984	CPPED1
## 1985	USP31
## 1986	BFAR
## 1987	RBL2
## 1988	QPRT
## 1989	XYLT1

## 1990	PYCARD
## 1991	RPGRIP1L
## 1992	MAZ
## 1993	STX4
## 1994	CDIPT
## 1995	BCKDK
## 1996	KAT8
## 1997	NOM01
## 1998	CCP110
## 1999	VPS35L
## 2000	RNF40
## 2001	KNOP1
## 2002	AAGAB
## 2003	LACTB
## 2004	CSK
## 2005	HERC1
## 2006	TRIP4
## 2007	MTFMT
## 2008	ACSBG1
## 2009	RAB11A
## 2010	CTSH
## 2011	TTC23
## 2012	FAH
## 2013	CEMIP
## 2014	RPAP1
## 2015	HOMER2
## 2016	EHD4
## 2017	TMEM87A
## 2018	ZNF106
## 2019	CEP152
## 2020	ATP8B4
## 2021	DTWD1
## 2022	TGM5
## 2023	FAM189A1
## 2024	GABPB1
## 2025	BMF
## 2026	DMXL2
## 2027	DNAJC17
## 2028	EIF3J
## 2029	SPG11
## 2030	VPS18
## 2031	OIP5
## 2032	BLOC1S6
## 2033	SGK3
## 2034	CSPP1
## 2035	ZDHHC2
## 2036	BRF2
## 2037	TRIM35
## 2038	ZFAND1
## 2039	CA2
## 2040	INTS9
## 2041	RIPK2
## 2042	NBN
## 2043	CPQ

##	2044	DECR1
##	2045	IMPAD1
##	2046	LAPTM4B
##	2047	UBE2W
##	2048	POP1
##	2049	NIPAL2
##	2050	IKBKB
##	2051	STK3
##	2052	GDAP1
##	2053	RAB2A
##	2054	EIF3E
##	2055	EMC2
##	2056	ESRP1
##	2057	NDRG1
##	2058	ARMC1
##	2059	TRPS1
##	2060	SPAG1
##	2061	CHRA1
##	2062	SNX16
##	2063	UBR5
##	2064	GSDMD
##	2065	TSTA3
##	2066	EEF1D
##	2067	SQLE
##	2068	SH2D4A
##	2069	INTS10
##	2070	ERI1
##	2071	SLC39A14
##	2072	MTMR9
##	2073	LEPROTL1
##	2074	DCTN6
##	2075	R3HCC1
##	2076	GSR
##	2077	TNFRSF10A
##	2078	UBXN8
##	2079	PPP2CB
##	2080	ERICH1
##	2081	KLHDC4
##	2082	MCM4
##	2083	KCTD9
##	2084	ASAH1
##	2085	BNIP3L
##	2086	MAN2B1
##	2087	KCNN4
##	2088	NUCB1
##	2089	GYS1
##	2090	MAP4K1
##	2091	ECH1
##	2092	HNRNPL
##	2093	NFKB1B
##	2094	TUBB4A
##	2095	SARS2
##	2096	SNRNP70
##	2097	CLPTM1

##	2098	RELB
##	2099	CLASRP
##	2100	LIN7B
##	2101	PPP1R37
##	2102	FCGRT
##	2103	PIH1D1
##	2104	ARHGEF18
##	2105	ERCC2
##	2106	DOT1L
##	2107	PLEKHJ1
##	2108	RNASEH2A
##	2109	KLC3
##	2110	CD37
##	2111	SF3A2
##	2112	AMH
##	2113	LYL1
##	2114	OAZ1
##	2115	TRMT1
##	2116	STX10
##	2117	RETN
##	2118	DMPK
##	2119	TBC1D17
##	2120	IL4I1
##	2121	CCDC130
##	2122	PTOV1
##	2123	TLE5
##	2124	SGTA
##	2125	MED25
##	2126	SNAPC2
##	2127	C19orf53
##	2128	TIMM44
##	2129	CCDC61
##	2130	IL27RA
##	2131	ASF1B
##	2132	TNNT1
##	2133	VRK3
##	2134	FAM32A
##	2135	PPP6R1
##	2136	C19orf44
##	2137	MED26
##	2138	RASAL3
##	2139	AKAP8
##	2140	ILVBL
##	2141	ZNF419
##	2142	POP4
##	2143	CCNE1
##	2144	URI1
##	2145	PDCD5
##	2146	ANKRD27
##	2147	RPS16
##	2148	TIMM50
##	2149	FBL
##	2150	DYRK1B
##	2151	GPI

##	2152	AKT2
##	2153	PLD3
##	2154	PRX
##	2155	PIAS4
##	2156	NUMBL
##	2157	YJU2
##	2158	TBCB
##	2159	FSD1
##	2160	POLR2I
##	2161	CLIP3
##	2162	SLC1A5
##	2163	PRKD2
##	2164	CACTIN
##	2165	CCDC9
##	2166	HNRNPUL1
##	2167	FZR1
##	2168	TGFB1
##	2169	DENND3
##	2170	DMAC2
##	2171	CEACAM4
##	2172	PLIN3
##	2173	MRPL4
##	2174	SIGLEC8
##	2175	CD79A
##	2176	ICAM4
##	2177	RPS19
##	2178	NOP53
##	2179	NKG7
##	2180	ICAM5
##	2181	ETFB
##	2182	CD33
##	2183	BABAM1
##	2184	TYK2
##	2185	CDC37
##	2186	NAPA
##	2187	RABAC1
##	2188	PTPRS
##	2189	CNFN
##	2190	MEGF8
##	2191	KDELRL1
##	2192	CYTH2
##	2193	GRWD1
##	2194	CLEC11A
##	2195	CCDC114
##	2196	CARD8
##	2197	LIG1
##	2198	ZNF175
##	2199	PLA2G4C
##	2200	SIGLEC5
##	2201	RAB3D
##	2202	DBP
##	2203	TMEM205
##	2204	CAPS
##	2205	PLPPR2

##	2206	BCAT2
##	2207	MIER2
##	2208	PPP2R1A
##	2209	TNPO2
##	2210	WDR830S
##	2211	GCDH
##	2212	DNASE2
##	2213	PRPF31
##	2214	JAK3
##	2215	RPL18A
##	2216	SLC5A5
##	2217	ARRDC2
##	2218	PIK3R2
##	2219	RAB3A
##	2220	ISYNA1
##	2221	ELL
##	2222	CRTC1
##	2223	COPE
##	2224	DDX49
##	2225	ARMC6
##	2226	TMEM147
##	2227	GAPDHS
##	2228	USF2
##	2229	KXD1
##	2230	FKBP8
##	2231	SUGP1
##	2232	SCN1B
##	2233	ERF
##	2234	GSK3A
##	2235	ATP13A1
##	2236	ZNF574
##	2237	GRIK5
##	2238	SIPA1L3
##	2239	ETHE1
##	2240	SMG9
##	2241	AVL9
##	2242	GTPBP10
##	2243	RASA4
##	2244	CDK6
##	2245	PMPCB
##	2246	DNAJC2
##	2247	BET1
##	2248	NAMPT
##	2249	TWISTNB
##	2250	PIK3CG
##	2251	PON2
##	2252	HBP1
##	2253	DUS4L
##	2254	SP4
##	2255	WDR91
##	2256	DNAH11
##	2257	CBLL1
##	2258	MTPN
##	2259	MPP6

##	2260	ZC3HAV1
##	2261	TTC26
##	2262	OGDH
##	2263	ADAP1
##	2264	TFEC
##	2265	H2AZ2
##	2266	RNF32
##	2267	LMBR1
##	2268	NHP2P1
##	2269	HOXA1
##	2270	DNAJB6
##	2271	HOXA3
##	2272	HOXA5
##	2273	BRAT1
##	2274	IQCE
##	2275	VIPR2
##	2276	SSBP1
##	2277	HOXA13
##	2278	HIBADH
##	2279	TAX1BP1
##	2280	ABHD11
##	2281	FKBP14
##	2282	PLEKHA8
##	2283	NOD1
##	2284	GARS1
##	2285	EPHB6
##	2286	NSUN5P2
##	2287	CASP2
##	2288	CHCHD2
##	2289	HSPB1
##	2290	PDAP1
##	2291	BUD31
##	2292	PTCD1
##	2293	ZKSCAN1
##	2294	EIF3B
##	2295	SNX8
##	2296	NUDT1
##	2297	TAF6
##	2298	WASL
##	2299	AIMP2
##	2300	TFR2
##	2301	FSCN3
##	2302	MOSPD3
##	2303	PCOLCE
##	2304	RBM28
##	2305	USP42
##	2306	IMPDH1
##	2307	AGFG2
##	2308	LSM5
##	2309	AP1S1
##	2310	C1GALT1
##	2311	PLOD3
##	2312	RPA3
##	2313	ZNHIT1



## 2314	CLDN15
## 2315	GLCCI1
## 2316	PHF14
## 2317	NRF1
## 2318	TMEM106B
## 2319	EZH2
## 2320	CEP41
## 2321	ZNF862
## 2322	MEST
## 2323	ANKMY2
## 2324	TSPAN13
## 2325	CHCHD3
## 2326	GIMAP2
## 2327	GLI3
## 2328	PSMA2
## 2329	MRPL32
## 2330	COA1
## 2331	URGCP
## 2332	TMEM248
## 2333	STAG3L4
## 2334	RHEB
## 2335	PRKAG2
## 2336	POLD2
## 2337	BCL7B
## 2338	YKT6
## 2339	TBL2
## 2340	CLIP2
## 2341	EIF4H
## 2342	LIMK1
## 2343	FKTN
## 2344	FSD1L
## 2345	SPIN1
## 2346	TMEM245
## 2347	MEGF9
## 2348	TRIM14
## 2349	CORO2A
## 2350	TGFBR1
## 2351	SEC61B
## 2352	C5
## 2353	TLE4
## 2354	LHX6
## 2355	PTGR1
## 2356	SUSD1
## 2357	AKNA
## 2358	TNFSF8
## 2359	DNM1
## 2360	ENG
## 2361	AK1
## 2362	CDC37L1
## 2363	PLGRKT
## 2364	TBC1D13
## 2365	RIC1
## 2366	KDM4C
## 2367	DOCK8

## 2368	KANK1
## 2369	TESK1
## 2370	FUBP3
## 2371	CREB3
## 2372	RGP1
## 2373	DDX58
## 2374	EDF1
## 2375	BAG1
## 2376	RAPGEF1
## 2377	SETX
## 2378	ABCA2
## 2379	SHB
## 2380	UBE2R2
## 2381	ABHD17B
## 2382	EXOSC3
## 2383	ZFAND5
## 2384	DVL1
## 2385	PDLIM1
## 2386	CCNJ
## 2387	HPS1
## 2388	PHYH
## 2389	RASSF4
## 2390	DNMBP
## 2391	RAB11FIP2
## 2392	ERLIN1
## 2393	EIF3A
## 2394	TRDMT1
## 2395	DDX50
## 2396	MAPK8
## 2397	SEC23IP
## 2398	ATE1
## 2399	NSMCE4A
## 2400	PLEKHA1
## 2401	PALD1
## 2402	VSIR
## 2403	MICU1
## 2404	PPP3CB
## 2405	CCSER2
## 2406	BMPR1A
## 2407	MINPP1
## 2408	LIPA
## 2409	TWNK
## 2410	LZTS2
## 2411	SFXN3
## 2412	FBXW4
## 2413	NPM3
## 2414	TNKS2
## 2415	GBF1
## 2416	ARHGAP21
## 2417	CPEB3
## 2418	FBXL15
## 2419	CUEDC2
## 2420	SUFU
## 2421	ANKRD26

##	2422	ACBD5
##	2423	LHPP
##	2424	LARP4B
##	2425	GTPBP4
##	2426	EDRF1
##	2427	BCCIP
##	2428	MTPAP
##	2429	NEURL1
##	2430	SH3PXD2A
##	2431	PITRM1
##	2432	STN1
##	2433	MAP3K8
##	2434	GLRX3
##	2435	TASOR2
##	2436	XPNPEP1
##	2437	SMC3
##	2438	SHOC2
##	2439	TFAM
##	2440	CCDC6
##	2441	CUL2
##	2442	CCNY
##	2443	UBE2S
##	2444	RPL28
##	2445	ZMIZ1
##	2446	DNAJC12
##	2447	PPIF
##	2448	PBLD
##	2449	TSPAN14
##	2450	TBC1D12
##	2451	NUFIP2
##	2452	GIT1
##	2453	RPL19
##	2454	FBXL20
##	2455	UBTF
##	2456	PSMD3
##	2457	CASC3
##	2458	RAPGEFL1
##	2459	RNF43
##	2460	RAD51C
##	2461	MTMR4
##	2462	TRIM37
##	2463	P2RX1
##	2464	DHX40
##	2465	TUBD1
##	2466	KPNB1
##	2467	GOSR2
##	2468	PNP0
##	2469	RPS6KB1
##	2470	CDK5RAP3
##	2471	CBX1
##	2472	RECQL5
##	2473	PIGL
##	2474	GALK1
##	2475	INTS2

##	2476	CAMTA2
##	2477	MED13
##	2478	ENO3
##	2479	PFN1
##	2480	RNF167
##	2481	SLC25A11
##	2482	RAI1
##	2483	NUP88
##	2484	C1QBP
##	2485	BLMH
##	2486	CPD
##	2487	GOSR1
##	2488	CCDC47
##	2489	MED31
##	2490	DRG2
##	2491	FTSJ3
##	2492	AKAP10
##	2493	SMARCD2
##	2494	ICAM2
##	2495	SYNGR2
##	2496	B9D1
##	2497	UTP6
##	2498	DDX5
##	2499	C17orf75
##	2500	CYTH1
##	2501	PSMD11
##	2502	PEX12
##	2503	DHX58
##	2504	KAT2A
##	2505	RAB5C
##	2506	NAGLU
##	2507	HSD17B1P1
##	2508	HSD17B1
##	2509	MLX
##	2510	CNTNAP1
##	2511	EZH1
##	2512	DLX4
##	2513	PPP1R9B
##	2514	PTGES3L-AARSD1
##	2515	MRPL27
##	2516	VAT1
##	2517	LRRC59
##	2518	ALOX12
##	2519	HDAC5
##	2520	LUC7L3
##	2521	SMURF2
##	2522	DUSP3
##	2523	EFTUD2
##	2524	HLF
##	2525	SLC16A6
##	2526	PRKAR1A
##	2527	YWHAE
##	2528	AC130689.1
##	2529	MMD

##	2530	RANGRF
##	2531	DPH1
##	2532	DHRS7B
##	2533	WSB1
##	2534	SLC9A3R1
##	2535	MYH3
##	2536	NAT9
##	2537	TMEM104
##	2538	TNFAIP1
##	2539	IFT20
##	2540	TMEM97
##	2541	CDR2L
##	2542	UNC119
##	2543	ALDOC
##	2544	SUPT6H
##	2545	RAB34
##	2546	PHF12
##	2547	TMEM33
##	2548	SLAIN2
##	2549	OCIAD1
##	2550	DCUN1D4
##	2551	USP46
##	2552	CHIC2
##	2553	CRACD
##	2554	LAMTOR3
##	2555	NFKB1
##	2556	MANBA
##	2557	UBE2D3
##	2558	ELF2
##	2559	NDUFC1
##	2560	ZNF330
##	2561	INPP4B
##	2562	GAB1
##	2563	KLHL2
##	2564	CPE
##	2565	RPL34
##	2566	GRPEL1
##	2567	GAR1
##	2568	FRG1
##	2569	CLCN3
##	2570	AADAT
##	2571	GALNT7
##	2572	DHX15
##	2573	SEPSECS
##	2574	SLC2A9
##	2575	FBXW7
##	2576	NEIL3
##	2577	NSD2
##	2578	SH3D19
##	2579	STIM2
##	2580	NKX3-2
##	2581	MFSD10
##	2582	GLRB
##	2583	BST1

##	2584	RAPGEF2
##	2585	SNX25
##	2586	UFSP2
##	2587	KLF3
##	2588	KLHL5
##	2589	NCAPG
##	2590	UGDH
##	2591	HTATIP2
##	2592	CTSC
##	2593	CCDC34
##	2594	ZBTB16
##	2595	ELP4
##	2596	ZPR1
##	2597	MTCH2
##	2598	FNBP4
##	2599	SC5D
##	2600	HSPA8
##	2601	DNAJC4
##	2602	SIAE
##	2603	SNX15
##	2604	LPXN
##	2605	DTX4
##	2606	ATG2A
##	2607	EHD1
##	2608	OSBP
##	2609	UNC93B1
##	2610	PUS3
##	2611	DCPS
##	2612	KMT5B
##	2613	FOXRED1
##	2614	PPP6R3
##	2615	NRXN2
##	2616	MS4A6A
##	2617	ST3GAL4
##	2618	CPT1A
##	2619	CCND1
##	2620	CCDC86
##	2621	PRPF19
##	2622	TMEM109
##	2623	TRIM3
##	2624	CHORDC1
##	2625	ANAPC15
##	2626	PANX1
##	2627	ARHGEF17
##	2628	CEP164
##	2629	RNF141
##	2630	EIF4G2
##	2631	IL10RA
##	2632	GALNT18
##	2633	BIRC2
##	2634	UBE4A
##	2635	DDX6
##	2636	CBL
##	2637	NECTIN1

## 2638	HIPK3
## 2639	FBX03
## 2640	PDHX
## 2641	COMMD9
## 2642	ACCS
## 2643	MDK
## 2644	AMBRA1
## 2645	MADD
## 2646	PTPMT1
## 2647	NAA40
## 2648	CARS1
## 2649	CD81
## 2650	SLC35F2
## 2651	C11orf21
## 2652	SOX6
## 2653	C11orf58
## 2654	PITPNM1
## 2655	RPS13
## 2656	AIP
## 2657	NUP98
## 2658	NDUFS8
## 2659	TCIRG1
## 2660	CHKA
## 2661	HPS5
## 2662	GTF2H1
## 2663	PSMD9
## 2664	P3H3
## 2665	PPFIBP1
## 2666	PRPF40B
## 2667	CD69
## 2668	PRDM4
## 2669	CLEC2B
## 2670	COQ5
## 2671	SELPLG
## 2672	CORO1C
## 2673	ASIC1
## 2674	CAPRIN2
## 2675	KCTD10
## 2676	SLC11A2
## 2677	MLEC
## 2678	MVK
## 2679	CSRNP2
## 2680	CAMKK2
## 2681	BIN2
## 2682	ATP5F1B
## 2683	PTGES3
## 2684	BCL7A
## 2685	RSRC2
## 2686	CYP27B1
## 2687	LIN7A
## 2688	ACSS3
## 2689	PPM1H
## 2690	METAP2
## 2691	LTA4H

##	2692	ELK3
##	2693	MAGOH
##	2694	ITFG2
##	2695	FOXM1
##	2696	PARP11
##	2697	ARPC3
##	2698	GPN3
##	2699	VPS29
##	2700	RAD51AP1
##	2701	CUX2
##	2702	SH2B3
##	2703	DUSP16
##	2704	CREBL2
##	2705	ACAD10
##	2706	CDKN1B
##	2707	NAA25
##	2708	LTBR
##	2709	OGFOD2
##	2710	CDK2AP1
##	2711	ARHGDIB
##	2712	GTF2H3
##	2713	EIF2B1
##	2714	DDX55
##	2715	SLC38A1
##	2716	C12orf49
##	2717	VDR
##	2718	RFC5
##	2719	STX2
##	2720	ADGRD1
##	2721	COPZ1
##	2722	TBC1D30
##	2723	CAND1
##	2724	RAB5B
##	2725	MDM1
##	2726	NUP107
##	2727	CNOT2
##	2728	TIMELESS
##	2729	CPSF6
##	2730	KRR1
##	2731	MRPL51
##	2732	GAPDH
##	2733	NOP2
##	2734	CHD4
##	2735	UHRF1BP1L
##	2736	COPS7A
##	2737	ING4
##	2738	GNB3
##	2739	CDCA3
##	2740	CHPT1
##	2741	USP5
##	2742	TPI1
##	2743	GNPTAB
##	2744	SPSB2
##	2745	ENO2



##	2746	ATN1
##	2747	C12orf57
##	2748	PTPN6
##	2749	LPCAT3
##	2750	NT5DC3
##	2751	SUDS3
##	2752	GOLT1B
##	2753	LDHB
##	2754	PRKAB1
##	2755	CMAS
##	2756	HCFC2
##	2757	C2CD5
##	2758	RAB35
##	2759	PHC1
##	2760	COX6A1
##	2761	AL021546.1
##	2762	RIC8B
##	2763	SRSF9
##	2764	AC009533.1
##	2765	FGFR10P2
##	2766	BTN3A3
##	2767	TDP2
##	2768	DSE
##	2769	RWDD1
##	2770	TMEM14C
##	2771	PAK1IP1
##	2772	SMIM8
##	2773	NEDD9
##	2774	CEP85L
##	2775	ASF1A
##	2776	MCM9
##	2777	RNGTT
##	2778	MAN1A1
##	2779	SERINC1
##	2780	HDDC2
##	2781	HINT3
##	2782	NCOA7
##	2783	SASH1
##	2784	UST
##	2785	ULBP1
##	2786	FBX05
##	2787	MTRF1L
##	2788	PPARD
##	2789	FANCE
##	2790	MAPK14
##	2791	KCTD20
##	2792	STK38
##	2793	SRSF3
##	2794	SOD2
##	2795	MRPL18
##	2796	MCM3
##	2797	RNF8
##	2798	PHACTR1
##	2799	CILK1

## 2800	FBX09
## 2801	CD83
## 2802	MDN1
## 2803	SAYSD1
## 2804	TREML2
## 2805	ZNF451
## 2806	BAG2
## 2807	RAB23
## 2808	GPR63
## 2809	FBXL4
## 2810	CCNC
## 2811	PRDM13
## 2812	E2F3
## 2813	PTP4A1
## 2814	ASCC3
## 2815	BVES
## 2816	MED23
## 2817	WASF1
## 2818	GPLD1
## 2819	ALDH5A1
## 2820	CRYBG1
## 2821	ACOT13
## 2822	SMAP1
## 2823	RPS12
## 2824	C6orf62
## 2825	B3GAT2
## 2826	GMNN
## 2827	SNX3
## 2828	HBS1L
## 2829	TRIM38
## 2830	PEX7
## 2831	ZBTB24
## 2832	FIG4
## 2833	SLC16A10
## 2834	HECA
## 2835	PHACTR2
## 2836	EPM2A
## 2837	PHF1
## 2838	CUTA
## 2839	QKI
## 2840	MDFI
## 2841	TFEB
## 2842	CCND3
## 2843	BYSL
## 2844	TBP
## 2845	BICRAL
## 2846	PPP2R5D
## 2847	MRPL2
## 2848	SRF
## 2849	CUL9
## 2850	DNPH1
## 2851	DUSP22
## 2852	EXOC2
## 2853	COX7A2

##	2854	TMEM30A
##	2855	GMDS
##	2856	SENP6
##	2857	VEGFA
##	2858	PRPF4B
##	2859	TTK
##	2860	SLC29A1
##	2861	BTN2A1
##	2862	TENT5A
##	2863	FBRSL1
##	2864	LY86
##	2865	ERBIN
##	2866	HARS2
##	2867	NUDT12
##	2868	CEP72
##	2869	MAN2A1
##	2870	TENT4A
##	2871	HMGCS1
##	2872	DAP
##	2873	BRD8
##	2874	KIF20A
##	2875	NNT
##	2876	MRPS30
##	2877	HSPA9
##	2878	MRPS27
##	2879	PFDN1
##	2880	LOX
##	2881	APBB3
##	2882	TMC06
##	2883	SPARC
##	2884	IK
##	2885	HMGCR
##	2886	CERT1
##	2887	FAF2
##	2888	PDE8B
##	2889	CLK4
##	2890	RNF130
##	2891	THG1L
##	2892	ARSB
##	2893	CLINT1
##	2894	CNOT6
##	2895	TTC1
##	2896	MSH3
##	2897	CCNG1
##	2898	POLR3G
##	2899	DROSHA
##	2900	LMNB1
##	2901	ARRDC3
##	2902	GOLPH3
##	2903	SUB1
##	2904	NPR3
##	2905	FAM172A
##	2906	SLC27A6
##	2907	TARS1

##	2908	LNPEP
##	2909	PDE4D
##	2910	RAD1
##	2911	BRIX1
##	2912	SLC12A7
##	2913	RAD50
##	2914	ST8SIA4
##	2915	GNPDA1
##	2916	SKP1
##	2917	NUP155
##	2918	PPP2CA
##	2919	NR3C1
##	2920	C5orf15
##	2921	PPWD1
##	2922	TRIM23
##	2923	TRAPPC13
##	2924	C9
##	2925	SEC24A
##	2926	TXNDC15
##	2927	TTC33
##	2928	RARS1
##	2929	MACROH2A1
##	2930	TCERG1
##	2931	SMAD5
##	2932	CSNK1A1
##	2933	HMGXB3
##	2934	ERGIC1
##	2935	ATP6V0E1
##	2936	BNIP1
##	2937	STC2
##	2938	CPEB4
##	2939	HRH2
##	2940	DBN1
##	2941	ZNF346
##	2942	EHHADH
##	2943	SMC4
##	2944	SELENOK
##	2945	ACTR8
##	2946	TBCCD1
##	2947	TIMMDC1
##	2948	CRBN
##	2949	BCL6
##	2950	ARL6
##	2951	NPHP3
##	2952	NIT2
##	2953	FAM162A
##	2954	OGG1
##	2955	KPNA1
##	2956	PCCB
##	2957	UBE3A
##	2958	ARMC8
##	2959	CEP70
##	2960	SLC25A36
##	2961	RNF7

## 2962	TFDP2
## 2963	XRN1
## 2964	KAT2B
## 2965	PDCD10
## 2966	PFKFB4
## 2967	COL7A1
## 2968	PRKAR2A
## 2969	HES1
## 2970	USP4
## 2971	ACAP2
## 2972	ECT2
## 2973	GNAI2
## 2974	TFG
## 2975	TUSC2
## 2976	NPRL2
## 2977	RPL24
## 2978	CYB561D2
## 2979	FXR1
## 2980	CBLB
## 2981	BBX
## 2982	IFT57
## 2983	GNB4
## 2984	GBE1
## 2985	UMPS
## 2986	NCBP2
## 2987	SNX4
## 2988	SLC41A3
## 2989	PLXNA1
## 2990	ATP6V1A
## 2991	ABTB1
## 2992	PODXL2
## 2993	CSPG5
## 2994	KLHL18
## 2995	SCAP
## 2996	KIAA1257
## 2997	MRPL3
## 2998	HEMK1
## 2999	CISH
## 3000	MAPKAPK3
## 3001	ACVR2B
## 3002	WDR48
## 3003	COMMD2
## 3004	GORASP1
## 3005	RRP9
## 3006	ABCC5
## 3007	ABHD14B
## 3008	EIF1B
## 3009	ABHD14A-ACY1
## 3010	KLHL24
## 3011	PLCH1
## 3012	VIPR1
## 3013	DNAH1
## 3014	SSR3
## 3015	ZBTB47

## 3016	NKTR
## 3017	CLCN2
## 3018	FOXP1
## 3019	EIF4G1
## 3020	SPCS1
## 3021	NEK4
## 3022	INO80D
## 3023	EEF1B2
## 3024	DGUOK
## 3025	MOB1A
## 3026	KANSL3
## 3027	LMAN2L
## 3028	RTKN
## 3029	TTL
## 3030	PIKFYVE
## 3031	FAHD2A
## 3032	NCL
## 3033	ACTR1B
## 3034	SLC35F5
## 3035	ACTR3
## 3036	STEAP3
## 3037	EPB41L5
## 3038	SF3B6
## 3039	TP53I3
## 3040	DNAJC27
## 3041	STAM2
## 3042	GPD2
## 3043	CENPA
## 3044	CYTIP
## 3045	TANC1
## 3046	SLC30A3
## 3047	MPV17
## 3048	GTF3C2
## 3049	EIF2B4
## 3050	NRBP1
## 3051	ITGA4
## 3052	PSMD14
## 3053	SNX17
## 3054	ASB3
## 3055	PPM1G
## 3056	PDE1A
## 3057	REEP6
## 3058	PCSK4
## 3059	APC2
## 3060	IFIH1
## 3061	RPS15
## 3062	GCA
## 3063	INO80B
## 3064	MOGS
## 3065	TTC31
## 3066	NDUFS7
## 3067	PCGF1
## 3068	SPTBN1
## 3069	AUP1

## 3070	RTN4
## 3071	HTRA2
## 3072	LOXL3
## 3073	DOK1
## 3074	GALNT3
## 3075	POLE4
## 3076	CCDC88A
## 3077	MRPL19
## 3078	LANCL1
## 3079	WDR75
## 3080	FANCL
## 3081	STAT1
## 3082	GLS
## 3083	PAPOLG
## 3084	PECR
## 3085	UNC50
## 3086	IGFBP2
## 3087	ELMOD3
## 3088	USP34
## 3089	CCT4
## 3090	GGCX
## 3091	EHBP1
## 3092	TXNDC9
## 3093	COQ10B
## 3094	SF3B1
## 3095	ST3GAL5
## 3096	CHST10
## 3097	PDCL3
## 3098	MOB4
## 3099	HSPE1
## 3100	KDM3A
## 3101	PLCD4
## 3102	CHMP3
## 3103	ZNF142
## 3104	CNPPD1
## 3105	UXS1
## 3106	STK16
## 3107	HDLBP
## 3108	PPP1R7
## 3109	PASK
## 3110	STK25
## 3111	ID2
## 3112	TAF1B
## 3113	HPCAL1
## 3114	ODC1
## 3115	BIRC6
## 3116	NOL10
## 3117	PLEKHB2
## 3118	GORASP2
## 3119	STRN
## 3120	CEBPZ
## 3121	PRKD3
## 3122	DCAF17
## 3123	RAB3GAP1

## 3124	SLC25A12
## 3125	DARS1
## 3126	SRSF7
## 3127	SDC1
## 3128	SLC1A4
## 3129	SOS1
## 3130	WIPF1
## 3131	ORC2
## 3132	COX7A2L
## 3133	PN01
## 3134	ORC4
## 3135	PLEK
## 3136	ATF2
## 3137	THADA
## 3138	AAK1
## 3139	TRAK2
## 3140	C2orf42
## 3141	TIA1
## 3142	PCYOX1
## 3143	ARID3A
## 3144	SUM01
## 3145	GRIN3B
## 3146	NFE2L2
## 3147	MSH6
## 3148	PLEKHA3
## 3149	SPR
## 3150	FARSB
## 3151	ALMS1
## 3152	BCL9
## 3153	DHCR24
## 3154	DNAJC16
## 3155	GPX7
## 3156	CACYBP
## 3157	SCP2
## 3158	RALGPS2
## 3159	CEP104
## 3160	FAM20B
## 3161	TCEANC2
## 3162	TMEM59
## 3163	LRRC42
## 3164	WRAP73
## 3165	MRPL37
## 3166	ICMT
## 3167	RPL22
## 3168	QSOX1
## 3169	STXBP3
## 3170	PHF13
## 3171	PARK7
## 3172	AMPD2
## 3173	SRSF4
## 3174	MECR
## 3175	KCNC4
## 3176	EDEM3
## 3177	WDR77



## 3178	ATP5PB
## 3179	RAP1A
## 3180	HDAC1
## 3181	CAPZA1
## 3182	S100BPB
## 3183	RNF19B
## 3184	ASH1L
## 3185	DLGAP3
## 3186	SFPQ
## 3187	RHOU
## 3188	GON4L
## 3189	ARHGEF2
## 3190	LAMTOR2
## 3191	MEF2D
## 3192	DOCK7
## 3193	SRM
## 3194	FBX06
## 3195	C1orf21
## 3196	SWT1
## 3197	MAD2L2
## 3198	LEPR
## 3199	IVNS1ABP
## 3200	KIAA2013
## 3201	MFN2
## 3202	PRG4
## 3203	MIIP
## 3204	SMG7
## 3205	NCF2
## 3206	SLC35D1
## 3207	PLA2G4A
## 3208	GADD45A
## 3209	PRDM2
## 3210	RGS2
## 3211	R060
## 3212	UCLH5
## 3213	BCAS2
## 3214	SRSF11
## 3215	CTH
## 3216	AGMAT
## 3217	PLEKHM2
## 3218	CRYZ
## 3219	PHTF1
## 3220	ZBTB17
## 3221	CD58
## 3222	TFAP2E
## 3223	TTF2
## 3224	KIF21B
## 3225	TMEM9
## 3226	ADPRHL2
## 3227	MAP7D1
## 3228	WARS2
## 3229	MRPS15
## 3230	EXOC8
## 3231	GNPAT

##	3232	TSNAX
##	3233	C1orf109
##	3234	RRAGC
##	3235	LGALS8
##	3236	MTR
##	3237	BMP8B
##	3238	SIPA1L2
##	3239	RLF
##	3240	KMO
##	3241	ZNF684
##	3242	KCNQ4
##	3243	RIMS3
##	3244	ETV3
##	3245	ACADM
##	3246	CD48
##	3247	PADI2
##	3248	SDHB
##	3249	RPF1
##	3250	KDM5B
##	3251	UAP1
##	3252	ACTL8
##	3253	CTBS
##	3254	KLHL12
##	3255	SSX2IP
##	3256	ZNHIT6
##	3257	RBBP5
##	3258	PINK1-AS
##	3259	KIF17
##	3260	GPR89A
##	3261	RAB29
##	3262	ECE1
##	3263	HMGCL
##	3264	GALE
##	3265	CD46
##	3266	PRPF3
##	3267	APH1A
##	3268	P3H1
##	3269	SLC2A1
##	3270	EBNA1BP2
##	3271	CDC20
##	3272	IP013
##	3273	ATP6V0B
##	3274	B4GALT2
##	3275	ERI3
##	3276	PTCH2
##	3277	AKR1A1
##	3278	PRDX1
##	3279	PIK3R3
##	3280	BLZF1
##	3281	SLC19A2
##	3282	FAAH
##	3283	NSUN4
##	3284	TMED5
##	3285	DR1

## 3286	PRRC2C
## 3287	ABCD3
## 3288	VAMP4
## 3289	DPH5
## 3290	PTBP2
## 3291	TNFSF4
## 3292	PRDX6
## 3293	DARS2
## 3294	UTP25
## 3295	RCAN3
## 3296	SYF2
## 3297	RSRP1
## 3298	SLC35A3
## 3299	RCOR3
## 3300	STMN1
## 3301	MTFR1L
## 3302	NEK2
## 3303	RPS6KA1
## 3304	DHDDS
## 3305	NENF
## 3306	NSL1
## 3307	ARID1A
## 3308	CENPF
## 3309	RPA2
## 3310	PPP1R8
## 3311	STX12
## 3312	OSBPL9
## 3313	TXNDC12
## 3314	ESYT2
## 3315	CD3EAP
## 3316	MESD
## 3317	RCN2
## 3318	CTSD
## 3319	STAG1
## 3320	STK11
## 3321	KMT2A
## 3322	IFT46
## 3323	KPTN
## 3324	RPS25
## 3325	KIF14
## 3326	DDX59
## 3327	ATF6
## 3328	MREG
## 3329	FASTKD2
## 3330	CREB1
## 3331	KLF7
## 3332	B4GALT6
## 3333	C1orf54
## 3334	LRMP
## 3335	SPCS2
## 3336	USP35
## 3337	CASP8AP2
## 3338	HMGN3
## 3339	UBE3D

##	3340	ANKRD13C
##	3341	PHF3
##	3342	PLAGL1
##	3343	FBX030
##	3344	TNFAIP3
##	3345	AKAP7
##	3346	RAB32
##	3347	MYB
##	3348	RNF146
##	3349	PMFBP1
##	3350	FBXL5
##	3351	MED28
##	3352	SLC16A7
##	3353	RXYLT1
##	3354	ZNF430
##	3355	VAMP8
##	3356	DCLRE1B
##	3357	MYL12B
##	3358	FOXO3
##	3359	RPN2
##	3360	TGIF2
##	3361	PKD2
##	3362	STBD1
##	3363	CCNI
##	3364	MFSD1
##	3365	RAB3GAP2
##	3366	EEF2KMT
##	3367	UBN1
##	3368	KLF12
##	3369	UCHL3
##	3370	HS1BP3
##	3371	LDAH
##	3372	WDR35
##	3373	CCND2
##	3374	OTUD4P1
##	3375	ELL2
##	3376	CYP20A1
##	3377	NDUFB3
##	3378	GTF3C3
##	3379	SATB2
##	3380	UBE2B
##	3381	TRPM6
##	3382	KLF9
##	3383	TJP2
##	3384	ITGB1BP1
##	3385	CPSF3
##	3386	PIGZ
##	3387	SENP5
##	3388	C1orf198
##	3389	HEATR1
##	3390	PTBP3
##	3391	RAD23B
##	3392	FKBP15
##	3393	CTNNAL1

## 3394	ABITRAM
## 3395	WDR34
## 3396	SET
## 3397	PTPA
## 3398	GLE1
## 3399	RAB14
## 3400	CNTRL
## 3401	TRIM32
## 3402	FBXW2
## 3403	PHF19
## 3404	NEK6
## 3405	BSPRY
## 3406	PPP6C
## 3407	NDUFA8
## 3408	HDHD3
## 3409	RBM18
## 3410	HSDL2
## 3411	MAPKAP1
## 3412	INVS
## 3413	DENND1A
## 3414	ALG2
## 3415	CSF3R
## 3416	KDSR
## 3417	VPS4B
## 3418	ONECUT2
## 3419	C19orf25
## 3420	ZBTB45
## 3421	YLPM1
## 3422	DCAF4
## 3423	FCF1
## 3424	PGF
## 3425	IFI27L2
## 3426	BBOF1
## 3427	NEK9
## 3428	ACYP1
## 3429	IFT43
## 3430	NPC2
## 3431	DNAL1
## 3432	IRF2BPL
## 3433	ACOT2
## 3434	LTBP2
## 3435	AREL1
## 3436	MLH3
## 3437	TTLL5
## 3438	FLVCR2
## 3439	ABCD4
## 3440	DLST
## 3441	TGFB3
## 3442	SLIRP
## 3443	RBM25
## 3444	ALDH6A1
## 3445	EIF2B2
## 3446	NRDE2
## 3447	COQ6

## 3448	ZNF410
## 3449	RHOQ
## 3450	GPR75
## 3451	SUPT7L
## 3452	DNMT3A
## 3453	TMEM214
## 3454	ATAD2B
## 3455	ATL2
## 3456	YPEL5
## 3457	FAM98A
## 3458	YIPF4
## 3459	AFTPH
## 3460	LGALSL
## 3461	BCL11A
## 3462	CRIP1
## 3463	EPCAM
## 3464	SLC17A5
## 3465	OGFRL1
## 3466	SLF2
## 3467	IDE
## 3468	ELOVL3
## 3469	IFIT3
## 3470	NKX2-3
## 3471	IFIT2
## 3472	GPAM
## 3473	CUTC
## 3474	PYROXD2
## 3475	CNNM1
## 3476	MXI1
## 3477	SMNDC1
## 3478	C10orf88
## 3479	HELLS
## 3480	TCTN3
## 3481	DENND10
## 3482	AVP1
## 3483	WDR11
## 3484	ARMH3
## 3485	KCNIP2
## 3486	GOT1
## 3487	C10orf95
## 3488	GNA13
## 3489	DUSP1
## 3490	PANK3
## 3491	RCL1
## 3492	CAAP1
## 3493	NUP43
## 3494	MTHFD1L
## 3495	PCMT1
## 3496	CXorf21
## 3497	WDR55
## 3498	MRPS14
## 3499	CENPL
## 3500	SEC16B
## 3501	GORAB

##	3502	ACAT2
##	3503	TCP1
##	3504	SNX19
##	3505	MSANTD2
##	3506	PDZD11
##	3507	SLC10A7
##	3508	NUDCD1
##	3509	ENY2
##	3510	MASTL
##	3511	PLXDC2
##	3512	EPC1
##	3513	IQSEC3
##	3514	CCDC77
##	3515	TAF12
##	3516	MTRF1
##	3517	SOHLH2
##	3518	PROSER1
##	3519	UFM1
##	3520	WBP4
##	3521	ELF1
##	3522	HSPH1
##	3523	KBTD7
##	3524	ALG5
##	3525	EXOSC8
##	3526	ETF1
##	3527	FAM53C
##	3528	SIL1
##	3529	PAIP2
##	3530	KDM3B
##	3531	EGR1
##	3532	SERP1
##	3533	PLS1
##	3534	ZFP30
##	3535	NR2C1
##	3536	UTP20
##	3537	TMP0
##	3538	ARL1
##	3539	MTERF2
##	3540	SOCS2
##	3541	NFYB
##	3542	WASHC3
##	3543	APAF1
##	3544	DUSP4
##	3545	CLU
##	3546	TNFRSF10B
##	3547	PTK2B
##	3548	PPP3CC
##	3549	PDLIM2
##	3550	RNF170
##	3551	UBIAD1
##	3552	TARDBP
##	3553	ZNF706
##	3554	LYPLA1
##	3555	CRISPLD1

## 3556	COPS5
## 3557	RDH10
## 3558	EPX
## 3559	AKAP1
## 3560	COIL
## 3561	TRIM25
## 3562	SCPEP1
## 3563	SPOP
## 3564	SLC35B1
## 3565	NACA3P
## 3566	FAM117A
## 3567	NCAPH
## 3568	LRAT
## 3569	TMEM131L
## 3570	MND1
## 3571	ABCC11
## 3572	TENT4B
## 3573	ADCY7
## 3574	CEP89
## 3575	TSHZ3
## 3576	ECHDC2
## 3577	PYROXD1
## 3578	PSPC1
## 3579	ZNF549
## 3580	A1BG
## 3581	ZSCAN18
## 3582	ZNF211
## 3583	LHX4
## 3584	RNF2
## 3585	TRMT1L
## 3586	SEC22A
## 3587	CSTA
## 3588	B4GALT4
## 3589	NAA50
## 3590	KIF18A
## 3591	DESI2
## 3592	CRY2
## 3593	PEX16
## 3594	DEPDC7
## 3595	CAT
## 3596	PILRB
## 3597	ZMYM2
## 3598	TBC1D15
## 3599	HCRTR1
## 3600	ZCCHC17
## 3601	KHDRBS1
## 3602	TMEM39B
## 3603	POLR3GL
## 3604	TNFSF10
## 3605	ZNF639
## 3606	PIK3CA
## 3607	PDS5A
## 3608	TMEM156
## 3609	LIAS



## 3610	ZSCAN20
## 3611	LRIF1
## 3612	CLCC1
## 3613	GPSM2
## 3614	GTDC1
## 3615	CXCR4
## 3616	ZRANB3
## 3617	ACVR2A
## 3618	POLK
## 3619	FLT3
## 3620	RPL21
## 3621	MTIF3
## 3622	GTF3A
## 3623	UBL3
## 3624	FYTTD1
## 3625	MTERF4
## 3626	SASH3
## 3627	OCRL
## 3628	MRPS2
## 3629	LAX1
## 3630	KIAA1191
## 3631	COPA
## 3632	CD244
## 3633	LY9
## 3634	RBBP6
## 3635	ZC3H7A
## 3636	SERAC1
## 3637	ANXA11
## 3638	SHLD2
## 3639	PRXL2A
## 3640	NAA60
## 3641	RPL5
## 3642	ODF2L
## 3643	SPATA1
## 3644	TRMT13
## 3645	LRRC39
## 3646	RWDD3
## 3647	ZNF644
## 3648	CCDC18
## 3649	RPAP2
## 3650	SLC66A2
## 3651	PMS2
## 3652	ZMIZ2
## 3653	SEPTIN7
## 3654	EEPD1
## 3655	KLHL7
## 3656	HERPUD2
## 3657	CBX3
## 3658	HNRNPA2B1
## 3659	WIPF3
## 3660	FAM126A
## 3661	FKBP9
## 3662	NT5C3A
## 3663	ARL4A

## 3664	CCZ1
## 3665	POLM
## 3666	MRM2
## 3667	TWIST1
## 3668	SMU1
## 3669	GLIPR2
## 3670	SLC25A51
## 3671	CLTA
## 3672	RECK
## 3673	TAF1L
## 3674	ACO1
## 3675	DCAF10
## 3676	KIAA1549
## 3677	TRIM24
## 3678	CYREN
## 3679	PLAU
## 3680	SRGN
## 3681	CISD1
## 3682	EGR2
## 3683	ECD
## 3684	P4HA1
## 3685	SLC25A16
## 3686	ZWINT
## 3687	VPS26A
## 3688	RBM19
## 3689	CIT
## 3690	IFT81
## 3691	ACADS
## 3692	HVCN1
## 3693	NME2P1
## 3694	DDX54
## 3695	MED13L
## 3696	CDKN2C
## 3697	RNF11
## 3698	RASSF8
## 3699	ITPR2
## 3700	CCDC91
## 3701	WWP1
## 3702	ACOT9
## 3703	PRDX4
## 3704	DDX39A
## 3705	PKN1
## 3706	TRIR
## 3707	ADGRE5
## 3708	WDR83
## 3709	GIPC1
## 3710	SPRYD7
## 3711	EBPL
## 3712	ATP7B
## 3713	ZC3H13
## 3714	NLN
## 3715	CENPK
## 3716	ATF1
## 3717	TSFM

## 3718	ARHGAP9
## 3719	NCKAP1L
## 3720	PFDN5
## 3721	SPATS2
## 3722	ORMDL2
## 3723	PDE1B
## 3724	CDK2
## 3725	ATG101
## 3726	NFE2
## 3727	IKZF4
## 3728	SMUG1
## 3729	TUBA1B
## 3730	EEF1AKMT3
## 3731	KBTBD4
## 3732	ATPAF1
## 3733	STIL
## 3734	HJURP
## 3735	AMD1
## 3736	NDUFAF4
## 3737	USP45
## 3738	MORF4L2
## 3739	RAB9B
## 3740	FAM199X
## 3741	RAB9A
## 3742	METTL8
## 3743	TTC21B
## 3744	NMI
## 3745	BAZ2B
## 3746	SLC36A1
## 3747	LPGAT1
## 3748	RAP2C
## 3749	EXOSC9
## 3750	PLA2G12A
## 3751	B9D2
## 3752	COQ8B
## 3753	PFKFB2
## 3754	RAB38
## 3755	AGO2
## 3756	MXD4
## 3757	PMS2P5
## 3758	CKS2
## 3759	ACSL3
## 3760	DNPEP
## 3761	OBSL1
## 3762	SLC12A4
## 3763	ENKD1
## 3764	FAM210B
## 3765	FAM209A
## 3766	SNX21
## 3767	TTPAL
## 3768	PREX1
## 3769	NCOA3
## 3770	PIGT
## 3771	NCOA5

## 3772	VAPB
## 3773	ATP5F1E
## 3774	CHD6
## 3775	PLCG1
## 3776	SRSF6
## 3777	ARFGEF2
## 3778	ZNFX1
## 3779	CSE1L
## 3780	TMEM189-UBE2V1
## 3781	RAB22A
## 3782	STAU1
## 3783	CDH26
## 3784	SNAI1
## 3785	MOCS3
## 3786	STX16
## 3787	RNF114
## 3788	DDX27
## 3789	BCAS4
## 3790	NEURL2
## 3791	MTRR
## 3792	FASTKD3
## 3793	PEPD
## 3794	STAMPB
## 3795	NAGK
## 3796	MCEE
## 3797	PAIP2B
## 3798	SNRNP27
## 3799	MPHOSPH10
## 3800	NDUFB4P12
## 3801	ATP8A1
## 3802	USP22
## 3803	ZNF576
## 3804	ZNF45
## 3805	USP9X
## 3806	F13A1
## 3807	TRERF1
## 3808	BTN2A2
## 3809	SIRT5
## 3810	MRS2
## 3811	WRNIP1
## 3812	RRP36
## 3813	SNRPC
## 3814	SERPINB6
## 3815	XP05
## 3816	ABCC10
## 3817	PEX6
## 3818	NQO2
## 3819	AL365205.1
## 3820	OARD1
## 3821	AARS2
## 3822	ZNF391
## 3823	RPS10
## 3824	MED20
## 3825	TBCC

##	3826	TCP11
##	3827	MAD2L1BP
##	3828	KLHDC3
##	3829	MEA1
##	3830	KLHL31
##	3831	CDKN1A
##	3832	SOX4
##	3833	GLO1
##	3834	RREB1
##	3835	SSR1
##	3836	RIOK1
##	3837	NRN1
##	3838	SLC35B3
##	3839	RPP40
##	3840	ATXN1
##	3841	NUP153
##	3842	DEK
##	3843	EEF1E1
##	3844	RUNX2
##	3845	LRRFIP1
##	3846	MYRF
##	3847	AHNAK
##	3848	EMC3
##	3849	SH3TC1
##	3850	CNOT1
##	3851	BBS2
##	3852	MT1G
##	3853	MT2A
##	3854	C16orf70
##	3855	GOT2
##	3856	DOK4
##	3857	CLYBL
##	3858	TMTC4
##	3859	RAP2A
##	3860	ABCC4
##	3861	EFNB2
##	3862	TM9SF2
##	3863	HROB
##	3864	IRF1
##	3865	UPF3B
##	3866	RNF113A
##	3867	SEPTIN6
##	3868	NDUFA1
##	3869	DMAC2L
##	3870	BMP4
##	3871	PTGER2
##	3872	FAM193A
##	3873	GRK4
##	3874	HS3ST3B1
##	3875	SLC25A35
##	3876	MRPS7
##	3877	GGA3
##	3878	ARMC7
##	3879	NUP85

## 3880	SLC25A19
## 3881	MIF4GD
## 3882	NT5C
## 3883	MST01
## 3884	TTF1
## 3885	GTF3C4
## 3886	DDX31
## 3887	PPP1R12C
## 3888	MBOAT7
## 3889	OPRL1
## 3890	SLC2A4RG
## 3891	IL1B
## 3892	CHCHD5
## 3893	PAX8
## 3894	INSIG2
## 3895	POLR1B
## 3896	HTR5BP
## 3897	CCDC93
## 3898	PSD4
## 3899	SLC25A23
## 3900	PSPN
## 3901	GTF2F1
## 3902	ALKBH7
## 3903	CLPP
## 3904	THOC2
## 3905	MED1
## 3906	RPL23
## 3907	AC046185.1
## 3908	ATG4C
## 3909	TRIP10
## 3910	GPR108
## 3911	OPA3
## 3912	SNRPD2
## 3913	RTN2
## 3914	EML2
## 3915	VASP
## 3916	SYMPK
## 3917	GPCPD1
## 3918	PANK2
## 3919	CD93
## 3920	GZF1
## 3921	NAPB
## 3922	CENPB
## 3923	PSMF1
## 3924	DTD1
## 3925	RBCK1
## 3926	TMX4
## 3927	STK35
## 3928	SNRPB
## 3929	AP5S1
## 3930	RRBP1
## 3931	ZNF133
## 3932	OVOL2
## 3933	MKKS

## 3934	DSTN
## 3935	SNRPB2
## 3936	MGME1
## 3937	TBC1D20
## 3938	ITPA
## 3939	MCM8
## 3940	FAM110A
## 3941	MRPS26
## 3942	S1PR4
## 3943	NCLN
## 3944	HNRNPR
## 3945	ZNF436
## 3946	MAX
## 3947	CHURC1-FNTB
## 3948	ARMCX5
## 3949	MMP24
## 3950	NECAB3
## 3951	ID1
## 3952	RALY
## 3953	DYNLRB1
## 3954	EIF2S2
## 3955	ERGIC3
## 3956	ROM01
## 3957	CEP250
## 3958	PLAGL2
## 3959	MMP24OS
## 3960	KDM5C
## 3961	AMOT
## 3962	TMEM115
## 3963	PSMB2
## 3964	AGO3
## 3965	UROD
## 3966	ST3GAL3
## 3967	TMEM53
## 3968	HECTD3
## 3969	KLC1
## 3970	XRCC3
## 3971	TUBGCP3
## 3972	PCID2
## 3973	LRFN3
## 3974	IGFLR1
## 3975	CAPNS1
## 3976	PDCD2L
## 3977	RBM42
## 3978	UBA2
## 3979	HCST
## 3980	COX6B1
## 3981	THRA
## 3982	NR1D1
## 3983	FRMD8
## 3984	PRDX5
## 3985	BCL2L12
## 3986	IRF3
## 3987	PRMT1

## 3988	RRAS
## 3989	SCAF1
## 3990	PRR12
## 3991	TSKS
## 3992	ASL
## 3993	SBDS
## 3994	STAT5A
## 3995	WNK4
## 3996	BECN1
## 3997	TRAP1
## 3998	NSRP1
## 3999	DNAJC8
## 4000	AHDC1
## 4001	IFI6
## 4002	ZNF384
## 4003	EMG1
## 4004	UXT
## 4005	CFP
## 4006	ELK1
## 4007	TIMM17B
## 4008	PCNX4
## 4009	ATG14
## 4010	KTN1
## 4011	DLGAP5
## 4012	L3HYPDH
## 4013	HSPA2
## 4014	ZBTB1
## 4015	TRMT5
## 4016	PLEKHG3
## 4017	RHOT1
## 4018	EVI2A
## 4019	WDR60
## 4020	AIF1L
## 4021	FAM78A
## 4022	NUP214
## 4023	AVPR2
## 4024	SLC10A3
## 4025	MAP2K2
## 4026	HNRNPH2
## 4027	ARMCX1
## 4028	TIMM8A
## 4029	ZC4H2
## 4030	CANX
## 4031	INTS11
## 4032	IPPK
## 4033	ZNF484
## 4034	FGD3
## 4035	HIVEP3
## 4036	PPCS
## 4037	COX7C
## 4038	TRAF2
## 4039	ABHD8
## 4040	HELB
## 4041	RAP1B



## 4042	RAB3IP
## 4043	DYRK2
## 4044	YEATS4
## 4045	IDUA
## 4046	FGFRL1
## 4047	TMEM175
## 4048	AUNIP
## 4049	PIN1
## 4050	FBXL12
## 4051	EMC1
## 4052	UBR4
## 4053	HP1BP3
## 4054	ADGRE2
## 4055	SIN3B
## 4056	SLC35E1
## 4057	EPS15L1
## 4058	KLF2
## 4059	UQCR11
## 4060	GFER
## 4061	SYNGR3
## 4062	PKMYT1
## 4063	WDR24
## 4064	CHTF18
## 4065	TUBBP1
## 4066	MACF1
## 4067	SMARCA4
## 4068	KDM4B
## 4069	TICAM1
## 4070	METTL25
## 4071	EMC6
## 4072	METTL16
## 4073	TUBA4A
## 4074	VIL1
## 4075	AAMP
## 4076	PNKD
## 4077	RNF6
## 4078	ECHS1
## 4079	AKAP9
## 4080	SEM1
## 4081	HIP1
## 4082	PTPN12
## 4083	POR
## 4084	STYXL1
## 4085	GNAI1
## 4086	PMS2P3
## 4087	PEX1
## 4088	MTERF1
## 4089	RBM48
## 4090	CASD1
## 4091	ZNF780B
## 4092	LRFN1
## 4093	ZFP36
## 4094	SRD5A3
## 4095	RASL11B

## 4096	PAICS
## 4097	KDR
## 4098	PPAT
## 4099	TUBGCP6
## 4100	DGCR6L
## 4101	DGCR8
## 4102	ASPHD2
## 4103	SDF2L1
## 4104	YWHAH
## 4105	ATF4
## 4106	TPST2
## 4107	MPST
## 4108	TST
## 4109	APOL2
## 4110	RAC2
## 4111	C22orf23
## 4112	APOBEC3F
## 4113	EMC4
## 4114	SPECC1
## 4115	DOCK4
## 4116	POT1
## 4117	ATP6V1F
## 4118	LSM8
## 4119	PRKRIP1
## 4120	PODXL
## 4121	FOXP2
## 4122	IFT22
## 4123	MKLN1
## 4124	DNAJB9
## 4125	CALU
## 4126	IRF5
## 4127	LRRC17
## 4128	KLHDC10
## 4129	NDUFA5
## 4130	OPN1SW
## 4131	MRPS12
## 4132	MYO1B
## 4133	MTX2
## 4134	EIF2S2P4
## 4135	OSGEPL1
## 4136	ORMDL1
## 4137	HAT1
## 4138	HOXD13
## 4139	HERC2
## 4140	PSMG2
## 4141	TWSG1
## 4142	ARHGAP22
## 4143	WDFY4
## 4144	EIF2AK4
## 4145	TMOD2
## 4146	TTBK2
## 4147	ELL3
## 4148	CCDC32
## 4149	INO80

## 4150	ICE2
## 4151	MINDY2
## 4152	IVD
## 4153	KNSTRN
## 4154	DUT
## 4155	CHAC1
## 4156	CLN6
## 4157	ARPP19
## 4158	VPS13C
## 4159	CALML4
## 4160	ACKR4
## 4161	ANAPC13
## 4162	MBD4
## 4163	COPB1
## 4164	PSMA1
## 4165	SUMF2
## 4166	PALLD
## 4167	SPCS3
## 4168	SERGEF
## 4169	E2F8
## 4170	DCTD
## 4171	PIMREG
## 4172	RPAIN
## 4173	PLD2
## 4174	CD68
## 4175	TXNDC17
## 4176	FXR2
## 4177	KIF1C
## 4178	MPDU1
## 4179	PHF20L1
## 4180	CCNT1
## 4181	PUS7L
## 4182	KRI1
## 4183	ILF3
## 4184	SLC44A2
## 4185	CDKN2D
## 4186	NGDN
## 4187	RIPK3
## 4188	RAB2B
## 4189	BCL2L2
## 4190	AJUBA
## 4191	DTD2
## 4192	PARP2
## 4193	HEATR5A
## 4194	SNX6
## 4195	EAPP
## 4196	MIS18BP1
## 4197	NRL
## 4198	NEDD8
## 4199	DAD1
## 4200	TEP1
## 4201	EPB41L4A
## 4202	REEP5
## 4203	ITFG1

## 4204	QRICH2
## 4205	SEC14L1
## 4206	RHBDF2
## 4207	ARHGEF6
## 4208	MAP7D3
## 4209	ASH2L
## 4210	TTI2
## 4211	SGO1
## 4212	KLF16
## 4213	PGAP6
## 4214	DOHH
## 4215	MAU2
## 4216	PLPPR3
## 4217	ABHD17A
## 4218	CBFA2T3
## 4219	GAMT
## 4220	PUDP
## 4221	PHF10
## 4222	CRACR2A
## 4223	STARD8
## 4224	FAM155B
## 4225	SAT1
## 4226	GNL3L
## 4227	MOSPD2
## 4228	DOCK6
## 4229	ECSIT
## 4230	LDLR
## 4231	ELOF1
## 4232	ANGPTL8
## 4233	PRKCSH
## 4234	CDC16
## 4235	THEM6
## 4236	NECTIN2
## 4237	TOMM40
## 4238	XP07
## 4239	FAM98C
## 4240	SAFB2
## 4241	RPL36
## 4242	ATP8B3
## 4243	GDF1
## 4244	GTPBP3
## 4245	BST2
## 4246	SLC27A1
## 4247	NSUN5
## 4248	USHBP1
## 4249	COLGALT1
## 4250	DDA1
## 4251	MRPL34
## 4252	PGLS
## 4253	LSM7
## 4254	TULP4
## 4255	SNX9
## 4256	RTN4IP1
## 4257	QRSL1

## 4258	MTRES1
## 4259	RSPH3
## 4260	MLLT1
## 4261	AFDN
## 4262	ACTN4
## 4263	STK33
## 4264	NDUFA10
## 4265	ARPC1B
## 4266	ZSWIM6
## 4267	FCH01
## 4268	MAP1S
## 4269	KLHDC7B
## 4270	SCO2
## 4271	SSBP4
## 4272	PGPEP1
## 4273	IQCIN
## 4274	LSM4
## 4275	JUND
## 4276	TRPM4
## 4277	ZNF557
## 4278	CAMSAP1
## 4279	UBAC1
## 4280	ZBTB46
## 4281	HELZ2
## 4282	SAMD10
## 4283	LSP1
## 4284	ATXN10
## 4285	TUBGCP2
## 4286	CYP2E1
## 4287	PNPLA7
## 4288	PAK4
## 4289	ZNF337
## 4290	CEP85
## 4291	TAF4
## 4292	LAMA5
## 4293	OSBPL2
## 4294	ADRM1
## 4295	EXOSC2
## 4296	POMT1
## 4297	UCK1
## 4298	PRRC2B
## 4299	CHMP2A
## 4300	UBE2M
## 4301	TRIM28
## 4302	METTL26
## 4303	YIPF2
## 4304	ATG4D
## 4305	EIF2S3
## 4306	TMEM160
## 4307	ZC3H4
## 4308	NPAS1
## 4309	GMFG
## 4310	MAP3K10
## 4311	LRRC47

## 4312	SESN2
## 4313	SMPDL3B
## 4314	ATP5IF1
## 4315	MED18
## 4316	THEMIS2
## 4317	CLIP1
## 4318	CCDC62
## 4319	HIP1R
## 4320	ZNF317
## 4321	PPAN
## 4322	EIF3G
## 4323	ANGPTL6
## 4324	SHFL
## 4325	DNMT1
## 4326	DKC1
## 4327	PLXNA3
## 4328	DUSP9
## 4329	MPP1
## 4330	ZNF331
## 4331	ZNF236
## 4332	LRP3
## 4333	C12orf65
## 4334	NOL11
## 4335	UBE4B
## 4336	PKDREJ
## 4337	SLC35D2
## 4338	UBA1
## 4339	POLN
## 4340	PPIL4
## 4341	SYNE1
## 4342	LATS1
## 4343	EPS8L1
## 4344	AAR2
## 4345	RBM39
## 4346	ZNF341
## 4347	GGT7
## 4348	ACSS2
## 4349	ARHGEF9
## 4350	ATP6V1E1
## 4351	ZNF227
## 4352	ZNF428
## 4353	ZNF141
## 4354	COX4I1
## 4355	EMC8
## 4356	GSE1
## 4357	AC010531.1
## 4358	GINS2
## 4359	CHMP1A
## 4360	SH3BGRL
## 4361	COX7B
## 4362	F12
## 4363	PRR7
## 4364	NFATC1
## 4365	CAP1

## 4366	PPT1
## 4367	RAB11FIP4
## 4368	RLIM
## 4369	ABCB7
## 4370	TRAF3
## 4371	HAUS8
## 4372	MRPS25
## 4373	SH3BP5
## 4374	HACL1
## 4375	TBC1D5
## 4376	CAPN7
## 4377	RFTN1
## 4378	C3orf20
## 4379	RBSN
## 4380	SLC6A6
## 4381	NR1H2
## 4382	KIF3A
## 4383	MGAT1
## 4384	TUBG1
## 4385	PSME3
## 4386	RPL27
## 4387	PSMC3IP
## 4388	ACLY
## 4389	VPS25
## 4390	AOC2
## 4391	NDUFA2
## 4392	ANKHD1
## 4393	DIAPH1
## 4394	NDFIP1
## 4395	UBE2D2
## 4396	EXOC4
## 4397	ACAP3
## 4398	C1orf159
## 4399	PPFIA1
## 4400	KREMEN2
## 4401	THOC6
## 4402	TRAF7
## 4403	NINJ1
## 4404	NPHP4
## 4405	IL13RA1
## 4406	WDR44
## 4407	ZCCHC9
## 4408	TOP2A
## 4409	STARD3
## 4410	RARA
## 4411	KHDRBS3
## 4412	CHD1L
## 4413	PEX11B
## 4414	FM05
## 4415	PIAS3
## 4416	PRKAB2
## 4417	CLUHP3
## 4418	PDHA1
## 4419	MCCC2

## 4420	ZNF304
## 4421	ZSCAN5A
## 4422	ZNF132
## 4423	SELENOS
## 4424	CHSY1
## 4425	SNRPA1
## 4426	LLGL1
## 4427	THAP1
## 4428	C19orf12
## 4429	FAAP24
## 4430	ACTR10
## 4431	ABHD12B
## 4432	GCH1
## 4433	DNAJB1
## 4434	ZSWIM4
## 4435	FBXW9
## 4436	RFX1
## 4437	C19orf57
## 4438	DCAF15
## 4439	CC2D1A
## 4440	TRIM21
## 4441	LRRC41
## 4442	CCT6B
## 4443	DHX30
## 4444	RAF1
## 4445	NUP210
## 4446	HSD17B7
## 4447	ENOSF1
## 4448	EMILIN2
## 4449	ARFIP2
## 4450	TRIM5
## 4451	RRP8
## 4452	TIMM10B
## 4453	EFR3A
## 4454	PTCD3
## 4455	IMMT
## 4456	MRPL35
## 4457	ILKAP
## 4458	PER2
## 4459	SCLY
## 4460	PTPRE
## 4461	RAN
## 4462	PRKAA1
## 4463	RAP1GAP2
## 4464	CLUH
## 4465	INPP5K
## 4466	MYBBP1A
## 4467	RPA1
## 4468	UBE2G1
## 4469	EEFSEC
## 4470	TBC1D14
## 4471	TMEM128
## 4472	COQ3
## 4473	PNISR



## 4474	SEC61G
## 4475	LANCL2
## 4476	FIGNL1
## 4477	GRSF1
## 4478	ANKRD17
## 4479	UTP3
## 4480	ITGB4
## 4481	WBP2
## 4482	H3-3B
## 4483	UNK
## 4484	TRIM47
## 4485	ZRANB2
## 4486	EIF5A
## 4487	KDM6B
## 4488	GPS2
## 4489	XAF1
## 4490	DLG4
## 4491	RIDA
## 4492	VPS13B
## 4493	MATN2
## 4494	PCBD2
## 4495	SDF2
## 4496	FLOT2
## 4497	ERAL1
## 4498	PRMT7
## 4499	NIP7
## 4500	TERF2
## 4501	VPS4A
## 4502	MTSS2
## 4503	PCED1A
## 4504	BTBD3
## 4505	PCNA
## 4506	NXT1
## 4507	POLR3F
## 4508	PTPRA
## 4509	DAP3
## 4510	KHDC4
## 4511	DCAF8
## 4512	SYT11
## 4513	IGHMBP2
## 4514	ACY3
## 4515	TESMIN
## 4516	MMACHC
## 4517	DPH2
## 4518	TOE1
## 4519	NASP
## 4520	MUTYH
## 4521	CTNNB1
## 4522	ZSWIM3
## 4523	RBM38
## 4524	OSER1
## 4525	SERINC3
## 4526	PPP1R3D
## 4527	AP3B1

## 4528	ZBED3
## 4529	KANK4
## 4530	FBX044
## 4531	CPLANE2
## 4532	CASP9
## 4533	DCTN4
## 4534	ZMYM5
## 4535	USPL1
## 4536	XP04
## 4537	POMP
## 4538	CDK8
## 4539	ALOX5AP
## 4540	HMGB1P5
## 4541	WASF3
## 4542	MYH10
## 4543	PEMT
## 4544	SC01
## 4545	MPRIP
## 4546	CHI3L1
## 4547	PIK3C2B
## 4548	DSTYK
## 4549	SLC41A1
## 4550	TMCC2
## 4551	CCNA1
## 4552	COG6
## 4553	SPART
## 4554	RFXAP
## 4555	TPT1
## 4556	GPALPP1
## 4557	RFC3
## 4558	STARD13
## 4559	TCEAL4
## 4560	FAM104A
## 4561	SLC39A11
## 4562	SRRM1
## 4563	BTBD2
## 4564	PRAM1
## 4565	KMT5C
## 4566	ZNF414
## 4567	PDE6B
## 4568	HSPBP1
## 4569	CSNK1G2
## 4570	SLF1
## 4571	CNDP2
## 4572	MACROD1
## 4573	WDR74
## 4574	LGALS12
## 4575	RTN3
## 4576	MED10
## 4577	MORC2
## 4578	MYO18B
## 4579	SLC2A11
## 4580	C1QTNF6
## 4581	GIMAP6

## 4582	ADCK2
## 4583	MKRN1
## 4584	AGAP3
## 4585	KRBA1
## 4586	ZNF767P
## 4587	ACTR3B
## 4588	BTG1
## 4589	C12orf29
## 4590	ATP13A3
## 4591	TMEM254
## 4592	KRAS
## 4593	IPO8
## 4594	LARS1
## 4595	IMPA1
## 4596	LRRCC1
## 4597	E2F5
## 4598	CCDC59
## 4599	SWAP70
## 4600	ARNTL
## 4601	AMPD3
## 4602	SBF2
## 4603	MICAL2
## 4604	HSD17B4
## 4605	ZFC3H1
## 4606	SARAF
## 4607	RNF122
## 4608	DPF2
## 4609	MEN1
## 4610	ERG28
## 4611	DGLUCY
## 4612	NUMB
## 4613	COX16
## 4614	TTC9
## 4615	MED6
## 4616	EIF2S1
## 4617	ELP3
## 4618	CTIF
## 4619	MBD2
## 4620	IER3IP1
## 4621	MRPS36
## 4622	CCNB1
## 4623	CD180
## 4624	IRAK2
## 4625	CAMK1
## 4626	THUMPD3
## 4627	VHL
## 4628	BHLHE40
## 4629	ARL8B
## 4630	EDEM1
## 4631	MEIS2
## 4632	DPH6
## 4633	KATNBL1
## 4634	EMC7
## 4635	GNAT2

## 4636	GSTM1
## 4637	PRPF38B
## 4638	GSTM3
## 4639	VAV3
## 4640	PSRC1
## 4641	PTPN22
## 4642	SORT1
## 4643	WNT2B
## 4644	LAMTOR5
## 4645	NOTCH2
## 4646	TRIM45
## 4647	CEPT1
## 4648	AP4B1
## 4649	NAPG
## 4650	SPIRE1
## 4651	PPHLN1
## 4652	FKBP11
## 4653	ARF3
## 4654	TMEM106C
## 4655	SLC38A2
## 4656	PLEKHA8P1
## 4657	YWHAQ
## 4658	KIDINS220
## 4659	ROCK2
## 4660	LPIN1
## 4661	CMPK2
## 4662	IAH1
## 4663	LDHA
## 4664	IL6ST
## 4665	NAV1
## 4666	CDC73
## 4667	TIMM17A
## 4668	RPS15A
## 4669	NARS1
## 4670	RELCH
## 4671	FBH1
## 4672	RBM17
## 4673	ANKRD16
## 4674	CCNH
## 4675	TMEM241
## 4676	KCTD1
## 4677	CABLES1
## 4678	DOCK2
## 4679	DDB2
## 4680	ACP2
## 4681	RTL8C
## 4682	RAB33A
## 4683	RBMX2
## 4684	STK26
## 4685	PIWIL4
## 4686	PUM1
## 4687	YARS1
## 4688	PHC2
## 4689	CDCA8

## 4690	GNL2
## 4691	AGO4
## 4692	BTF3L4
## 4693	TUT4
## 4694	PRPF38A
## 4695	DSC2
## 4696	RNF138
## 4697	ELP2
## 4698	DTNA
## 4699	FHOD3
## 4700	TPGS2
## 4701	DAGLA
## 4702	SLC43A3
## 4703	TIMM10
## 4704	DHX34
## 4705	FADS2
## 4706	TMEM258
## 4707	C5AR2
## 4708	TMEM165
## 4709	CLOCK
## 4710	GGACT
## 4711	CLDN10
## 4712	DZIP1
## 4713	UBAC2
## 4714	ARGLU1
## 4715	BIVM
## 4716	ERCC5
## 4717	TPP2
## 4718	POGLUT2
## 4719	CARS2
## 4720	ARHGAP32
## 4721	STT3A
## 4722	TMED7
## 4723	APC
## 4724	NREP
## 4725	WDR36
## 4726	OSTF1
## 4727	RFK
## 4728	UBQLN1
## 4729	NAA35
## 4730	C9orf40
## 4731	CEMIP2
## 4732	AGTPBP1
## 4733	GOLM1
## 4734	PSAT1
## 4735	ISCA1
## 4736	TAOK3
## 4737	USP30
## 4738	FBXO21
## 4739	P2RX4
## 4740	TRAFFD1
## 4741	DMTF1
## 4742	TMEM243
## 4743	TMEM60

## 4744	UGT2B28
## 4745	PNPLA8
## 4746	HILPDA
## 4747	RINT1
## 4748	SRPK2
## 4749	KCP
## 4750	TES
## 4751	MDFIC
## 4752	MT01
## 4753	ANKRD6
## 4754	KHDC1
## 4755	CEP162
## 4756	SYNCRIP
## 4757	SNX14
## 4758	AKIRIN2
## 4759	ORC3
## 4760	MAP3K7
## 4761	PRR5L
## 4762	LM02
## 4763	PHF21A
## 4764	NAT10
## 4765	PRRG4
## 4766	CAPRIN1
## 4767	ATP5MC2
## 4768	DNAJC14
## 4769	CD63
## 4770	AVIL
## 4771	GDF11
## 4772	GLS2
## 4773	RDH5
## 4774	AGAP2
## 4775	BLOC1S1
## 4776	CDK4
## 4777	PPP1R1A
## 4778	TROAP
## 4779	TSPAN31
## 4780	B4GALNT1
## 4781	TFCP2
## 4782	COQ10A
## 4783	PAN2
## 4784	ESPL1
## 4785	ZC3H10
## 4786	HNRNPA1
## 4787	SLC26A10
## 4788	ACVR1B
## 4789	OS9
## 4790	MIP
## 4791	LTV1
## 4792	MAP7
## 4793	CD164
## 4794	AFG1L
## 4795	NHSL1
## 4796	SMPD2
## 4797	MICAL1

## 4798	REPS1
## 4799	TEC
## 4800	PRADC1
## 4801	SEMA4F
## 4802	CCT7
## 4803	SMYD5
## 4804	DYSF
## 4805	CCDC142
## 4806	KCNMB4
## 4807	USP15
## 4808	GNS
## 4809	CPM
## 4810	MDM2
## 4811	KLHL36
## 4812	MPHOSPH6
## 4813	DYNC1LI2
## 4814	FBXL8
## 4815	FHOD1
## 4816	CCDC102A
## 4817	SLC9A5
## 4818	AGT
## 4819	ZNF670-ZNF695
## 4820	PCNX2
## 4821	URB2
## 4822	EGLN1
## 4823	COG2
## 4824	ABCB10
## 4825	NTPCR
## 4826	TAF5L
## 4827	GLUL
## 4828	STX6
## 4829	RNASEL
## 4830	DHX9
## 4831	KIAA1614
## 4832	CEP350
## 4833	NPL
## 4834	NIBAN1
## 4835	PIGC
## 4836	RC3H1
## 4837	GPR55
## 4838	MRPL44
## 4839	DOCK10
## 4840	TTLL4
## 4841	USP37
## 4842	ITM2C
## 4843	DNAJB2
## 4844	TMBIM1
## 4845	EIF4E2
## 4846	CAB39
## 4847	COX5B
## 4848	REV1
## 4849	MFSD9
## 4850	TMEM127
## 4851	TGFBRAP1

## 4852	GCC2
## 4853	MRPS9
## 4854	C2orf49
## 4855	ANKRD36
## 4856	EPC2
## 4857	ARHGEF4
## 4858	ISCU
## 4859	ALDH1L2
## 4860	USP44
## 4861	SCYL2
## 4862	PLXNC1
## 4863	APPL2
## 4864	PWP1
## 4865	DRAM1
## 4866	WASHC4
## 4867	VILL
## 4868	FLNB
## 4869	NEK3
## 4870	VPS36
## 4871	RNASEH2B
## 4872	CKAP2
## 4873	TBC1D4
## 4874	BORA
## 4875	LRCH1
## 4876	SUCLA2
## 4877	RCBTB1
## 4878	MED4
## 4879	PHF11
## 4880	RPL13AP25
## 4881	COG3
## 4882	LMO7
## 4883	ITM2B
## 4884	SPRY2
## 4885	NUDT15
## 4886	RCBTB2
## 4887	LCP1
## 4888	SETDB2
## 4889	C7orf25
## 4890	CHST12
## 4891	IGF2BP3
## 4892	GPNMB
## 4893	RAC1
## 4894	KDELRL2
## 4895	NUP42
## 4896	ZDHHC4
## 4897	AOAH
## 4898	BZW2
## 4899	TBRG4
## 4900	DDX56
## 4901	HUS1
## 4902	DBNL
## 4903	CCM2
## 4904	MYO1G
## 4905	TTYH3



## 4906	CIDEB
## 4907	AL355922.1
## 4908	TTC5
## 4909	ZFHX2
## 4910	MTHFS
## 4911	ADAMTS7
## 4912	ABHD17C
## 4913	IREB2
## 4914	TM6SF1
## 4915	CALCOCO2
## 4916	RSAD1
## 4917	NMT1
## 4918	SRSF1
## 4919	VEZF1
## 4920	CHAD
## 4921	TACO1
## 4922	TEX2
## 4923	DCAF7
## 4924	LIMD2
## 4925	BRIP1
## 4926	KAT7
## 4927	ACTL6A
## 4928	NDUFB5
## 4929	MRPL47
## 4930	TRA2B
## 4931	MARCHF7
## 4932	TANK
## 4933	SKIL
## 4934	EPRS1
## 4935	HLX
## 4936	VPS45
## 4937	KCTD3
## 4938	RPS6KC1
## 4939	CBWD2
## 4940	SMPD4
## 4941	WDR33
## 4942	CCDC115
## 4943	SAP130
## 4944	BIN1
## 4945	IMP4
## 4946	HS6ST1
## 4947	UGGT1
## 4948	GYPC
## 4949	STAM
## 4950	ABI1
## 4951	YME1L1
## 4952	DNAJC1
## 4953	NIPSNAP3A
## 4954	LRRC8A
## 4955	CDK9
## 4956	TXN
## 4957	ODF2
## 4958	ECPAS
## 4959	TOR1B

## 4960	C9orf78
## 4961	SMC2
## 4962	TOR1A
## 4963	RALGPS1
## 4964	NIBAN2
## 4965	ST6GALNAC4
## 4966	TMOD1
## 4967	CDK5RAP2
## 4968	SLC31A2
## 4969	SLC31A1
## 4970	ZNF189
## 4971	STX17
## 4972	PRPF4
## 4973	FPGS
## 4974	USP20
## 4975	ATP6V1G1
## 4976	TEX10
## 4977	GARNL3
## 4978	MRPL50
## 4979	DPM2
## 4980	WDR38
## 4981	TSTD2
## 4982	PSMB7
## 4983	NR5A1
## 4984	TRMO
## 4985	RABEPK
## 4986	GOLGA1
## 4987	XPA
## 4988	NCBP1
## 4989	ANP32B
## 4990	PDCL
## 4991	RPL35
## 4992	ARPC5L
## 4993	DSCC1
## 4994	DERL1
## 4995	MYC
## 4996	DMAC1
## 4997	RANBP6
## 4998	POLR1E
## 4999	PLAA
## 5000	IL11RA
## 5001	UBAP2
## 5002	APTX
## 5003	RNF38
## 5004	TLN1
## 5005	SPAG8
## 5006	DCTN3
## 5007	CD72
## 5008	TMEM8B
## 5009	GRHPR
## 5010	ALDH1B1
## 5011	HINT2
## 5012	ARHGEF39
## 5013	DENND4C

## 5014	RPS6
## 5015	CNPY3
## 5016	FOXP4
## 5017	PPIL1
## 5018	KLC4
## 5019	ZSCAN9
## 5020	PIM1
## 5021	CMTR1
## 5022	TFAP2A
## 5023	YIPF3
## 5024	TMEM14B
## 5025	TMEM63B
## 5026	FRS3
## 5027	TJAP1
## 5028	CAPN11
## 5029	SLC22A23
## 5030	LRRC1
## 5031	BPHL
## 5032	RIPK1
## 5033	UQCC2
## 5034	HMGA1
## 5035	TCF19
## 5036	PGBD1
## 5037	TPMT
## 5038	MTCH1
## 5039	TAF8
## 5040	FAM8A1
## 5041	CPEB2
## 5042	TLR2
## 5043	MYO7A
## 5044	FCHSD2
## 5045	ARRB1
## 5046	THAP12
## 5047	ANKRD42
## 5048	IL18BP
## 5049	NUMA1
## 5050	CCDC90B
## 5051	CREBZF
## 5052	PRCP
## 5053	NARS2
## 5054	RNF121
## 5055	MRPL15
## 5056	GGH
## 5057	SLC05A1
## 5058	TGS1
## 5059	SDCBP
## 5060	NEK1
## 5061	DDX60
## 5062	SORL1
## 5063	BUD13
## 5064	DCUN1D5
## 5065	SLC37A4
## 5066	RDX
## 5067	PPP2R1B

## 5068	FDX1
## 5069	C11orf1
## 5070	ALKBH8
## 5071	MAP2K5
## 5072	SQOR
## 5073	CTDSPL2
## 5074	SLTM
## 5075	MAPKBP1
## 5076	NUSAP1
## 5077	NDUFAF1
## 5078	KIF23
## 5079	KNL1
## 5080	HAUS2
## 5081	RTF1
## 5082	PARP6
## 5083	RPLP1
## 5084	TUBGCP4
## 5085	RMDN3
## 5086	ITPKA
## 5087	SMAD6
## 5088	PLCB2
## 5089	TMEM62
## 5090	PAK6
## 5091	ADAM10
## 5092	ZNF280D
## 5093	RSL24D1
## 5094	GCOM1
## 5095	FNBP1L
## 5096	KYAT3
## 5097	GTF2B
## 5098	RABGGTB
## 5099	RPL7P9
## 5100	DBT
## 5101	RTCA
## 5102	IFT172
## 5103	SELENOI
## 5104	CGREF1
## 5105	HADHB
## 5106	KHK
## 5107	ADCY3
## 5108	PPM1B
## 5109	PNPT1
## 5110	DYNC2LI1
## 5111	THUMPD2
## 5112	SULT6B1
## 5113	RAB1A
## 5114	ACTR2
## 5115	PREB
## 5116	SLC5A6
## 5117	PREPL
## 5118	SLC3A1
## 5119	EMILIN1
## 5120	FBXO11
## 5121	ATRAID

## 5122	CENPO
## 5123	LRPPRC
## 5124	TRIM54
## 5125	DTNB
## 5126	ACTR1A
## 5127	MFSD13A
## 5128	STAMBPL1
## 5129	ATAD1
## 5130	KIF11
## 5131	CUZD1
## 5132	DUSP5
## 5133	CALHM2
## 5134	ARL3
## 5135	CEP55
## 5136	KIF20B
## 5137	ENTPD1
## 5138	EXOC6
## 5139	PLCE1
## 5140	DBR1
## 5141	DNAJC13
## 5142	ANXA7
## 5143	FAM149B1
## 5144	ASCC1
## 5145	RPS24
## 5146	TET1
## 5147	DNA2
## 5148	ATIC
## 5149	SMARCAL1
## 5150	BARD1
## 5151	CARF
## 5152	ASNSD1
## 5153	METTL5
## 5154	SSB
## 5155	NAB1
## 5156	PPIG
## 5157	FASTKD1
## 5158	IDH1
## 5159	OLA1
## 5160	CIR1
## 5161	ITPRID2
## 5162	FAM117B
## 5163	WDR12
## 5164	ABI2
## 5165	ITGAV
## 5166	SLC40A1
## 5167	SLC35A5
## 5168	SLC49A4
## 5169	SENP7
## 5170	COX17
## 5171	PARP9
## 5172	MNS1
## 5173	USP8
## 5174	SECISBP2L
## 5175	TMOD3

## 5176	SPPL2A
## 5177	APH1B
## 5178	INTS14
## 5179	PARP16
## 5180	PPCDC
## 5181	SEMA7A
## 5182	UBL7
## 5183	ARHGAP24
## 5184	FAM13A
## 5185	HERC3
## 5186	HERC6
## 5187	HERC5
## 5188	ZGRF1
## 5189	AP1AR
## 5190	COPS4
## 5191	HNRNPD
## 5192	SEC31A
## 5193	FGF2
## 5194	BBS7
## 5195	KIAA1109
## 5196	RAP1GDS1
## 5197	LARP1B
## 5198	MMRN1
## 5199	PDE5A
## 5200	PRDM5
## 5201	NAAA
## 5202	NUP54
## 5203	BMP2K
## 5204	G3BP2
## 5205	SEPTIN11
## 5206	SCARB2
## 5207	CCNG2
## 5208	CNOT6L
## 5209	USO1
## 5210	ANXA3
## 5211	PPA2
## 5212	CENPE
## 5213	GSTCD
## 5214	INTS12
## 5215	CASP6
## 5216	LEF1
## 5217	HADH
## 5218	PAPSS1
## 5219	SEC24B
## 5220	PPP3CA
## 5221	SLC39A8
## 5222	FBN2
## 5223	MAPK8IP3
## 5224	RGS3
## 5225	GUCD1
## 5226	RNF185
## 5227	PARVG
## 5228	ERP27
## 5229	ETV6

##	5230	GABARAPL1
##	5231	KIF21A
##	5232	YARS2
##	5233	FGD4
##	5234	ALG10
##	5235	SINHCAF
##	5236	AEBP2
##	5237	ETFBKMT
##	5238	ETNK1
##	5239	ZCRB1
##	5240	TMEM117
##	5241	PRICKLE1
##	5242	C1RL
##	5243	NDUFA9
##	5244	CLSTN3
##	5245	KLRG1
##	5246	VAMP1
##	5247	TAPBPL
##	5248	CD27
##	5249	RBP5
##	5250	PEX5
##	5251	SCAF11
##	5252	LLPH
##	5253	RPL14P1
##	5254	MARCH9
##	5255	GLIPR1
##	5256	PHLDA1
##	5257	TMEM19
##	5258	DUSP6
##	5259	POC1B
##	5260	TMTC3
##	5261	SNRPF
##	5262	NEDD1
##	5263	SYCP3
##	5264	GAS2L3
##	5265	SLC15A4
##	5266	TDG
##	5267	RITA1
##	5268	MMAB
##	5269	GLTP
##	5270	GIT2
##	5271	TCHP
##	5272	FAM222A
##	5273	NUP58
##	5274	MTMR6
##	5275	SLC46A3
##	5276	SLC7A1
##	5277	LNK2
##	5278	SUOX
##	5279	CCDC65
##	5280	TARBP2
##	5281	GPR84
##	5282	NABP2
##	5283	N4BP2L1

## 5284	SMARCC2
## 5285	BRCA2
## 5286	KANSL2
## 5287	CERS5
## 5288	MAP3K12
## 5289	ITGB7
## 5290	GALNT6
## 5291	CSAD
## 5292	LMBR1L
## 5293	C12orf10
## 5294	ESYT1
## 5295	TMBIM6
## 5296	ANKRD52
## 5297	ZNF740
## 5298	WDFY2
## 5299	HNRNPA1L2
## 5300	LPAR6
## 5301	ESD
## 5302	RB1
## 5303	SBN01
## 5304	SETD1B
## 5305	VPS33A
## 5306	VPS37B
## 5307	RHOF
## 5308	DENR
## 5309	DIAPH3
## 5310	SLAIN1
## 5311	RBM26
## 5312	MBNL2
## 5313	ABHD13
## 5314	RAB20
## 5315	CUL4A
## 5316	CDH24
## 5317	CBLN3
## 5318	TSSK4
## 5319	TMX1
## 5320	FRMD6
## 5321	ARMH4
## 5322	NAA30
## 5323	DCAF5
## 5324	RAB15
## 5325	WDR89
## 5326	STON2
## 5327	EFCAB11
## 5328	GPR65
## 5329	PTGR2
## 5330	JDP2
## 5331	CLBA1
## 5332	WARS1
## 5333	WDR20
## 5334	NIPA2
## 5335	SLC12A6
## 5336	MFAP1
## 5337	TCF12



## 5338	SORD
## 5339	SERF2
## 5340	ZSCAN29
## 5341	LYSMD2
## 5342	SLC27A2
## 5343	BNIP2
## 5344	GTF2A2
## 5345	SRP14
## 5346	BAHD1
## 5347	DISP2
## 5348	CDAN1
## 5349	TLE3
## 5350	ANP32A
## 5351	COMMD4
## 5352	UBE2Q2
## 5353	PSTPIP1
## 5354	ETFA
## 5355	HMG20A
## 5356	SCAPER
## 5357	TSPAN3
## 5358	WDR61
## 5359	NCOA2
## 5360	NEIL1
## 5361	MAN2C1
## 5362	TLNRD1
## 5363	IGF1R
## 5364	ARRDC4
## 5365	PIF1
## 5366	USP3
## 5367	BBS4
## 5368	PML
## 5369	LINS1
## 5370	ULK3
## 5371	PCSK6
## 5372	SCAMP2
## 5373	POLG
## 5374	FANCI
## 5375	ABHD2
## 5376	TICRR
## 5377	DET1
## 5378	ZNF710
## 5379	UNC45A
## 5380	MCTP2
## 5381	FURIN
## 5382	IQGAP1
## 5383	CRTC3
## 5384	EFL1
## 5385	SEC11A
## 5386	GLYR1
## 5387	PMM2
## 5388	SLC5A2
## 5389	ITGAX
## 5390	C16orf58
## 5391	ARMC5

## 5392	FTO
## 5393	UQCRC2
## 5394	CDR2
## 5395	ARHGAP17
## 5396	DHX38
## 5397	TXNL4B
## 5398	CHST4
## 5399	ZFHX3
## 5400	CPNE2
## 5401	NLRC5
## 5402	KATNB1
## 5403	NUDT7
## 5404	GCSH
## 5405	CMTM3
## 5406	NOL3
## 5407	MAP1LC3B
## 5408	MBTPS1
## 5409	ZCCHC14
## 5410	IRF8
## 5411	RHOT2
## 5412	ZSCAN32
## 5413	RPS2
## 5414	NDUFB10
## 5415	PDPK1
## 5416	TIGD7
## 5417	DEF8
## 5418	TCF25
## 5419	GALNS
## 5420	GAS8
## 5421	MED9
## 5422	NCOR1
## 5423	COPS3
## 5424	GID4
## 5425	KSR1
## 5426	UTP4
## 5427	RANBP10
## 5428	CTRL
## 5429	GFOD2
## 5430	NOB1
## 5431	PRPSAP2
## 5432	PCTP
## 5433	TOM1L1
## 5434	C17orf80
## 5435	TOB1
## 5436	VPS53
## 5437	SGSM2
## 5438	NPEPPS
## 5439	LRRC46
## 5440	SCRN2
## 5441	SSH2
## 5442	ARSG
## 5443	G6PC3
## 5444	CLTC
## 5445	BCAS3

## 5446	PTRH2
## 5447	SS18
## 5448	TAF4B
## 5449	AFG3L2
## 5450	PRELID3A
## 5451	IMPA2
## 5452	GNAL
## 5453	SLC39A6
## 5454	RPRD1A
## 5455	C18orf21
## 5456	GALNT1
## 5457	ESCO1
## 5458	OSBPL1A
## 5459	RMC1
## 5460	PELP1
## 5461	NPC1
## 5462	ARRB2
## 5463	WRAP53
## 5464	MINK1
## 5465	SAT2
## 5466	ASGR1
## 5467	PIK3R5
## 5468	TP53
## 5469	ARHGDIA
## 5470	TMC6
## 5471	SLC16A3
## 5472	TTYH2
## 5473	RAB40B
## 5474	EIF4A3
## 5475	CSNK1D
## 5476	ANAPC11
## 5477	TBCD
## 5478	FN3KRP
## 5479	NARF
## 5480	RPTOR
## 5481	FOXK2
## 5482	TRIM65
## 5483	CBX8
## 5484	RNF157
## 5485	CEP131
## 5486	WDR45B
## 5487	CBX4
## 5488	RNF165
## 5489	DYM
## 5490	ELAC1
## 5491	MBD1
## 5492	SMAD4
## 5493	ZCCHC2
## 5494	PMAIP1
## 5495	P3H4
## 5496	NT5C3B
## 5497	RETREG3
## 5498	ERBB2
## 5499	MIEN1

## 5500	IGFBP4
## 5501	TXNL4A
## 5502	MISP3
## 5503	SAMD1
## 5504	BRD4
## 5505	SLC39A3
## 5506	NFIC
## 5507	TPGS1
## 5508	PRDM15
## 5509	PFKL
## 5510	FEM1A
## 5511	VAV1
## 5512	MVB12A
## 5513	AC008764.1
## 5514	SH3GL1
## 5515	DUS3L
## 5516	DPP9
## 5517	CCDC97
## 5518	TMEM91
## 5519	ZFP14
## 5520	SIRT3
## 5521	IFITM3
## 5522	PGGHG
## 5523	HUNK
## 5524	IFNAR1
## 5525	SOD1
## 5526	TRPM2
## 5527	SCYL1
## 5528	TMEM50B
## 5529	APP
## 5530	DOP1B
## 5531	URB1
## 5532	AKT1
## 5533	EMP3
## 5534	SAE1
## 5535	GEMIN7
## 5536	RNPEPL1
## 5537	CAPN10
## 5538	MYO1F
## 5539	ERVK3-1
## 5540	ZNF787
## 5541	TIMM29
## 5542	CARM1
## 5543	EVI5L
## 5544	PSMB6
## 5545	SIGLEC10
## 5546	ZNF473
## 5547	FAM71E1
## 5548	RPS11
## 5549	AC020909.1
## 5550	RPL13A
## 5551	CTU1
## 5552	NOSIP
## 5553	RCN3

## 5554	SLC2A5
## 5555	RERE
## 5556	ARHGEF19
## 5557	EFHD2
## 5558	PEX14
## 5559	PGD
## 5560	SH3BGRL3
## 5561	CNKSR1
## 5562	RPL11
## 5563	ZNF593
## 5564	C1orf216
## 5565	KIAA0319L
## 5566	EVA1B
## 5567	PLK4
## 5568	MAP3K6
## 5569	GPN2
## 5570	SYTL1
## 5571	WDTC1
## 5572	NBPF3
## 5573	HSPG2
## 5574	ITGB3BP
## 5575	SERBP1
## 5576	BCL10
## 5577	CCN1
## 5578	PRKACB
## 5579	PIGK
## 5580	RPS8
## 5581	KIF2C
## 5582	PTPRF
## 5583	MOB3C
## 5584	LMO4
## 5585	MTF2
## 5586	ZNF697
## 5587	STRIP1
## 5588	PSMA5
## 5589	C1orf162
## 5590	CD53
## 5591	CELSR2
## 5592	ALDH9A1
## 5593	ATP1B1
## 5594	TIPRL
## 5595	NME7
## 5596	POGK
## 5597	MPC2
## 5598	CREG1
## 5599	DCAF6
## 5600	GPA33
## 5601	TBX19
## 5602	UCK2
## 5603	TMC01
## 5604	POU2F1
## 5605	MGST3
## 5606	COP1
## 5607	UFC1

## 5608	PPOX
## 5609	FCGR2A
## 5610	NUF2
## 5611	SDHC
## 5612	PFDN2
## 5613	NR1I3
## 5614	USP21
## 5615	PRCC
## 5616	RRNAD1
## 5617	MRPL24
## 5618	PIGM
## 5619	ISG20L2
## 5620	HDGF
## 5621	ABL2
## 5622	XPR1
## 5623	RGS16
## 5624	TOR1AIP1
## 5625	LYPLAL1
## 5626	PRUNE1
## 5627	SF3B4
## 5628	ECM1
## 5629	ZNF687
## 5630	TARS2
## 5631	SNX27
## 5632	SETDB1
## 5633	ADAMTSL4
## 5634	MCL1
## 5635	CTSK
## 5636	RFX5
## 5637	PI4KB
## 5638	PIP5K1A
## 5639	ANP32E
## 5640	MINDY1
## 5641	ANXA9
## 5642	CERS2
## 5643	ENSA
## 5644	SEMA6C
## 5645	MRPL9
## 5646	ARNT
## 5647	POGZ
## 5648	C1orf56
## 5649	OAZ3
## 5650	GOLPH3L
## 5651	GABPB2
## 5652	DTL
## 5653	DYRK3
## 5654	EIF2D
## 5655	INTS7
## 5656	VASH2
## 5657	TAF1A
## 5658	SMYD2
## 5659	DUSP10
## 5660	TP53BP2
## 5661	ATP8B2

## 5662	ADAM15
## 5663	JTB
## 5664	S100A8
## 5665	TPM3
## 5666	SNAPIN
## 5667	UBAP2L
## 5668	SLC39A1
## 5669	HAX1
## 5670	CREB3L4
## 5671	EFNA3
## 5672	C1orf43
## 5673	GATAD2B
## 5674	ILF2
## 5675	RIT1
## 5676	INTS3
## 5677	C1orf131
## 5678	GALNT2
## 5679	TTC13
## 5680	SCCPDH
## 5681	LYST
## 5682	MAP3K21
## 5683	CEP170
## 5684	ACP1
## 5685	SNAP47
## 5686	SRP9
## 5687	NVL
## 5688	SDE2
## 5689	DEGS1
## 5690	FBXO28
## 5691	ARF1
## 5692	CNIH4
## 5693	ITPKB
## 5694	GUK1
## 5695	CNIH3
## 5696	C1orf35
## 5697	MBOAT2
## 5698	PARP1
## 5699	PSEN2
## 5700	PYCR2
## 5701	LBR
## 5702	EPHX1
## 5703	PPFIA4
## 5704	PTPN7
## 5705	ARL8A
## 5706	PDIA6
## 5707	RHOB
## 5708	ATP6V1C2
## 5709	HNRNPLL
## 5710	EML4
## 5711	CALM2
## 5712	CHAC2
## 5713	RPS27A
## 5714	WDPCP
## 5715	VPS54

## 5716	ASXL2
## 5717	ETAA1
## 5718	SNRPG
## 5719	ABHD1
## 5720	CIA01
## 5721	ZNF514
## 5722	SNRNP200
## 5723	MRPS5
## 5724	TPRKB
## 5725	EXOC6B
## 5726	SFXN5
## 5727	TEX261
## 5728	DUSP11
## 5729	RALB
## 5730	TMEM177
## 5731	NT5DC4
## 5732	RABL2A
## 5733	SLC20A1
## 5734	AL078621.1
## 5735	ZC3H8
## 5736	LIPT1
## 5737	FAHD2B
## 5738	AFF3
## 5739	UBXN4
## 5740	SPOPL
## 5741	POLR2D
## 5742	AMMECR1L
## 5743	PKP4
## 5744	SCRN3
## 5745	LNPK
## 5746	CDCA7
## 5747	UBR3
## 5748	PHOSPHO2
## 5749	FAM171B
## 5750	HSPD1
## 5751	CCDC150
## 5752	METTL21A
## 5753	PTH2R
## 5754	NBEAL1
## 5755	KANSL1L
## 5756	SUMF1
## 5757	RHBDD1
## 5758	HES6
## 5759	ANKMY1
## 5760	COPS7B
## 5761	DIS3L2
## 5762	FANCD2
## 5763	TAMM41
## 5764	VGLL4
## 5765	RAB5A
## 5766	RETREG2
## 5767	CTDSP1
## 5768	CNOT9
## 5769	STK11IP



## 5770	GMPPA
## 5771	EAF1
## 5772	DYNC1LI1
## 5773	POMGNT2
## 5774	GASK1A
## 5775	CSRNP1
## 5776	SLC25A38
## 5777	ITGA9
## 5778	GOLGA4
## 5779	CTDSPL
## 5780	IQSEC1
## 5781	CAND2
## 5782	RPL32
## 5783	PTPRG
## 5784	SHQ1
## 5785	SLC25A26
## 5786	UBA3
## 5787	ARL6IP5
## 5788	TMF1
## 5789	AC073896.1
## 5790	LIMD1
## 5791	NFKBIZ
## 5792	NXPE3
## 5793	ABHD10
## 5794	RABL3
## 5795	ADPRH
## 5796	ATG3
## 5797	SRPRB
## 5798	MED12L
## 5799	EIF2A
## 5800	OSBPL11
## 5801	NCEH1
## 5802	LPP
## 5803	TMEM44
## 5804	RUBCN
## 5805	AMT
## 5806	TCTA
## 5807	NICN1
## 5808	DCAF1
## 5809	MANF
## 5810	CCDC39
## 5811	STXBP5L
## 5812	EAF2
## 5813	SLIT2
## 5814	EIF2B5
## 5815	ECE2
## 5816	DGKQ
## 5817	FIP1L1
## 5818	SLC26A1
## 5819	LYAR
## 5820	CENPC
## 5821	ATP10D
## 5822	OCIAD2
## 5823	SLC10A4

## 5824	SCD5
## 5825	PLAC8
## 5826	ENOPH1
## 5827	TRMT10A
## 5828	KLHL8
## 5829	SNCA
## 5830	PYURF
## 5831	TBCK
## 5832	CAMK2D
## 5833	CISD2
## 5834	ANK2
## 5835	TIFA
## 5836	SPATA5
## 5837	CCNA2
## 5838	METTL14
## 5839	USP53
## 5840	SETD7
## 5841	NAF1
## 5842	MARCHF1
## 5843	RPS3A
## 5844	RNF175
## 5845	PDGFC
## 5846	CBR4
## 5847	CYP4V2
## 5848	NDUFS6
## 5849	MARCHF6
## 5850	SRD5A1
## 5851	MYO10
## 5852	OTULINL
## 5853	RPL37
## 5854	SKP2
## 5855	OSMR
## 5856	PLK2
## 5857	PIK3R1
## 5858	LHFPL2
## 5859	SSBP2
## 5860	IQGAP2
## 5861	RASA1
## 5862	GIN1
## 5863	PPIP5K2
## 5864	PAM
## 5865	BDP1
## 5866	GTF2H2
## 5867	SLC30A5
## 5868	BTF3
## 5869	FBXL17
## 5870	TNFAIP8
## 5871	FEM1C
## 5872	COMMD10
## 5873	ATG12
## 5874	YIPF5
## 5875	ARHGAP26
## 5876	DDX46
## 5877	RNF145

## 5878	FBX038
## 5879	PCY0X1L
## 5880	TNIP1
## 5881	G3BP1
## 5882	ZNF300
## 5883	NHP2
## 5884	RMND5B
## 5885	BOD1
## 5886	TBC1D7
## 5887	FARS2
## 5888	GFOD1
## 5889	CDKAL1
## 5890	ZMAT2
## 5891	TRIM41
## 5892	HIGD2A
## 5893	FAM193B
## 5894	TNFRSF21
## 5895	RNF44
## 5896	MMUT
## 5897	DOK3
## 5898	ABT1
## 5899	PRIM2
## 5900	RPL7L1
## 5901	NFKBIE
## 5902	TPBG
## 5903	IRAK1BP1
## 5904	PHIP
## 5905	MMS22L
## 5906	PNRC1
## 5907	PM20D2
## 5908	RARS2
## 5909	TBC1D32
## 5910	ARHGAP18
## 5911	ABRACL
## 5912	MTFR2
## 5913	SHPRH
## 5914	AIG1
## 5915	DYNLT1
## 5916	TIAM2
## 5917	TMEM181
## 5918	WTAP
## 5919	ZMYM4
## 5920	ARMT1
## 5921	VWDE
## 5922	GNA12
## 5923	C7orf50
## 5924	WASH2P
## 5925	CCZ1B
## 5926	C7orf26
## 5927	RBAK
## 5928	CDCA5
## 5929	PURB
## 5930	AC004453.1
## 5931	SSC4D

## 5932	MDH2
## 5933	NIPSNAP2
## 5934	CCT6A
## 5935	PSPH
## 5936	ZNF92
## 5937	ATXN7L1
## 5938	TMEM168
## 5939	MAP11
## 5940	SLC12A9
## 5941	GIGYF1
## 5942	TRIM4
## 5943	MEPCE
## 5944	TMEM209
## 5945	ZC3HAV1L
## 5946	TMEM140
## 5947	TLK2
## 5948	EPHA1
## 5949	NOM1
## 5950	NCAPG2
## 5951	LUC7L2
## 5952	DENND2A
## 5953	SH3KBP1
## 5954	LANCL3
## 5955	CASK
## 5956	KDM6A
## 5957	MSN
## 5958	CCNB3
## 5959	HDAC8
## 5960	SLC16A2
## 5961	ZNF182
## 5962	CHST7
## 5963	KRBOX4
## 5964	NDUFB11
## 5965	ZNF41
## 5966	ZMYM3
## 5967	TAF1
## 5968	NONO
## 5969	CCDC120
## 5970	EBP
## 5971	OGT
## 5972	SNX12
## 5973	IL2RG
## 5974	ZNF711
## 5975	DIAPH2
## 5976	NXF3
## 5977	PRPS1
## 5978	DOCK11
## 5979	RBMX
## 5980	MCPH1
## 5981	MFHAS1
## 5982	FBX025
## 5983	NSDHL
## 5984	ZNF185
## 5985	CETN2

## 5986	RPL10
## 5987	ATP6V1B2
## 5988	CCDC25
## 5989	HMBOX1
## 5990	BIN3
## 5991	DOK2
## 5992	SLC25A37
## 5993	CHMP7
## 5994	STAR
## 5995	PLPBP
## 5996	ERLIN2
## 5997	ST18
## 5998	TACC1
## 5999	GOLGA7
## 6000	PLPP5
## 6001	GINS4
## 6002	NSD3
## 6003	DNAJC5B
## 6004	ADHFE1
## 6005	MRPS28
## 6006	LACTB2
## 6007	TERF1
## 6008	RPL7
## 6009	MTDH
## 6010	LRP12
## 6011	EBAG9
## 6012	POLR2K
## 6013	EIF3H
## 6014	UTP23
## 6015	NDUFB9
## 6016	TATDN1
## 6017	ZNF7
## 6018	ARHGAP39
## 6019	SLC39A4
## 6020	NAPRT
## 6021	VLDLR
## 6022	AK3
## 6023	UHRF2
## 6024	PLIN2
## 6025	HAUS6
## 6026	CDKN2A
## 6027	C9orf72
## 6028	ZCCHC7
## 6029	FBX010
## 6030	SIGMAR1
## 6031	CBWD5
## 6032	CEP78
## 6033	AUH
## 6034	MFSD14B
## 6035	AOPEP
## 6036	INIP
## 6037	UGCG
## 6038	SNX30
## 6039	STOM

## 6040	GSN
## 6041	MRRF
## 6042	NR6A1
## 6043	CRB2
## 6044	ALAD
## 6045	WDR31
## 6046	POLE3
## 6047	SURF4
## 6048	GBGT1
## 6049	SURF1
## 6050	SURF2
## 6051	SURF6
## 6052	MED22
## 6053	REX04
## 6054	RPL7A
## 6055	GTF3C5
## 6056	ASB6
## 6057	PTGES2
## 6058	NTMT1
## 6059	CIZ1
## 6060	SLC25A25
## 6061	SH3GLB2
## 6062	MIGA2
## 6063	LRSAM1
## 6064	GPR107
## 6065	PAXX
## 6066	IDI2
## 6067	INPP5E
## 6068	SEC16A
## 6069	DPH7
## 6070	NOTCH1
## 6071	PROSER2
## 6072	USP6NL
## 6073	COMMD3
## 6074	MSRB2
## 6075	PDSS1
## 6076	FAM171A1
## 6077	MINDY3
## 6078	RSU1
## 6079	PARD3
## 6080	ZEB1
## 6081	NRBF2
## 6082	POLR3A
## 6083	HERC4
## 6084	CAMK2G
## 6085	ADIRF
## 6086	GLUD1
## 6087	RPP30
## 6088	FRA10AC1
## 6089	ADD3
## 6090	DNAJB12
## 6091	EIF4EBP2
## 6092	TCF7L2
## 6093	MKI67

## 6094	INA
## 6095	FUOM
## 6096	LRRC27
## 6097	MTG1
## 6098	NKX6-2
## 6099	GST01
## 6100	TAF5
## 6101	PPRC1
## 6102	ITPRIP
## 6103	CNNM2
## 6104	PDCD11
## 6105	ADAM12
## 6106	RGS10
## 6107	BTBD10
## 6108	GAS2
## 6109	LIN7C
## 6110	IMMP1L
## 6111	PGAP2
## 6112	TUT1
## 6113	HSD17B12
## 6114	APIP
## 6115	DGKZ
## 6116	EIF3M
## 6117	TNKS1BP1
## 6118	SSRP1
## 6119	SLC43A1
## 6120	PTPRJ
## 6121	C11orf49
## 6122	ARFGAP2
## 6123	CELF1
## 6124	HIKESHI
## 6125	CCDC81
## 6126	SESN3
## 6127	ENDOD1
## 6128	CCDC82
## 6129	KLHL35
## 6130	SERPINH1
## 6131	CAPN5
## 6132	INTS4
## 6133	PAK1
## 6134	RPS3
## 6135	NPAT
## 6136	ATM
## 6137	AASDHPPT
## 6138	SLX4IP
## 6139	LAMTOR1
## 6140	P4HA3
## 6141	ST14
## 6142	HYOU1
## 6143	KAT14
## 6144	TKFC
## 6145	MTA2
## 6146	TMEM138
## 6147	FADS1

## 6148	ROM1
## 6149	EML3
## 6150	INCENP
## 6151	MS4A3
## 6152	FRG1BP
## 6153	CPSF7
## 6154	B3GAT3
## 6155	EI24
## 6156	CCDC15
## 6157	CHEK1
## 6158	ESAM
## 6159	SIDT2
## 6160	TAGLN
## 6161	COMMD7
## 6162	DSN1
## 6163	SOGA1
## 6164	CNBD2
## 6165	LSM14B
## 6166	YTHDF1
## 6167	CABLES2
## 6168	LT01
## 6169	TRPT1
## 6170	NUDT22
## 6171	FERMT3
## 6172	PLCB3
## 6173	MRPL49
## 6174	FAU
## 6175	TM7SF2
## 6176	VPS51
## 6177	PPP4C
## 6178	ALDOA
## 6179	DOC2A
## 6180	HIRIP3
## 6181	TAOK2
## 6182	TMEM219
## 6183	HMGA2
## 6184	CNKSR2
## 6185	ITGB1
## 6186	CWC15
## 6187	FCGR1A
## 6188	DCUN1D2
## 6189	TMC03
## 6190	TMEM218
## 6191	TIRAP
## 6192	EEF1AKMT1
## 6193	LATS2
## 6194	SAP18
## 6195	ADGRL3
## 6196	KIAA1328
## 6197	MIA2
## 6198	PDCD4
## 6199	ADRA2A
## 6200	CCDC102B
## 6201	RGS18



## 6202	MTMR12
## 6203	CCT5
## 6204	ATPCKMT
## 6205	DIXDC1
## 6206	DLAT
## 6207	PIH1D2
## 6208	NKAPD1
## 6209	TIMM8B
## 6210	IL18
## 6211	PTS
## 6212	PIP4K2A
## 6213	FOXO1
## 6214	SEC24D
## 6215	ABCB9
## 6216	RILPL2
## 6217	DHX37
## 6218	UBC
## 6219	ITPR1
## 6220	PRSS53
## 6221	SLC7A11
## 6222	NOCT
## 6223	CACNA2D4
## 6224	DCP1B
## 6225	CACNA1C
## 6226	NGLY1
## 6227	OXSM
## 6228	UEVLD
## 6229	C12orf45
## 6230	TMEM263
## 6231	UBE3B
## 6232	IPMK
## 6233	RAD9B
## 6234	PLBD2
## 6235	MAT1A
## 6236	SLC2A13
## 6237	GXYLT1
## 6238	TWF1
## 6239	EIF4E
## 6240	MAGI1
## 6241	TEX30
## 6242	CSNK1G3
## 6243	SRFBP1
## 6244	FAM177A1
## 6245	MBIP
## 6246	EXT2
## 6247	TMEM18
## 6248	NDUFC2
## 6249	ME3
## 6250	NUBPL
## 6251	NEK7
## 6252	FER
## 6253	VIPAS39
## 6254	ANKRD50
## 6255	UPF2

## 6256	CDC123
## 6257	SCLT1
## 6258	C4orf33
## 6259	FRMD4A
## 6260	EPS8
## 6261	ACAD8
## 6262	THYN1
## 6263	VPS26B
## 6264	NCAPD3
## 6265	VTI1A
## 6266	QDPR
## 6267	FAM160B1
## 6268	TEX9
## 6269	QTRT2
## 6270	MMAA
## 6271	ZNF827
## 6272	NR3C2
## 6273	ADAM8
## 6274	KIN
## 6275	PIGF
## 6276	ANKAR
## 6277	INPP1
## 6278	MFSD6
## 6279	RNF144A
## 6280	ADAM17
## 6281	FLI1
## 6282	WWC2
## 6283	CENPU
## 6284	ACSL1
## 6285	SLC25A4
## 6286	AMN1
## 6287	BICD1
## 6288	SAV1
## 6289	NBAS
## 6290	GUF1
## 6291	SACS
## 6292	CCDC175
## 6293	PABPC3
## 6294	CENPJ
## 6295	FBXO4
## 6296	TMEM267
## 6297	CCL28
## 6298	PARP8
## 6299	CACUL1
## 6300	DST
## 6301	TIAL1
## 6302	BAG3
## 6303	RABGAP1L
## 6304	MZT2B
## 6305	FAM168B
## 6306	PTPN14
## 6307	AC073869.1
## 6308	MGAT5
## 6309	TMEM163

## 6310	GPATCH11
## 6311	GEMIN6
## 6312	POU4F1
## 6313	OBI1
## 6314	ARL11
## 6315	ARL14EP
## 6316	EPG5
## 6317	PSTPIP2
## 6318	ATP5F1A
## 6319	HAUS1
## 6320	C18orf25
## 6321	SPC25
## 6322	PDK1
## 6323	PDE3B
## 6324	TGOLN2
## 6325	UHMK1
## 6326	ATG10
## 6327	POC5
## 6328	TADA1
## 6329	CWF19L2
## 6330	JMY
## 6331	HOMER1
## 6332	XRCC4
## 6333	ZNF547
## 6334	ZNF773
## 6335	ZNF776
## 6336	ZNF256
## 6337	SUV39H2
## 6338	DCLRE1C
## 6339	RPP38
## 6340	NMT2
## 6341	ZNF837
## 6342	USP12
## 6343	CCDC50
## 6344	TRIM36
## 6345	ZFP36L2
## 6346	PAN3
## 6347	PFKM
## 6348	TMEM123
## 6349	IGSF10
## 6350	SPEF2
## 6351	MBNL1
## 6352	NADK2
## 6353	GPD1L
## 6354	SLC30A6
## 6355	PELO
## 6356	RASGRP3
## 6357	SAR1B
## 6358	GPR180
## 6359	TCTEX1D1
## 6360	ANKRD22
## 6361	FARP1
## 6362	PANK1
## 6363	PRDM8

## 6364	HNRNPDL
## 6365	HHEX
## 6366	UTRN
## 6367	GGPS1
## 6368	ZNF117
## 6369	RAD17
## 6370	MED21
## 6371	PLOD2
## 6372	STK32B
## 6373	ADGRA3
## 6374	SREK1IP1
## 6375	CWC27
## 6376	MR1
## 6377	SRP19
## 6378	CENPH
## 6379	CDYL
## 6380	CARHSP1
## 6381	BANK1
## 6382	TXNDC11
## 6383	DAB2
## 6384	BCL2L11
## 6385	ANAPC1
## 6386	CAST
## 6387	SCOC
## 6388	CLGN
## 6389	CETN3
## 6390	SMARCA5
## 6391	RGPD3
## 6392	RASSF3
## 6393	HNRNPU
## 6394	RANBP2
## 6395	AHCTF1
## 6396	TMEM87B
## 6397	NR4A2
## 6398	RBMS1
## 6399	CD96
## 6400	FAM49B
## 6401	ASAP1
## 6402	TRAPPC8
## 6403	LINC00467
## 6404	INO80C
## 6405	LPCAT1
## 6406	UBALD1
## 6407	ING1
## 6408	ADPRHL1
## 6409	CMTM7
## 6410	UBP1
## 6411	RMND5A
## 6412	CD8A
## 6413	RPIA
## 6414	CNKSR3
## 6415	GTF2E1
## 6416	CFDP1
## 6417	ZDHHC7

## 6418	C7orf31
## 6419	CMIP
## 6420	TRIP12
## 6421	CEBPG
## 6422	KCTD15
## 6423	ZNF599
## 6424	MCOLN2
## 6425	DDAH1
## 6426	SREK1
## 6427	CHD1
## 6428	DGKE
## 6429	HS2ST1
## 6430	MSI2
## 6431	ZUP1
## 6432	HS3ST3A1
## 6433	NUS1
## 6434	PPP2R5E
## 6435	GRAP
## 6436	SLC5A10
## 6437	IMPACT
## 6438	SDHAF4
## 6439	DNAAF1
## 6440	C16orf74
## 6441	TBCEL
## 6442	ANKH
## 6443	OTULIN
## 6444	UBASH3B
## 6445	TBRG1
## 6446	NRGN
## 6447	TOMM70
## 6448	ANGPT1
## 6449	PITPNC1
## 6450	CC2D1B
## 6451	PRKCA
## 6452	LRRK1
## 6453	C4orf19
## 6454	MIA3
## 6455	NEIL2
## 6456	OBSCN
## 6457	LONRF1
## 6458	TRIM11
## 6459	CCSAP
## 6460	SH3RF1
## 6461	BUB3
## 6462	DIPK1A
## 6463	ATP5MC3
## 6464	ELOC
## 6465	CEP170P1
## 6466	BTG3
## 6467	C21orf91
## 6468	RABGEF1
## 6469	MRPL39
## 6470	ATP5PF
## 6471	GABPA

## 6472	ADAMTS1
## 6473	TSEN2
## 6474	XPC
## 6475	CCDC174
## 6476	FLCN
## 6477	DPH3
## 6478	OXNAD1
## 6479	PLCL2
## 6480	CXXC1
## 6481	PPP4R1
## 6482	MPPE1
## 6483	RAB6B
## 6484	EME1
## 6485	ACSS1
## 6486	ANKRD40
## 6487	ZNF18
## 6488	VOPP1
## 6489	APOOL
## 6490	CYP2U1
## 6491	RSPH10B
## 6492	FBXL18
## 6493	AK9
## 6494	KLF10
## 6495	AZIN1
## 6496	ATP6V1C1
## 6497	PIP4P2
## 6498	OTUD6B
## 6499	CDK19
## 6500	GTF3C6
## 6501	AGPAT5
## 6502	MMS19
## 6503	PI4K2A
## 6504	MARVELD1
## 6505	ZFYVE27
## 6506	TRMT44
## 6507	SLC25A28
## 6508	HSPA13
## 6509	SAMSN1
## 6510	USP25
## 6511	ZCCHC10
## 6512	C16orf87
## 6513	MOV10
## 6514	RHOC
## 6515	DBI
## 6516	SLC16A1
## 6517	HEATR3
## 6518	NIFK
## 6519	OXA1L
## 6520	LARP1
## 6521	CNOT8
## 6522	SETD9
## 6523	MIER3
## 6524	NUP205
## 6525	ZKSCAN2

## 6526	C9orf85
## 6527	PIK3AP1
## 6528	RBM45
## 6529	TTN
## 6530	VSIG4
## 6531	PDIA4
## 6532	KDM8
## 6533	KCTD18
## 6534	FAM126B
## 6535	TMEM237
## 6536	FZD7
## 6537	SPAG17
## 6538	DEPTOR
## 6539	RNF20
## 6540	PPARGC1B
## 6541	ELM01
## 6542	SLC26A2
## 6543	LSM11
## 6544	MED7
## 6545	RRAGA
## 6546	PXYLP1
## 6547	RASA2
## 6548	RMND1
## 6549	SLA
## 6550	TMBIM4
## 6551	VBP1
## 6552	RAB39B
## 6553	AFF2
## 6554	GRIP1
## 6555	VPS37A
## 6556	PSD3
## 6557	CARNMT1
## 6558	MCU
## 6559	ELMSAN1
## 6560	FAM161B
## 6561	GNAQ
## 6562	ADK
## 6563	BATF
## 6564	DCK
## 6565	ADAMTS3
## 6566	ALX3
## 6567	DPY19L4
## 6568	NDUFAF6
## 6569	DRAM2
## 6570	C8orf37
## 6571	WHAMM
## 6572	N6AMT1
## 6573	RWDD2B
## 6574	USP16
## 6575	CCT8
## 6576	BACH1
## 6577	TSPAN7
## 6578	TIAM1
## 6579	SCAF4

## 6580	RPGR
## 6581	PCGF6
## 6582	ANKRD9
## 6583	SFR1
## 6584	SFXN2
## 6585	ATP5MPL
## 6586	UQCRB
## 6587	MTERF3
## 6588	PTDSS1
## 6589	RPL30
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## 6591	SUPV3L1
## 6592	FAM122B
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## 6594	FBX043
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## 6596	TYSND1
## 6597	PHF6
## 6598	CD109
## 6599	UBE2L6
## 6600	ZDHHC5
## 6601	MED19
## 6602	ZFAND3
## 6603	NPTN
## 6604	KAT6B
## 6605	SAMD8
## 6606	RAB11FIP1
## 6607	UTP14A
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## 6611	TBC1D31
## 6612	WDYHV1
## 6613	ATAD2
## 6614	FBX032
## 6615	NSMCE2
## 6616	ZNF689
## 6617	PRR14
## 6618	FBR1
## 6619	FRRS1
## 6620	PHKG2
## 6621	MFSD14A
## 6622	SASS6
## 6623	MALSU1
## 6624	VPS8
## 6625	GALK2
## 6626	BUB1B
## 6627	PDE6D
## 6628	EIF4A2
## 6629	BRPF1
## 6630	RPUSD3
## 6631	TATDN2
## 6632	GHRL
## 6633	SEC13



## 6634	EXOG
## 6635	ZFYVE9
## 6636	SMG1
## 6637	FCH02
## 6638	SYN2
## 6639	ODR4
## 6640	CPT2
## 6641	NECAP2
## 6642	LRP8
## 6643	PAXIP1
## 6644	SSBP3
## 6645	CLDN12
## 6646	MMP14
## 6647	FZD1
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## 6651	DDX19B
## 6652	ST3GAL2
## 6653	FCSK
## 6654	DHRS1
## 6655	KIT
## 6656	AASDH
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## 6658	RNF111
## 6659	CCNB2
## 6660	APPL1
## 6661	TSC22D3
## 6662	VPS26C
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## 6664	KCNJ15
## 6665	ERG
## 6666	ETS2
## 6667	TSPAN18
## 6668	SLC35B2
## 6669	TMEM164
## 6670	CREB3L1
## 6671	TAB3
## 6672	SLC38A10
## 6673	C9orf43
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## 6675	TMEM268
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## 6678	UBN2
## 6679	BRAF
## 6680	PSMG3
## 6681	WDR19
## 6682	SLC37A3
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## 6684	FMNL2
## 6685	GAREM2
## 6686	SPPL3
## 6687	RAB28

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## 6692	SKI
## 6693	WIPI2
## 6694	LDLRAP1
## 6695	KRTCAP3
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## 6698	MRPL17
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## 6704	TPRG1L
## 6705	LRRC43
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## 6710	DZIP1L
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## 6713	MRAS
## 6714	WASF2
## 6715	ABHD3
## 6716	ESYT3
## 6717	TENT5B
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## 6719	CUL4B
## 6720	GPR153
## 6721	GPRASP2
## 6722	CDC25C
## 6723	MITD1
## 6724	EIF5B
## 6725	TMSB15B
## 6726	CNOT11
## 6727	TSPAN33
## 6728	AHCYL2
## 6729	B4GALT5
## 6730	SPATA2
## 6731	FAM86C1
## 6732	TSR2
## 6733	ZC3H18
## 6734	ZFAND2B
## 6735	GDPD5
## 6736	TMED4
## 6737	PPP1R15B
## 6738	COPG2
## 6739	EMSY
## 6740	GPAT4
## 6741	ZSCAN12

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## 6743	ELK4
## 6744	SLAMF8
## 6745	SLC45A3
## 6746	DUSP23
## 6747	RNF166
## 6748	NBL1
## 6749	F11R
## 6750	USF1
## 6751	SPATA2L
## 6752	NIT1
## 6753	DEDD
## 6754	ZNF276
## 6755	EDA
## 6756	PINK1
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## 6759	NDUFS2
## 6760	FCER1G
## 6761	TOMM40L
## 6762	MPZ
## 6763	CCAR2
## 6764	CDC42SE2
## 6765	RAPGEF6
## 6766	EPB41
## 6767	MIS18A
## 6768	ALG8
## 6769	FBXW5
## 6770	CFAP298
## 6771	SYNJ1
## 6772	PAXBP1
## 6773	IFNAR2
## 6774	MRPL10
## 6775	IFNGR2
## 6776	GART
## 6777	SON
## 6778	DONSON
## 6779	SV2A
## 6780	CSRP1
## 6781	ATP5MC1
## 6782	RCAN1
## 6783	UBE2Z
## 6784	CIART
## 6785	SNF8
## 6786	RUNX1
## 6787	MORC3
## 6788	CHAF1B
## 6789	HLCS
## 6790	SCUBE1
## 6791	ADPGK
## 6792	PTMS
## 6793	ADIPOR1
## 6794	CYB5R1
## 6795	PSMD4

## 6796	ATP13A2
## 6797	M1AP
## 6798	PSMB4
## 6799	HK2
## 6800	ALDH4A1
## 6801	STARD9
## 6802	TCHH
## 6803	UBR1
## 6804	AMFR
## 6805	MED8
## 6806	RGL4
## 6807	RSPRY1
## 6808	CCDC17
## 6809	GPBP1L1
## 6810	NAE1
## 6811	TMEM69
## 6812	ADGRG5
## 6813	DRC7
## 6814	EFCAB14
## 6815	SPON2
## 6816	CHCHD6
## 6817	CTBP1
## 6818	ATP6V0D1
## 6819	CARMIL2
## 6820	C16orf86
## 6821	RGS12
## 6822	PSKH1
## 6823	ZYX
## 6824	CCDC117
## 6825	ZNF230
## 6826	CCDC107
## 6827	ZNF222
## 6828	NPR2
## 6829	ZNF221
## 6830	ZNF235
## 6831	GNE
## 6832	TNFRSF13C
## 6833	ARHGAP35
## 6834	PTGIR
## 6835	CALM3
## 6836	DFFA
## 6837	CCDC28B
## 6838	IQCC
## 6839	TMEM234
## 6840	BSDC1
## 6841	ZBTB8A
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## 6843	SSU72
## 6844	UBE2J2
## 6845	ZNF362
## 6846	NR2F6
## 6847	ANKLE1
## 6848	CCDC58
## 6849	VMA21

## 6850	FAM86C2P
## 6851	SLC37A1
## 6852	WDR4
## 6853	NDUFV3
## 6854	PKNOX1
## 6855	U2AF1
## 6856	RRP1B
## 6857	PDXK
## 6858	G6PD
## 6859	CSTB
## 6860	RRP1
## 6861	AGPAT3
## 6862	TRAPPC10
## 6863	GAB3
## 6864	GATD3A
## 6865	ICOSLG
## 6866	CFAP410
## 6867	LRRC3
## 6868	ITGB2
## 6869	FAM207A
## 6870	RALGDS
## 6871	SPATC1L
## 6872	LSS
## 6873	MCM3AP
## 6874	C21orf58
## 6875	PCNT
## 6876	DIP2A
## 6877	S100B
## 6878	PRMT2
## 6879	ADAMTS13
## 6880	ZNF714
## 6881	C19orf47
## 6882	CFAP157
## 6883	TOR2A
## 6884	ST6GALNAC6
## 6885	SHKBP1
## 6886	ZER1
## 6887	ZDHHC12
## 6888	PKN3
## 6889	TAOK1
## 6890	MED27
## 6891	DEDD2
## 6892	SIK3
## 6893	NEK8
## 6894	TLCD1
## 6895	PCSK7
## 6896	SAFB
## 6897	S100A1
## 6898	CHTOP
## 6899	CXCR5
## 6900	ZBTB7B
## 6901	FLAD1
## 6902	SHC1
## 6903	VPS11

## 6904	NLRX1
## 6905	ADAR
## 6906	IL6R
## 6907	UBE2Q1
## 6908	CRTC2
## 6909	ANO10
## 6910	FDPS
## 6911	RUSC1
## 6912	PAQR6
## 6913	PMF1
## 6914	SLC25A44
## 6915	LMNA
## 6916	NBEAL2
## 6917	CCDC12
## 6918	UBQLN4
## 6919	PPP1R35
## 6920	GPATCH4
## 6921	NACC1
## 6922	IER2
## 6923	ZNF394
## 6924	CPSF4
## 6925	LY6E
## 6926	VPS28
## 6927	TONSL
## 6928	PWWP3A
## 6929	RECQL4
## 6930	LRRC14
## 6931	ZNF333
## 6932	PPP1R16A
## 6933	FOXH1
## 6934	ORAI2
## 6935	ALKBH4
## 6936	SH2B2
## 6937	MRNIP
## 6938	SQSTM1
## 6939	MGAT4B
## 6940	RPL8
## 6941	MAML1
## 6942	LRWD1
## 6943	SCGB3A1
## 6944	PSMC2
## 6945	MFSD12
## 6946	YDJC
## 6947	DVL3
## 6948	AP2M1
## 6949	ABCF3
## 6950	PCYT1A
## 6951	U2AF1L4
## 6952	BDH1
## 6953	THAP8
## 6954	ZNF382
## 6955	PGAP3
## 6956	FDXR
## 6957	SAP30BP

## 6958	ACOX1
## 6959	PRPSAP1
## 6960	SRSF2
## 6961	TMEM143
## 6962	ALDH16A1
## 6963	ITGA5
## 6964	ZNF385A
## 6965	LSM12
## 6966	ASB16
## 6967	EMC10
## 6968	JOSD2
## 6969	SHANK1
## 6970	FAM171A2
## 6971	DBF4B
## 6972	PLCD3
## 6973	FMNL3
## 6974	RACGAP1
## 6975	LARP4
## 6976	RAVER1
## 6977	SYCE2
## 6978	SPC24
## 6979	LEMD2
## 6980	ADCY10P1
## 6981	ZNF653
## 6982	MED11
## 6983	RNASEK-C17orf49
## 6984	TNFSF13
## 6985	SENP3
## 6986	FGF11
## 6987	EIF4A1
## 6988	RPL26
## 6989	POLR3K
## 6990	SNRNP25
## 6991	WDR90
## 6992	JMJD8
## 6993	SPSB3
## 6994	TEDC2
## 6995	CCNF
## 6996	TBC1D24
## 6997	AMDHD2
## 6998	PAQR4
## 6999	FLYWCH2
## 7000	ZG16B
## 7001	ZNF75A
## 7002	ADCY9
## 7003	CLPB
## 7004	NEU3
## 7005	CYB561A3
## 7006	ASRGL1
## 7007	UBXN1
## 7008	LBHD1
## 7009	TTC9C
## 7010	TAF6L
## 7011	NXF1

## 7012	STX5
## 7013	SLC25A45
## 7014	RPL29
## 7015	SYVN1
## 7016	ZFPL1
## 7017	RPS6KA4
## 7018	LRP5
## 7019	TPCN2
## 7020	TAL1
## 7021	CMPK1
## 7022	COA7
## 7023	ZYG11B
## 7024	CZIB
## 7025	MAGOH
## 7026	ACOT11
## 7027	FAM151A
## 7028	PARS2
## 7029	USP24
## 7030	PLPP3
## 7031	NOL9
## 7032	KLHL21
## 7033	GMEB1
## 7034	SELENON
## 7035	AK4
## 7036	JAK1
## 7037	LZIC
## 7038	DRAVIN
## 7039	DHRS3
## 7040	LAPTM5
## 7041	PEF1
## 7042	SYNC
## 7043	RBBP4
## 7044	TSSK3
## 7045	TMC04
## 7046	SCNN1D
## 7047	MXRA8
## 7048	FAAP20
## 7049	MEGF6
## 7050	OMA1
## 7051	MYSM1
## 7052	TM2D1
## 7053	USP1
## 7054	FUBP1
## 7055	DNAJB4
## 7056	TYW3
## 7057	FAM102B
## 7058	HENMT1
## 7059	C1orf52
## 7060	ATXN7L2
## 7061	ZNF326
## 7062	GFI1
## 7063	AGL
## 7064	EXTL2
## 7065	SLC30A7



## 7066	ZNF281
## 7067	ARPC5
## 7068	NLRP3
## 7069	ZNF496
## 7070	IGSF8
## 7071	PEA15
## 7072	PEX19
## 7073	NCSTN
## 7074	C1orf74
## 7075	FLVCR1
## 7076	ATF3
## 7077	RBM15
## 7078	DENND2D
## 7079	IER5
## 7080	SNED1
## 7081	BPNT1
## 7082	BROX
## 7083	NBPF20
## 7084	ACP6
## 7085	TFB2M
## 7086	CNST
## 7087	PPP1R21
## 7088	OXER1
## 7089	HAAO
## 7090	B3GALNT2
## 7091	C1orf147
## 7092	MAPKAPK2
## 7093	CAPN2
## 7094	MRPL55
## 7095	WDR26
## 7096	REL
## 7097	PUS10
## 7098	PEX13
## 7099	KIAA1841
## 7100	DISC1
## 7101	MEMO1
## 7102	DPY30
## 7103	TYW5
## 7104	MAIP1
## 7105	SLC66A3
## 7106	ARL5A
## 7107	CLHC1
## 7108	DUSP19
## 7109	CFAP36
## 7110	NUP35
## 7111	CCDC138
## 7112	FBX041
## 7113	WDCP
## 7114	SMC6
## 7115	H3-3A
## 7116	COQ8A
## 7117	SLC16A14
## 7118	SGCB
## 7119	BBS5

## 7120 SMARCAD1  
 ## 7121 HPGDS  
 ## 7122 PDLIM5  
 ## 7123 RPRD2  
 ## 7124 ANKRD23  
 ## 7125 CTSS  
 ## 7126 MSX1  
 ## 7127 PACRGL  
 ## 7128 TNFAIP8L2  
 ## 7129 SCNM1  
 ## 7130 TMOD4  
 ## 7131 VPS72  
 ## 7132 ERCC3  
 ## 7133 RNF149  
 ## 7134 IWS1  
 ## 7135 BOLA3  
 ## 7136 CDC42EP3  
 ## 7137 S100A11  
 ## 7138 DHX57  
 ## 7139 ARHGAP25  
 ## 7140 S100A9  
 ## 7141 CCNYL1  
 ## 7142 FZD5

##

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dolichyl-phosphate mannosyltransf

chromosome

FGR proto-oncogene,

glutamate-cysteine

nuclear transcription

sperm tail

NIH

LAS1 like

ectonucleotide pyrophosph

ankyrin repeat

cytochrome P450 fam

KRIT

RAD52

BCL2 assoc

CD9

heparan sulfate-glucos

mitotic

mannose-6-phosphate

alsin Rho guanine nucle

CASP8 and FAL

tissue

## 31	NADH:ubiquinone oxidoreductas
## 32	
## 33	myo
## 34	solute
## 35	
## 36	sterile alpha
## 37	DNA polymerase
## 38	
## 39	
## 40	
## 41	
## 42	
## 43	
## 44	calcium/calmodulin depend
## 45	
## 46	VPS50 sub
## 47	Rho G
## 48	NADH:ubiquinone
## 49	solute
## 50	zinc fin
## 51	solute
## 52	supp
## 53	
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## 55	dishevelled
## 56	U
## 57	src kinase
## 58	solute
## 59	mitochondrial calcium uniporter dom
## 60	
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## 63	
## 64	RNA polymer
## 65	acyl-CoA synthetase m
## 66	
## 67	cytokine in
## 68	signa
## 69	family with sequen
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## 74	GC-rich se
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## 76	carn
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## 79	inhibito
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## 82	F-box and le
## 83	
## 84	pyru

## 85		Z
## 86		lysosomal as
## 87		
## 88		glycerophospho
## 89		required for exc
## 90		cytol
## 91		oxyste
## 92		
## 93		mitogen-activated prot
## 94		adaptor related prote
## 95		
## 96		sp
## 97		TNF recep
## 98		mitogen-activated pro
## 99		
## 100		
## 101		
## 102		aldehyde dehyd
## 103		putative homeodon
## 104		FERM, ARH/RhoGEF and p
## 105		gam
## 106		
## 107		
## 108		interferon relate
## 109		cytochrome c oxidase assembly factor heme A
## 110		GTF2I
## 111		PAF1 homolog, Paf1/RNA poly
## 112		VP
## 113		Rho G
## 114		
## 115		
## 116		patatin like phosph
## 117		
## 118		
## 119		microtubule a
## 120		coiled
## 121		platelet activating factor acetylhydrol
## 122		
## 123		
## 124		
## 125		trafficking p
## 126		megakaryocyte
## 127		
## 128		suppressi
## 129		
## 130		RNA pseudouridine s
## 131		
## 132		
## 133		TSR3
## 134		phosphatidylinositol glycan a
## 135		cramped ch
## 136		DnaJ heat shock protein
## 137		myosin regulatory ligh
## 138		

## 139		pro
## 140	jumonji and AT-rich inter	
## 141		
## 142		
## 143	DLEC1 cilia and	
## 144		
## 145		ADAM
## 146		
## 147		
## 148		
## 149	cadherin EGF LAG s	
## 150	pleckstrin homology and	
## 151		
## 152		
## 153		microsomal g
## 154		cryptoch
## 155		
## 156	ST3 beta-galactoside alp	
## 157		
## 158	polycystin 1, transient receptor po	
## 159		
## 160		Rho rela
## 161		
## 162	SEC62 homolog, prep	
## 163		
## 164		cold
## 165		ul
## 166	REV3 like, DNA directed polym	
## 167		mannan binding
## 168		family with sequ
## 169		
## 170		prot
## 171		
## 172		bromodomain adjace
## 173		
## 174		
## 175	eEF1A lysine and N	
## 176	dual specificity tyrosine phospho	
## 177		
## 178	ubiquinol-cytochrome	
## 179		
## 180	non-SMC con	
## 181	intermedia	
## 182		
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## 186		fuzzy p
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## 190		leucin
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## 192		Scm polyc

## 193		FYN proto-oncogene,
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## 197		chlor
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## 201		amyloid beta precursor protein
## 202		MKS transi
## 203		abhy
## 204		A-kinas
## 205		
## 206		UTP18 small s
## 207		
## 208		tetratr
## 209		polypyrimid
## 210		
## 211		leucyl-tRNA s
## 212		phosphatidylinositol-4-phosphate 3-kinase cata
## 213		plasminogen ac
## 214		an
## 215		
## 216		RAB C
## 217		glutaminy-pep
## 218		protein phosp
## 219		
## 220		mitogen-activated protein kin
## 221		transmembrane immun
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## 223		
## 224		ERCC excision repair 1, endonuc
## 225		membrane bound transcripti
## 226		prickle plan
## 227		exostosin
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## 229		calcium bindin
## 230		ubiquitin protein ligase
## 231		mitogen-activated protein kin
## 232		protea
## 233		mannosida
## 234		solute c
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## 236		negative regulator o
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## 240		RL
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## 246		transforming acidic coile

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## 248	DNA polymerase
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## 255	coiled
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## 257	zinc fin
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## 262	RANBP2 like a
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## 265	ATPase secretory p
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## 268	RUN a
## 269	alkylg
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## 271	tetratr
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## 277	
## 278	zinc fing
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## 293	zinc fin
## 294	ribonucle
## 295	NADH:ubiquinone oxi
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## 297	endop
## 298	5'
## 299	A-I
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## 301	small nuclear RNA activ
## 302	deor
## 303	serine/threonine kinase
## 304	ATP binding ca
## 305	DEF6 guanine
## 306	pleckstrin hor
## 307	glutamate-cyste
## 308	ubiquitin protein ligase
## 309	
## 310	coiled
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## 312	heat sh
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## 314	hydroxyster
## 315	nuclear receptor s
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## 341	rabaptin, RAB GTPase
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## 347	family with sequ
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## 356	zinc fin
## 357	ATP binding ca
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## 360	
## 361	ubiquitin like m
## 362	GRB2 a
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## 364	solute
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## 370	GABA type A recepto
## 371	SH3 a
## 372	family with sequen
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## 375	death a
## 376	neutral sphingomyelinase a
## 377	
## 378	signal transduc
## 379	TIMP m
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## 383	cytochrome P450 fam
## 384	zinc
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## 398	trio Rho guanine
## 399	C-type l
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## 401	zinc fin
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## 403	polynucle
## 404	PH domain and leucine rich r
## 405	spindle appa
## 406	staufen double-str
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## 413	pro
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## 415	poly(ADP-ribose)
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## 421	capping a
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## 423	defective in cullin neddylation
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## 426	tRNA
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## 429	phosphorylase kinase
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## 431	heat shock protein
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## 434	OFD1 centriole and c
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## 441	ArfGAP with RhoGAP domain, ankyr
## 442	translocated promoter reg
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## 449	family with sequen
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## 457	ribonucleotide reductase regulatory
## 458	
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## 460	mitochond
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## 462	vacuolar p

## 463	CUGBI
## 464	family wi
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## 467	ERCC excision repair 8, CSA ubiqu
## 468	hexose-6-phosphate dehydrogen
## 469	vesicle as
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## 477	NEDD4 like
## 478	protein phosphat
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## 480	pentat
## 481	neurite ext
## 482	JNK1/MAPK8
## 483	nuclear
## 484	mitochondrial ca
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## 488	mitogen
## 489	collag
## 490	family with sequen
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## 507	aldo-keto r
## 508	MRT4 homolog,
## 509	uncon
## 510	MCF.2 cell line derived t
## 511	nuclear rec
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## 513	anaphase p
## 514	trafficking
## 515	thyroid hormone re
## 516	phos

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## 520	serologically def
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## 523	TB
## 524	family with sequen
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## 528	SUZ RNA
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## 530	family with sequen
## 531	TGF-beta activated kinase 1
## 532	glycop
## 533	eukaryotic translation initiat
## 534	ubiqu
## 535	
## 536	pumilio
## 537	mitochond
## 538	inter-alpha-trypt
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## 543	ring fing
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## 554	ATPase phospholipid
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## 556	SEC61
## 557	protein phosphata
## 558	ciliary roo
## 559	RL
## 560	ATPase plasma m
## 561	zinc fing
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## 564	NDC
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## 569	poly(ADP-ribose) p
## 570	aldehyde dehydr

## 571	TAR (H
## 572	glutamyl-tRNA
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## 574	
## 575	DnaJ heat shock protein
## 576	solute
## 577	pleckstrin
## 578	
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## 580	serine/-
## 581	WNK lysine
## 582	cell division cycl
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## 584	
## 585	phosphatidylinositol glycan a
## 586	small nuclear ribon
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## 589	a
## 590	branched chain
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## 599	GC-rich
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## 606	amyloid beta precursor
## 607	DNA polymerase
## 608	eukaryotic trans
## 609	solute
## 610	BRD4 interacting chromatin remodeling
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## 615	U2 small nuc
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## 625		in
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## 628		
## 629		ST3 beta-galactoside al
## 630		TATA-box binding p
## 631		homeodomain in
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## 646		PMS1 homolog 1, mism
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## 648		TATA-box binding p
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## 663		minichromosome maintenance 10 rep
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## 667		adenosin
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## 670		NADH:ubiquinon
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## 672		zinc fin
## 673		mitogen-activa
## 674		proton a
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## 677		glutatl
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## 679  
 ## 680 ankyrin repea  
 ## 681 family with sequen  
 ## 682  
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 ## 684 methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, methenyltetra  
 ## 685 solute  
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 ## 689 protein phosphatase 2  
 ## 690 ELAV  
 ## 691 disco inte  
 ## 692 SWI/SNF related, matrix associated, actin dependent regulator of chrom  
 ## 693  
 ## 694 nuclear transcrip  
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 ## 696 abnormal sp  
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 ## 700 zinc finger an  
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 ## 704 isochori  
 ## 705 tRNA m  
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 ## 707 Myb/SANT DNA  
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 ## 710 zinc finger an  
 ## 711 mitoch  
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 ## 719  
 ## 720 translocation as  
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 ## 722 TNF rec  
 ## 723 calcium voltage-gated channe  
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 ## 729  
 ## 730 tumor pr  
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 ## 732 ribosoma

## 733	
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## 735	PMS1 homolog 2, mismatch repair sys
## 736	isoleucyl-tRNA s
## 737	isocitrate dehydrogenase (NAD(+)) 3 m
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## 739	Rho associated coiled-coil c
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## 744	Ras associa
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## 751	transcription factor
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## 759	ATPase ph
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## 761	lysosomal pro
## 762	tetratr
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## 766	RAS
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## 770	end
## 771	protein phosphatase 2
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## 773	
## 774	nuclear casein kinase and cyclin d
## 775	VPS35
## 776	DnaJ heat shock prote
## 777	BCL
## 778	potassium voltage-gated channel subfamily A
## 779	gal
## 780	C-type lect
## 781	
## 782	ATPase Na <sup>+</sup> /K <sup>+</sup> +
## 783	NEDD4
## 784	phosphatidylinositol glycan a
## 785	mitogen
## 786	RAB27A,



## 787	haloacid dehalogenase like hy
## 788	ubiquitin recognition factor in L
## 789	LDL
## 790	PHI
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## 795	dual adaptor of phosphotyrosine
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## 797	SMG6 nonsense
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## 816	eukaryotic translation initiation
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## 819	oxysterol
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## 821	ATPase plasma membrane
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## 823	mitogen-activated protein kinase
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## 828	Rho GTPase
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## 831	
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## 840	methyl-Cp

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## 842	family with sequ
## 843	FAM3 metabolism regul
## 844	cleavage and polyad
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## 848	protein kinase cAMP-activa
## 849	adhesion G p
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## 851	zinc fing
## 852	
## 853	protein tyrosine phosph
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## 855	aldehyde dehyd
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## 857	sterol regulatory element bin
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## 859	ubiquit
## 860	membr
## 861	Rho rela
## 862	structural ma
## 863	hydroxysteroid
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## 867	prolyl 4-h
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## 870	acyl-CoA del
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## 872	F-box and WD
## 873	ArfGAP with coiled-coil, anky
## 874	collapsin
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## 888	succinate dehydrogenase comp
## 889	SWI/SNF related, matrix associated, actin dependent regulator of chroma
## 890	fibronectin t
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## 893	ADAM
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## 895	insulin like growth fact
## 896	mitogen-activated prot
## 897	ST6 beta-galactoside al
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## 899	FRY n
## 900	phosphatidylinositol binding
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## 916	interaction protein for cy
## 917	zinc finger ZZ-type and l
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## 926	eukaryotic translation
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## 932	cadherin EGF LAG s
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## 950		RAB7A,
## 951		B cell rec
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## 953		spliceosome associated factor
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## 961		RNA binding motif single str
## 962		bromodomain adjace
## 963		protein tyrosine phosph
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## 971		TNF r
## 972		phosphoprotein membrane anchor with glycos
## 973		
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## 976		muscleblin
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## 978		Rho guanine n
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## 980		mitogen-activa
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## 982		
## 983		transmemb
## 984		nuclea
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## 986		protein phosphata
## 987		DnaJ heat shock protein
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## 990		ubiqu
## 991		small nuclear ribon
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## 993		dynein cytoplas
## 994		amyloid beta precursor protein binding family B m
## 995		leucine rich repeats and calponin h
## 996		family with sequ
## 997		
## 998		DNA polymerase
## 999		capping actin protein of
## 1000		G pr
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## 1002		solute

## 1003	ubiqui
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## 1006	protein inh
## 1007	A-Raf proto-oncogen
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## 1010	ubiqui
## 1011	phosphatidylinositol 3-kinas
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## 1013	TP53 induced glycol
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## 1016	protein phosphatase 2
## 1017	PMS1 homolog 2, mismatch repair sys
## 1018	
## 1019	MLLT10 histone lysine methy
## 1020	zinc finger CW-type ar
## 1021	in
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## 1025	trinucleotide r
## 1026	CBFA2/RUNX1 partner tran
## 1027	itchy l
## 1028	polycystin 2 like 2, transient recept
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## 1030	st:
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## 1032	ubiquitin conjugat
## 1033	RUNX1 partner tran
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## 1058		solute carrier
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## 1065		Snf2 related
## 1066		pumilio like
## 1067		CCR4-NOT trans
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## 1071		heat shock protein 90 alpha
## 1072		RB transcr
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## 1075		NDC80 kin
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## 1078		membrane associated guanylate kinase, WW
## 1079		osteoclastogenesis associat
## 1080		PEST proteolytic signal
## 1081		exonucleas
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## 1084		protein tyrosine p
## 1085		ubiquitin like m
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## 1090		dual
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## 1092		DAP3 bin
## 1093		protocae
## 1094		heat shock protein
## 1095		PH domain and leucine rich r
## 1096		interleukin
## 1097	SWI/SNF related, matrix associated, actin dependent regulator of chromatin	
## 1098		
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## 1100		
## 1101		basic leuc
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## 1106		family with sequen
## 1107		mitochond
## 1108		gem nuclear org
## 1109		nuclear
## 1110		glyco

## 1111	ELKS/RAB6-inter
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## 1131	CYI
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## 1145	StAR related lipid t
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## 1151	amyloid be
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## 1159	RAB10,
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## 1161	carbamoyl-phosphate synthetase 2, aspartate transcarb
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## 1220	protein phosphata
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## 1509		synapt
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## 1551	small n
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## 1739	DnaJ heat shock prote
## 1740	negative elongation
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## 1772	TBC/LysM-ass
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## 1775	SAM and HD domain containing deoxynucleoside triphosp
## 1776	
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## 1781	microtubule associated pr
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## 1783	CDK5 regulatory s
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## 1795	deoxynucleotidyltransferase term
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## 1840	ATPase ph
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## 1851	RB binding protein 7, c
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## 1871	TIMP metalloprotease
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## 1887	DnaJ heat shock protein
## 1888	Rho guanine nucleotide exchange factor
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## 1890	SPT20 homolog
## 1891	mitochondrial
## 1892	solute carrier
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## 1894	formyl
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## 1896	von Willebrand factor
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## 1898	katanin
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## 1902	CLN5 intracellular
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## 1907	heat shock
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## 1909	mitogen-activated
## 1910	engine
## 1911	phosphorylase kinase
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## 1916	translin associated factor
## 1917	nuclear factor
## 1918	1
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## 1920	ADP ribosylation factor like

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## 1924	ACD shelterin complex subunit and tel
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## 1926	par-6 family ce
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## 1929	U6 snRNA bio
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## 1931	NME/NM23 nucl
## 1932	proteasom
## 1933	SET domain containing 6, prote
## 1934	solute
## 1935	VAC14 c
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## 1937	transport and g
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## 1939	sphing
## 1940	solute carrier family
## 1941	solute
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## 1944	MON1 homolog B, secre
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## 1948	NPR3 1.
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## 1950	N-m
## 1951	hydroxys
## 1952	TATA-box binding protein associated factor,
## 1953	N-acetylglucosamine-1-phosphodiester al
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## 1955	coactosin lik
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## 1959	NME/NM23 nucl
## 1960	ATP binding ca
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## 1964	methenyltetrahydrofolate s
## 1965	chlor
## 1966	hydroxyacy
## 1967	adenine nucleotide translocas
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## 1971	STIP1 homology and
## 1972	n
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## 1980	ubiquitin
## 1981	glutamyl-tRNA
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## 1983	golgi associated, gamma adaptin ear contain
## 1984	calcineurin like phosphoe
## 1985	ubiqu
## 1986	bifun
## 1987	RB transcr
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## 1990	PYD
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## 1994	CDP-diacylglycerol--inosito
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## 1999	VPS35 endosomal p
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## 2001	lysin
## 2002	alpha and gamma
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## 2005	HECT and RLD domain containing E3 ubiquitin pro
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## 2008	acyl-CoA synthetas
## 2009	RAB11A,
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## 2014	RNA polymer
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## 2029	SPG11 vesicle traffi
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## 2032	biogenesis of lysosomal org
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## 2035	zinc finger DHHC-
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## 2053	RAB2A,
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## 2075	R3H domain ar
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## 2087	potassium calcium-activated c
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## 2090	mitogen-activated protein kin
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## 2095	seryl-tRNA s
## 2096	small nuclear ribon
## 2097	CLPTM1 regulator of GABA type A r
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## 2100	lin-7 homolog B, crumbs cell
## 2101	protein phosphat
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## 2131	anti-silencing fun
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## 2161	CAP-Gly domain
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## 5060	
## 5061	
## 5062	
## 5063	
## 5064	defective in cullin neddylation
## 5065	solute carrier
## 5066	
## 5067	protein phosphatase
## 5068	
## 5069	chromosome
## 5070	alkB homolog
## 5071	mitogen-activated protein kinase
## 5072	sulfhydryl
## 5073	C'
## 5074	SAFB 1
## 5075	mitogen-activated protein kinase
## 5076	nucleolar and stress granule
## 5077	NADH:ubiquinone oxidoreductase
## 5078	
## 5079	
## 5080	HAUS aug
## 5081	RTF1 homolog, Paf1/RNA polymerase
## 5082	poly(ADP-ribose)
## 5083	ribosomal protein
## 5084	tubulin gamma chain
## 5085	regulator
## 5086	inositol
## 5087	
## 5088	
## 5089	
## 5090	p2
## 5091	ADAM
## 5092	
## 5093	ribosome
## 5094	
## 5095	for
## 5096	ky
## 5097	genera
## 5098	Rab geranylgeranyl
## 5099	ribosome
## 5100	dihydrolipoamide branched
## 5101	RNA 3'
## 5102	in
## 5103	
## 5104	cell growth regula
## 5105	hydroxyacyl-CoA dehydrogenase trifunctional multi
## 5106	



## 5107	
## 5108	protein phosphatase
## 5109	polyribonucleotide
## 5110	dynein cytoplasmic 2
## 5111	
## 5112	sulfotransferase
## 5113	RAB1A, RAB1A-LIM
## 5114	
## 5115	prolactin
## 5116	solute carrier
## 5117	
## 5118	solute carrier
## 5119	elastin
## 5120	
## 5121	all-trans retinoic acid inducible
## 5122	
## 5123	leucine rich pentatricopeptide
## 5124	trip
## 5125	
## 5126	
## 5127	major facilitator superfamily
## 5128	
## 5129	ATPase family
## 5130	
## 5131	CUB and zinc finger
## 5132	dual specificity
## 5133	calcium homeostasis
## 5134	ADP ribosylating
## 5135	
## 5136	
## 5137	ectonucleoside triphosphate
## 5138	
## 5139	
## 5140	
## 5141	DnaJ heat shock protein
## 5142	
## 5143	family with sequence
## 5144	activating signal cointeracting
## 5145	
## 5146	tet m
## 5147	DNA repl
## 5148	5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase
## 5149	SWI/SNF related, matrix associated, actin dependent regulator of chromatin
## 5150	BRC
## 5151	calcium response
## 5152	asparagine synthetase
## 5153	
## 5154	small RNA binding exonuclease
## 5155	
## 5156	
## 5157	
## 5158	isocitrate
## 5159	
## 5160	corepressor

## 5161		ITPR inte
## 5162		family with sequen
## 5163		
## 5164		
## 5165		
## 5166		solute
## 5167		solute
## 5168		solute
## 5169		
## 5170		cytochrome c oxi
## 5171		poly(ADP-ribose)
## 5172		meiosis sp
## 5173		ubiq
## 5174		SI
## 5175		
## 5176		signa
## 5177		aph-1 homolog
## 5178		in
## 5179		poly(ADP-ribose) p
## 5180		phosphopantoth
## 5181		semaphorin 7A (John
## 5182		
## 5183		Rho G
## 5184		family with sequen
## 5185		HECT and RLD domain containing E3
## 5186	HECT and RLD domain containing E3 ubiquitin pro	
## 5187	HECT and RLD domain containing E3	
## 5188	zinc f	
## 5189	adaptor related protein complex 1 as	
## 5190		
## 5191		heterogeneous m
## 5192		SEC31 homolog A, C
## 5193		
## 5194		
## 5195		
## 5196		Rap1 GTPase-GDI
## 5197		
## 5198		
## 5199		
## 5200		
## 5201		N-ac
## 5202		
## 5203		
## 5204		G3BP stress
## 5205		
## 5206		scavenge
## 5207		
## 5208		CCR4-NOT transcrip
## 5209		US
## 5210		
## 5211		
## 5212		
## 5213		glutathione S-transferase C
## 5214		in

## 5215	
## 5216	lymphoi
## 5217	hy
## 5218	3'-phosphoadenosine 5
## 5219	SEC24 homolog B, C
## 5220	protein phosphatas
## 5221	solute
## 5222	
## 5223	mitogen-activated protein kin
## 5224	regulat
## 5225	guanylyl
## 5226	
## 5227	
## 5228	endop
## 5229	ETS var
## 5230	GABA type A recepto
## 5231	
## 5232	
## 5233	FYVE, RhoGEF
## 5234	ALG10 al
## 5235	SIN3-HDA
## 5236	
## 5237	electron transfer flavoprotein subunit be
## 5238	
## 5239	zinc finger CCHC-type and RNA
## 5240	
## 5241	prickle plan
## 5242	compl
## 5243	NADH:ubiquinon
## 5244	
## 5245	killer c
## 5246	vesicle as
## 5247	
## 5248	
## 5249	
## 5250	perox
## 5251	SR-relate
## 5252	LLP homolog, long-term s
## 5253	ribosom
## 5254	membrane assoc
## 5255	
## 5256	pleckstrin homology lil
## 5257	
## 5258	dua
## 5259	
## 5260	transmembrane O-mannosyltransf
## 5261	small nuclear ribon
## 5262	NEDD1 gamma-tubulin rin
## 5263	syn
## 5264	grow
## 5265	solute
## 5266	
## 5267	RBPJ interacti
## 5268	metabolis

## 5269	
## 5270	
## 5271	trichople
## 5272	family with sequen
## 5273	
## 5274	myo
## 5275	solute
## 5276	solute
## 5277	
## 5278	
## 5279	coiled
## 5280	TARBP2 subun
## 5281	G p
## 5282	nuc:
## 5283	NED
## 5284	SWI/SNF related, matrix associated, actin dependent regulator of chr
## 5285	
## 5286	KAT8 regul
## 5287	
## 5288	mitogen-activated prot
## 5289	
## 5290	polypeptide N-acetyl
## 5291	cysteine s
## 5292	limb developm
## 5293	chromosom
## 5294	
## 5295	transmembrane BAX in
## 5296	
## 5297	
## 5298	WD repeat ar
## 5299	heterogeneous nuclear
## 5300	lysopl
## 5301	
## 5302	RB tr
## 5303	
## 5304	SET domain containing 1B, histor
## 5305	VPS33A core subunit o
## 5306	
## 5307	ras homolog family mem
## 5308	density regulated re-in
## 5309	
## 5310	
## 5311	RL
## 5312	muscleblin
## 5313	abhyd
## 5314	RAB20,
## 5315	
## 5316	
## 5317	
## 5318	test
## 5319	thioredoxin rela
## 5320	
## 5321	armadillo like
## 5322	N(alpha)-acetyltransferase

## 5323	DDB1 an
## 5324	RAB15,
## 5325	
## 5326	
## 5327	EF-hand
## 5328	G p
## 5329	
## 5330	
## 5331	clathrin binding box
## 5332	try
## 5333	
## 5334	N
## 5335	solute
## 5336	micro
## 5337	
## 5338	
## 5339	
## 5340	zinc finger an
## 5341	
## 5342	solute
## 5343	
## 5344	general transcr
## 5345	sign
## 5346	bromo adjacent h
## 5347	dispatched RND
## 5348	
## 5349	TLE family member 3,
## 5350	acidic nuclear phosph
## 5351	
## 5352	ubiquit
## 5353	proline-serine-threonine phosph
## 5354	electron transfer
## 5355	
## 5356	S-phase cyclin A a
## 5357	
## 5358	
## 5359	nuc
## 5360	
## 5361	mannosida
## 5362	ta
## 5363	insulin lil
## 5364	a
## 5365	
## 5366	ubiq
## 5367	
## 5368	
## 5369	
## 5370	
## 5371	proprotein convert
## 5372	secretory
## 5373	DNA polymera
## 5374	
## 5375	abhy
## 5376	TOPBP1 interacting checkpoi

## 5377	DET1 partner c
## 5378	
## 5379	
## 5380	multiple C2 and transmembrane
## 5381	furin, paired basic
## 5382	IQ motif containing C
## 5383	CREB regulated
## 5384	elongation
## 5385	SEC11 homolog A, signal
## 5386	glycyl
## 5387	
## 5388	solute
## 5389	
## 5390	chromosome
## 5391	arm
## 5392	FTO alpha-ketoglutarate
## 5393	ubiquinol-cytochrome
## 5394	cerebellar degeneration
## 5395	Rho GTPase
## 5396	
## 5397	
## 5398	carboxyl
## 5399	
## 5400	
## 5401	NLR family
## 5402	kinase
## 5403	
## 5404	glycine
## 5405	CKLF like MARVEL transmembrane
## 5406	
## 5407	microtubule associated protein
## 5408	membrane bound transcription factor
## 5409	zinc finger
## 5410	interact
## 5411	receptor
## 5412	zinc finger and
## 5413	
## 5414	NADH:ubiquinone
## 5415	3-phosphoinositide
## 5416	tigger transmembrane
## 5417	differentially expressed
## 5418	
## 5419	galactosaminase
## 5420	
## 5421	
## 5422	nucleus
## 5423	
## 5424	GIL
## 5425	
## 5426	UTP4 small subunit
## 5427	
## 5428	
## 5429	glucose-fructose oxidoreductase
## 5430	NIN1 (RPN12)

## 5431	phosphoribosyl pyrophosphate synt
## 5432	phosphati
## 5433	target of myb1 like 1 m
## 5434	chromosom
## 5435	
## 5436	VP
## 5437	small G pr
## 5438	aminope
## 5439	leucin
## 5440	
## 5441	slin
## 5442	
## 5443	glucose-6-phosp
## 5444	
## 5445	BCAS3 microtubule assoc
## 5446	
## 5447	SS18 subunit of BAF cl
## 5448	TATA-box binding p
## 5449	AFG3 like mat
## 5450	
## 5451	
## 5452	
## 5453	solute
## 5454	regulation of nuclear pr
## 5455	chromosom
## 5456	polypeptide N-acetyl
## 5457	establishment of sister chromatid coh
## 5458	oxyste
## 5459	
## 5460	proline, glutamate
## 5461	NPC intracellular
## 5462	
## 5463	WD repeat c
## 5464	
## 5465	spermidine/spermine N1-acetyl
## 5466	as
## 5467	phosphoinositide-3-l
## 5468	
## 5469	Rho GDP d
## 5470	t
## 5471	solute
## 5472	
## 5473	RAB40B,
## 5474	eukaryotic transl
## 5475	
## 5476	anaphase p
## 5477	
## 5478	fructosamin
## 5479	nuclear pr
## 5480	regulatory associated
## 5481	
## 5482	trip
## 5483	
## 5484	

## 5485	
## 5486	
## 5487	
## 5488	
## 5489	
## 5490	
## 5491	methyl-Cp
## 5492	
## 5493	zinc fin
## 5494	phorbol-12-myristate-13-acetate
## 5495	prolyl 3-hydroxylase
## 5496	5'-nucleotidase
## 5497	reticulophagy
## 5498	erb-b2
## 5499	migrat.
## 5500	insulin like grow
## 5501	
## 5502	
## 5503	sterile alpha
## 5504	
## 5505	solute
## 5506	
## 5507	tubulin polygl
## 5508	
## 5509	phosphatase
## 5510	
## 5511	vav guanine nu
## 5512	mult.
## 5513	
## 5514	SH3 domain containing
## 5515	dihydro
## 5516	
## 5517	coiled
## 5518	
## 5519	
## 5520	
## 5521	interferon induc
## 5522	protein-glucosylgalactosyl
## 5523	hormonally up-regul
## 5524	interferon alpha
## 5525	
## 5526	transient receptor potential cation ch
## 5527	
## 5528	
## 5529	amyloid
## 5530	DOP1 leu
## 5531	URB1
## 5532	AK
## 5533	ep
## 5534	SUMO1
## 5535	gem nuclear org
## 5536	ar
## 5537	
## 5538	



## 5539	endogenous r
## 5540	
## 5541	translocase of inner
## 5542	coactivator associated a
## 5543	ecotropic vi
## 5544	pro
## 5545	sialic aci
## 5546	
## 5547	family with sequen
## 5548	
## 5549	
## 5550	
## 5551	cytoso:
## 5552	nitric oxide s
## 5553	
## 5554	solute
## 5555	arginine-gluta
## 5556	Rho guanine nu
## 5557	EF-h
## 5558	perox
## 5559	phos
## 5560	SH3 domain binding gl
## 5561	connector enhancer of
## 5562	
## 5563	
## 5564	chromosom
## 5565	
## 5566	
## 5567	
## 5568	mitogen-activated pro
## 5569	
## 5570	
## 5571	WD and
## 5572	
## 5573	hep
## 5574	integrin sub
## 5575	SERP
## 5576	BCL
## 5577	cellular comm
## 5578	protein kinase cAMP-activ
## 5579	phosphatidylinositol glycan a
## 5580	
## 5581	
## 5582	protein tyrosine p
## 5583	
## 5584	
## 5585	metal response element bin
## 5586	
## 5587	str
## 5588	pro
## 5589	chromosom
## 5590	
## 5591	cadherin EGF LAG s
## 5592	aldehyde dehyd

## 5593	ATPase Na <sup>+</sup> /K <sup>+</sup> -
## 5594	TOR s
## 5595	
## 5596	pogo transposable elemen
## 5597	mitoch
## 5598	cellular represso
## 5599	DDB1 an
## 5600	
## 5601	T-l
## 5602	
## 5603	transmembran
## 5604	
## 5605	microsomal g
## 5606	
## 5607	ubiquitin-fold mo
## 5608	
## 5609	Fc f
## 5610	NUF2 component o
## 5611	succinate dehy
## 5612	
## 5613	nuclear receptor s
## 5614	ubiqu
## 5615	proline rich mitoti
## 5616	ribosomal RNA adenine dime
## 5617	mitochon
## 5618	phosphatidylinositol glycan a
## 5619	interferon stimulated
## 5620	hep
## 5621	ABL proto-oncogene 2, n
## 5622	xenotropic and polyt
## 5623	regulator
## 5624	tors
## 5625	
## 5626	
## 5627	sp
## 5628	ext
## 5629	
## 5630	threonyl-tRNA s
## 5631	
## 5632	SET domain bifurcated histone
## 5633	
## 5634	MCL1 apoptosis re
## 5635	
## 5636	
## 5637	phospha
## 5638	phosphatidylinositol-4-phosp
## 5639	acidic nuclear phosph
## 5640	MINDY
## 5641	
## 5642	
## 5643	
## 5644	
## 5645	mitochon
## 5646	aryl hydrocarbon re

## 5647	pogo transposable elem
## 5648	chromos
## 5649	ornithin
## 5650	
## 5651	GA binding protein transcrip
## 5652	denticleless E3 ubiqu
## 5653	dual specificity tyrosine phospho
## 5654	eukaryotic trans
## 5655	in
## 5656	
## 5657	TATA-box binding protein associated factor,
## 5658	SET a
## 5659	dual
## 5660	tumor pr
## 5661	ATPase ph
## 5662	ADAM
## 5663	jumpin
## 5664	S100
## 5665	
## 5666	
## 5667	ubiquitin
## 5668	solute
## 5669	H
## 5670	cAMP responsive elemen
## 5671	
## 5672	chromos
## 5673	GATA zinc
## 5674	interleukin
## 5675	
## 5676	in
## 5677	chromosom
## 5678	polypeptide N-acetyl
## 5679	tetratr
## 5680	saccharopin
## 5681	lyso
## 5682	mitogen-activated prote
## 5683	
## 5684	
## 5685	synapt
## 5686	sig
## 5687	
## 5688	SDE2 t
## 5689	delta 4
## 5690	
## 5691	
## 5692	cornichon family AMPA r
## 5693	inosito
## 5694	
## 5695	cornichon family AMPA r
## 5696	chromos
## 5697	membrane bound O-acyltrans
## 5698	po
## 5699	
## 5700	pyrrolin

## 5701	
## 5702	
## 5703	PTPRF
## 5704	protein tyrosine phosphatase
## 5705	ADP ribosyltransferase
## 5706	protein disulfide isomerase
## 5707	
## 5708	ATPase H <sup>+</sup> transporting
## 5709	heterogeneous nuclear ribonucleoprotein
## 5710	
## 5711	
## 5712	ChaC cation transport
## 5713	
## 5714	WD repeat containing protein
## 5715	VPg
## 5716	ASXL1
## 5717	ET
## 5718	small nuclear ribonucleoprotein
## 5719	abhy
## 5720	cytosolic iron-sulfur
## 5721	
## 5722	small nuclear ribonucleoprotein
## 5723	mitochondrial
## 5724	
## 5725	e
## 5726	
## 5727	
## 5728	dual
## 5729	
## 5730	
## 5731	5'-nucleotidyl transferase
## 5732	RAB, member of RAB
## 5733	solute carrier
## 5734	small nuclear ribonucleoprotein polypeptide
## 5735	zinc finger
## 5736	
## 5737	fumarylacetoacetate hydrolase
## 5738	
## 5739	
## 5740	speckle
## 5741	
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## 5743	
## 5744	
## 5745	lunapark, EL
## 5746	cell
## 5747	ubiquitin protein ligase
## 5748	
## 5749	family with sequence
## 5750	heat shock protein
## 5751	coiled-coil
## 5752	
## 5753	par
## 5754	

## 5755	KAT8 regulatory
## 5756	st
## 5757	rl
## 5758	hes family
## 5759	ankyrin repeat an
## 5760	
## 5761	DIS3 L
## 5762	
## 5763	TAM41 mitochondrial translocator assem
## 5764	ves
## 5765	RAB5A,
## 5766	reticulophag
## 5767	
## 5768	CCR4-NOT trans
## 5769	serine/threonine kin
## 5770	GDP-r
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## 5772	dynein cytoplasmic 1
## 5773	protein O-linked mannose N-acetylglucosamin
## 5774	
## 5775	cysteine and se
## 5776	solute c
## 5777	
## 5778	
## 5779	
## 5780	IQ mot.
## 5781	cullin associated and neddylation
## 5782	
## 5783	protein tyrosine p
## 5784	SHQ1, H/ACA ribonu
## 5785	solute c
## 5786	ubiquitin like m
## 5787	ADP ribosylation factor like GTPa
## 5788	TATA c
## 5789	
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## 5792	neurexophilin and PC-ester
## 5793	abhyd
## 5794	RAB, member of
## 5795	ADP
## 5796	
## 5797	
## 5798	m
## 5799	eukaryotic trans
## 5800	oxyste
## 5801	neutral ch
## 5802	LIM domain containing preferred trans
## 5803	
## 5804	
## 5805	
## 5806	T cell leu
## 5807	
## 5808	DDB1 an

## 5809	mesencephalic astrocyte c
## 5810	coiled
## 5811	synt
## 5812	
## 5813	
## 5814	eukaryotic translation initiation
## 5815	end
## 5816	
## 5817	factor intera
## 5818	solute
## 5819	
## 5820	
## 5821	ATPase phospholipid
## 5822	
## 5823	solute
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## 5829	
## 5830	
## 5831	TB
## 5832	calcium/calmodulin depend
## 5833	
## 5834	
## 5835	TRAF interacting protein with
## 5836	sp
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## 5839	ubiqu
## 5840	SET domain containing 7, histor
## 5841	nuclear assembly
## 5842	membrane assoc
## 5843	
## 5844	
## 5845	plate
## 5846	
## 5847	cytochrome P450 far
## 5848	NADH:ubiquinon
## 5849	membrane assoc
## 5850	
## 5851	
## 5852	OTU deubiquitinase with linea
## 5853	
## 5854	S-phase
## 5855	
## 5856	
## 5857	phosphoinositide-3-l
## 5858	LHFPL t
## 5859	single str
## 5860	IQ motif containing (
## 5861	
## 5862	gypsy

## 5863	diphosphoinositol
## 5864	peptidylglycine al
## 5865	B double prime 1, subunit of RNA polymerase III transcrip
## 5866	general transcr
## 5867	solute
## 5868	bo
## 5869	F-box and leuc
## 5870	
## 5871	
## 5872	
## 5873	
## 5874	
## 5875	Rho G
## 5876	
## 5877	
## 5878	
## 5879	pro
## 5880	TNF
## 5881	G3BP stress
## 5882	
## 5883	
## 5884	required for meiotic m
## 5885	biorientation of chr
## 5886	
## 5887	phenylalanyl-tRNA
## 5888	glucose-fructose oxidore
## 5889	CDK5 regulatory subunit
## 5890	
## 5891	trip
## 5892	HIG1 hypoxia inducib
## 5893	family with sequen
## 5894	TNF rec
## 5895	
## 5896	
## 5897	
## 5898	activat
## 5899	
## 5900	
## 5901	
## 5902	
## 5903	interleukin 1 receptor associated
## 5904	pleckstrin homology
## 5905	MMS
## 5906	proline rich nuc
## 5907	peptid
## 5908	arginyln-tRNA
## 5909	TI
## 5910	Rho G
## 5911	
## 5912	mitoch
## 5913	SNF2 histor
## 5914	
## 5915	dyne
## 5916	

## 5917	
## 5918	
## 5919	zinc f
## 5920	acidic
## 5921	von Willebran
## 5922	
## 5923	chromos
## 5924	WASP f
## 5925	CCZ1 homolog B, vacuolar protein trafficking
## 5926	chromos
## 5927	RB a
## 5928	cell c
## 5929	purine rich
## 5930	ribosomal pro
## 5931	scavenger receptor cysteine rich f
## 5932	
## 5933	
## 5934	chaperonin
## 5935	
## 5936	
## 5937	
## 5938	
## 5939	microt
## 5940	solute
## 5941	GRB1
## 5942	tr
## 5943	metl
## 5944	
## 5945	zinc finger CCCH-type c
## 5946	
## 5947	
## 5948	
## 5949	nucleolar p
## 5950	non-SMC conde
## 5951	LUC7 like
## 5952	
## 5953	SH3 domain containi
## 5954	
## 5955	calcium/calmodulin depe
## 5956	
## 5957	
## 5958	
## 5959	
## 5960	solute
## 5961	
## 5962	carb
## 5963	KI
## 5964	NADH:ubiquinone
## 5965	
## 5966	zinc f
## 5967	TATA-box binding p
## 5968	non-POU domain
## 5969	coiled
## 5970	EBP c



## 5971	O-linked N-acetylglucos
## 5972	
## 5973	interleuk
## 5974	
## 5975	
## 5976	
## 5977	phosphoribosyl
## 5978	
## 5979	RNA bin
## 5980	
## 5981	malignant fibrous histio
## 5982	
## 5983	NAD(P) dependent
## 5984	zinc finger p
## 5985	
## 5986	
## 5987	ATPase H+
## 5988	coiled
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## 5990	
## 5991	
## 5992	solute c
## 5993	charged mu
## 5994	steroidogen
## 5995	pyridoxa
## 5996	
## 5997	ST18 C2H2C-type zinc
## 5998	transforming acidic coiled
## 5999	
## 6000	
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## 6002	nuclear receptor b
## 6003	DnaJ heat shock protein far
## 6004	alcohol dehy
## 6005	mitochond
## 6006	
## 6007	telome
## 6008	
## 6009	
## 6010	LDL
## 6011	estrogen receptor binding
## 6012	
## 6013	eukaryotic translation in
## 6014	UTP23 small s
## 6015	NADH:ubiquinon
## 6016	Tat
## 6017	
## 6018	Rho G
## 6019	solute
## 6020	nicotinate
## 6021	very low d
## 6022	
## 6023	ubiquitin like with PH
## 6024	

## 6025	HAUS aug
## 6026	cyclin dep
## 6027	C9
## 6028	zinc fin
## 6029	
## 6030	sigma non-opio
## 6031	
## 6032	
## 6033	AU RNA binding metl
## 6034	major facilitator superf
## 6035	
## 6036	INTS3 an
## 6037	UDP-glucose c
## 6038	sor
## 6039	
## 6040	
## 6041	mitochondria
## 6042	nuclear receptor s
## 6043	crumbs cell p
## 6044	
## 6045	
## 6046	DNA polymerase ep
## 6047	
## 6048	globoside alpha-1,3-N-acetylgalactosaminyltrans
## 6049	SURF1 cytochrom
## 6050	
## 6051	
## 6052	
## 6053	REX4
## 6054	
## 6055	general transcrip
## 6056	ankyrin repea
## 6057	
## 6058	N-terminal Xaa-Pro
## 6059	CDKN1A intera
## 6060	solute c
## 6061	SH3 domain containi
## 6062	
## 6063	leucine rich repeat and steri
## 6064	G p
## 6065	PAXX non-hor
## 6066	isopentenyl-di
## 6067	inositol po
## 6068	SEC16 homolog A, endoplas
## 6069	
## 6070	
## 6071	
## 6072	
## 6073	
## 6074	methion
## 6075	decaprenyl dipl
## 6076	family with sequen
## 6077	MINDY
## 6078	

## 6079	par-3 fam
## 6080	zinc fing
## 6081	nuclea
## 6082	RL
## 6083	HECT and RLD domain containing E3
## 6084	calcium/calmodulin depend
## 6085	adip
## 6086	
## 6087	rib
## 6088	FRA
## 6089	
## 6090	DnaJ heat shock protein
## 6091	eukaryotic translation initiation
## 6092	tr
## 6093	ma
## 6094	internexin neuronal intermed
## 6095	
## 6096	leucin
## 6097	mitochondrial r
## 6098	
## 6099	glutath
## 6100	TATA-box binding p
## 6101	
## 6102	inositol 1,4,5-trisphosphate r
## 6103	cyclin and CBS domain divalent metal
## 6104	
## 6105	ADAM
## 6106	regulator
## 6107	
## 6108	
## 6109	lin-7 homolog C, crumbs cell
## 6110	inner mitochondrial m
## 6111	post-Gl
## 6112	terminal uridylyl trans
## 6113	hydroxysteroid
## 6114	
## 6115	
## 6116	eukaryotic translation in
## 6117	tar
## 6118	structure spe
## 6119	solute
## 6120	protein tyrosine p
## 6121	chromosom
## 6122	ADP ribosylation factor
## 6123	CUGB
## 6124	heat shock protein nu
## 6125	coiled
## 6126	
## 6127	endon
## 6128	coiled
## 6129	
## 6130	
## 6131	
## 6132	in

## 6133	p2
## 6134	
## 6135	nuclear protein, coactivator
## 6136	
## 6137	aminoadipate-semialdehyde dehydrogenase-phosphatase
## 6138	
## 6139	late endosomal/lysosomal adaptor
## 6140	prolyl 4-hydroxylase
## 6141	suppressor
## 6142	
## 6143	
## 6144	
## 6145	metastasis associated
## 6146	
## 6147	
## 6148	retinal outer
## 6149	
## 6150	
## 6151	membrane
## 6152	FSHD region gene 1
## 6153	cleavage and polyadenylation
## 6154	beta-
## 6155	EI24 autophagy associated
## 6156	coiled-coil
## 6157	
## 6158	endothelial
## 6159	SID1 transmembrane
## 6160	
## 6161	
## 6162	DSN1 component of
## 6163	suppressor of glucocorticoid
## 6164	cyclic nucleotide
## 6165	
## 6166	YTH N6-methyladenine
## 6167	Cdk5
## 6168	LT01
## 6169	
## 6170	
## 6171	
## 6172	
## 6173	mitochondrial
## 6174	FAU ubiquitin like and related
## 6175	transmembrane
## 6176	VP2
## 6177	protein phosphatase
## 6178	aldolase
## 6179	
## 6180	
## 6181	
## 6182	
## 6183	high
## 6184	connector enhancer of
## 6185	
## 6186	CWC15 spliceosome

## 6187		Fc :
## 6188	defective in cullin neddylation	
## 6189	transmembrane	
## 6190		
## 6191		TIR domain
## 6192		EEF1A
## 6193		large
## 6194		
## 6195		adhesion G protein
## 6196		
## 6197		MIA SH3
## 6198		
## 6199		
## 6200		coiled-coil
## 6201		regulator
## 6202		myotubular
## 6203		chaperonin
## 6204	ATP synthase c subunit	
## 6205		
## 6206		dihydrolyase
## 6207		
## 6208		
## 6209	translocase of inner mitochondrial membrane	
## 6210		
## 6211		6-pyruvoyl
## 6212	phosphatidylinositol-5-phosphatase	
## 6213		
## 6214		SEC24 homolog D, C
## 6215		ATP binding cassette
## 6216		Rab interaction
## 6217		
## 6218		
## 6219		inositol 1,4,5-trisphosphate
## 6220		
## 6221		solute
## 6222		
## 6223	calcium voltage-gated channel auxiliary subunit	
## 6224		
## 6225		calcium voltage-gated channel
## 6226		
## 6227		3-oxoacyl-CoA
## 6228		UEV and lactate/methylcrotonyl
## 6229		chromosome
## 6230		
## 6231		ultra
## 6232		inositol
## 6233		RAD9 class
## 6234		phospholipase
## 6235		methionine
## 6236		solute
## 6237		glucose
## 6238		twinfilin
## 6239		eukaryotic transmembrane
## 6240	membrane associated guanylate kinase, WW domain	

## 6241	
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## 6243	serum response
## 6244	family with sequence
## 6245	MAP3K12 binding
## 6246	exosome
## 6247	
## 6248	NADH:ubiquinone
## 6249	
## 6250	nucleosome
## 6251	
## 6252	
## 6253	VPS33B interacting protein, apical-basolateral polarity
## 6254	
## 6255	UPF2 regulator of nonsense
## 6256	
## 6257	sodium channel
## 6258	chromosome
## 6259	
## 6260	epidermal growth factor receptor
## 6261	acyl-CoA dehydrogenase
## 6262	
## 6263	VPS26, retromer
## 6264	non-SMC condensin
## 6265	vesicle transport through intermediate
## 6266	quinoid
## 6267	family with sequence
## 6268	
## 6269	queuine tRNA-ribosyltransferase
## 6270	metabolism
## 6271	
## 6272	nuclear receptor subunit
## 6273	ADAM
## 6274	Kin17 family
## 6275	phosphatidylinositol glycan anchor
## 6276	ankyrin and spectrin
## 6277	inositol polyphosphate
## 6278	major facilitator superfamily
## 6279	
## 6280	ADAM
## 6281	Fli-1 proto-oncogene
## 6282	WW domain
## 6283	
## 6284	acyl-CoA synthetase
## 6285	solute
## 6286	antagonist of mitochondrial
## 6287	
## 6288	salvador family WW domain
## 6289	NBAS subunit
## 6290	
## 6291	
## 6292	coiled-coil
## 6293	poly(A) binding
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## 6298	poly(ADP-ribose)
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## 6301	TIA1 cytotoxic granule associated
## 6302	
## 6303	RAB GTPase
## 6304	mitotic sp
## 6305	family with sequen
## 6306	protein tyrosine phosph
## 6307	
## 6308	alpha-1,6-mannosylglycoprotein 6-beta-N-ac
## 6309	
## 6310	G
## 6311	gem nuclear org
## 6312	
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## 6314	ADP ribosyl
## 6315	ADP ribosylation factor like
## 6316	ectopic P-granules a
## 6317	proline-serine-threonine phosph
## 6318	ATP
## 6319	HAUS aug
## 6320	chromosom
## 6321	SPC25 component o
## 6322	pyruv
## 6323	
## 6324	tr
## 6325	U
## 6326	
## 6327	
## 6328	
## 6329	CWF19 like
## 6330	junction mediating and regul
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## 6332	X-ray r
## 6333	
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## 6337	suppressor o
## 6338	
## 6339	rib
## 6340	
## 6341	
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## 6343	coiled
## 6344	trip
## 6345	ZFP36
## 6346	poly(A) specifi
## 6347	
## 6348	

## 6349		immunoglobulin
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## 6351		muscleblind
## 6352		
## 6353		glycerol-3-phosphate
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## 6355		pelota mRNA surveillance
## 6356		RAS
## 6357		secretion associated
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## 6359		
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## 6365		hematopoietic
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## 6370		
## 6371		procollagen-lysine,2-oxoglutarate
## 6372		
## 6373		adhesion G protein
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## 6375		CWC27 spliceosome
## 6376		major histocompatibility
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## 6378		
## 6379		
## 6380		calcium regulator
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## 6382		thioredoxin
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## 6390	SWI/SNF related, matrix associated, actin dependent regulator of chromatin	
## 6391		RANBP2 like ankyrin
## 6392		Ras associated
## 6393		heterogeneous nuclear
## 6394		
## 6395		AT-hook containing
## 6396		
## 6397		nuclear receptor superfamily
## 6398		RNA binding motif single strand
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## 6400		family with sequence
## 6401		ArfGAP with SH3 domain, ankyrin
## 6402		trafficking



## 6403	long intergenic
## 6404	
## 6405	lysophosphatidyl
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## 6408	
## 6409	CKLF like MARVEL transmembrane
## 6410	
## 6411	required for meiotic nuclear
## 6412	
## 6413	ribosomal
## 6414	
## 6415	general transcription factor
## 6416	craniofacial
## 6417	zinc finger
## 6418	chromosome
## 6419	
## 6420	thyroid hormone
## 6421	CCAAT enhancer
## 6422	potassium channel tetramerization
## 6423	
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## 6425	dimethylarginine
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## 6428	di
## 6429	heparan sulfate
## 6430	muscle
## 6431	zinc finger containing
## 6432	heparan sulfate-glucosaminyl
## 6433	NUS1 dehydrodolichyl diphosphate
## 6434	protein phosphatase 2 regulatory
## 6435	GL
## 6436	solute
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## 6438	succinate dehydrogenase
## 6439	dynein
## 6440	chromosome
## 6441	tubulin
## 6442	ANKH inorganic pyrophosphatase
## 6443	OTU deubiquitinase with
## 6444	ubiquitin associated
## 6445	transforming growth factor
## 6446	
## 6447	translocase of outer
## 6448	
## 6449	phosphatidylinositol transfer
## 6450	coiled-coil
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## 6453	chromosome
## 6454	MIA SH3
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## 6457	LON peptidase N-termin
## 6458	trip
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## 6460	SH3 doma
## 6461	BUB3
## 6462	diverge
## 6463	ATP synthase
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## 6465	centrosom
## 6466	BTG
## 6467	chromosom
## 6468	RAB guanine n
## 6469	mitochond
## 6470	ATP synthase p
## 6471	GA binding protein transcr
## 6472	ADAM metalloproteinase with th
## 6473	tRNA spli
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## 6484	essential meiotic structur
## 6485	acyl-CoA synthetase
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## 6488	VOPP
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## 6496	ATPase H+
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## 6501	1-acylglycerol-3-ph
## 6502	MMS19 homolog, cytosolic iron
## 6503	phosphatidylinos
## 6504	
## 6505	zinc fin
## 6506	tRNA m
## 6507	solute
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## 6509	SAM domain, SH3 domain and nuc
## 6510	ubiqu

## 6511	zinc finger
## 6512	chromosome
## 6513	Mov10
## 6514	
## 6515	diazepam binding inhibitor
## 6516	solute
## 6517	
## 6518	nucleolar protein interacting with
## 6519	OXA1L mitochondrial
## 6520	La ribonucleoprotein
## 6521	CCR4-NOT trans
## 6522	
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## 6524	
## 6525	zinc finger with
## 6526	chromosome
## 6527	phosphoinositide
## 6528	RL
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## 6530	V-set and immunoglobulin
## 6531	protein disulfide isomerase
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## 6533	potassium channel tetramerization
## 6534	family with sequence
## 6535	
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## 6548	required for meiotic
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## 6562	
## 6563	basic leucine zipper ATPase
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## 6565	ADAM metallopeptidase with th
## 6566	
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## 6571	WASP homolog associated with actin, golgi
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## 6586	ubiquinol-cytochrome c
## 6587	mitochondrial transcr
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## 6590	family wi
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## 6592	family wi
## 6593	eukaryotic translation c
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## 6596	
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## 6605	sterile alpha
## 6606	RAB11 f
## 6607	UTP14A small s
## 6608	apoptosis inducing factor
## 6609	mitogen-a
## 6610	
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## 6615	NSE2 (MMS21) homolog, SM
## 6616	
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## 6626	BUB1 mitotic checkpoint
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## 6632	ghrelin
## 6633	SEC13 homolog, nuclear pore and C
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## 6648	GATA zinc
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## 6655	KIT proto-oncogene
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## 6660	adaptor protein, phosphotyrosine interacting with PH
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## 6666	ETS proto-oncog
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## 6679	B-Raf proto-oncogene
## 6680	protein
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## 6702	polypeptide N-acetylglutamate
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## 6705	leucine
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## 6708	cyclin and CBS domain divalent metal ion
## 6709	EYA transcriptional coactivator
## 6710	DAZ interacting
## 6711	
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## 6735	glycerophosphodiester phosphodie
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## 6757	beta-
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## 6759	NADH:ubiquinone oxi
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## 6761	translocase of outer mit
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## 6803	ubiquitin protein ligase
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## 6806	guanine nucleotide dissociation
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## 6842	ATPase fami
## 6843	SSU72 homolog, RNA po
## 6844	ubiquit
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## 6846	nuclear receptor s
## 6847	ankyrin repeat a
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## 6850	family with sequence similar
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## 6934	ORAI calcium release-ac
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## 6939	alpha-1,3-mannosyl-glycoprotein 4-beta-N-acety
## 6940	
## 6941	mastermind like tr
## 6942	leucine rich repeats and WD

## 6943	secret
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## 6945	major facilitator super
## 6946	YdjC chitooligosac
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## 1993	STX4A
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## 1996	MYST1
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## 1999	C16orf62
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## 2001	C16orf88
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## 2003	MRPL56
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## 2010	CPSB
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## 2013	KIAA1199

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##	2028	EIF3S1
##	2029	KIAA1840, ALS5
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##	2032	PA, PLDN
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##	2052	CMT4A
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##	2054	INT6, EIF3S6
##	2055	KIAA0103, TTC35
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##	2072	C8orf9, MTMR8
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##	2092	HNRPL
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##	2094	TUBB4, DYT4
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##	2118	DM1, DM
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##	2135	KIAA1115, SAPS1
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##	2141	ZNF419A
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##	2164	C19orf29
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##	2166	HNRPUL1
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##	2168	TGFB, DPD1
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##	2175	IGA

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##	2183	C19orf62
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##	2190	EGFL4, C19orf49
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##	2212	DNL, DNL2
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##	2229	C19orf50

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##	2265	H2AV, H2AFV
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##	2270	LGMD1D
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##	2272	HOX1C, HOX1
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##	2363	C9orf46
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##	2365	KIAA1432
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##	2381	C9orf77, FAM108B1
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##	2430	SH3MD1
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##	2436	XPNPEP, XPNPEPL1, XPNPEPL
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##	2497	C17orf40
##	2498	HLR1, G17P1
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## 2500	PSCD1
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## 2504	GCN5L2
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## 2592	PLS, PALS
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##	6026	CDKN2, MLM
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##	6030	OPRS1
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##	6032	C9orf81
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##	6034	HIATL1
##	6035	C9orf3
##	6036	C9orf80
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##	6057	C9orf15
##	6058	C9orf32, METTL11A
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##	6062	C9orf54, FAM73B
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## 6065	C9orf142
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## 6067	JBTS1
## 6068	KIAA0310
## 6069	C9orf112, WDR85
## 6070	TAN1
## 6071	C10orf47
## 6072	USP6NL-IT1
## 6073	C10orf8
## 6074	MSRB
## 6075	TPRT
## 6076	C10orf38
## 6077	C10orf97, FAM188A
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## 6084	CAMKG
## 6085	C10orf116
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## 6088	C10orf4
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## 6094	NEF5
## 6095	C10orf125
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## 6097	GTPBP7
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## 6100	TAF2D
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## 6102	KIAA1754
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## 6110	IMMP1
## 6111	MRT21, MRT17
## 6112	RBM21
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## 6116	PCID1
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## 6122	ZNF289
## 6123	CUGBP1
## 6124	C11orf73
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## 6136	ATA, ATDC, ATC, ATD
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## 6138	C20orf94
## 6139	C11orf59
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## 6143	CSRP2BP
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## 6152	C20orf80, FRG1B
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## 6161	C20orf92
## 6162	C20orf172
## 6163	C20orf117, KIAA0889
## 6164	C20orf152, CNMPD1
## 6165	C20orf40, FAM61B
## 6166	C20orf21
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## 6173	C11orf4
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## 6185	FNRB, MSK12, MDF2
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## 6197	CTAGE5, MGEA, MGEA6
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## 6199	ADRA2, ADRA2R
## 6200	C18orf14, ACY1L
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## 6208	C11orf57
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## 6213	FKHR, FOXO1A
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##	6230	C12orf23
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##	6240	BAIAP1
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##	6250	C14orf127
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##	6253	C14orf133
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##	6256	C10orf7
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##	6259	FRMD4
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## 6334	ZNF419B
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## 6343	C3orf6, DFNA44
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## 6376	HLALS
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## 6394	ANE1
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## 6403	C1orf97
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## 6459	C1orf96
## 6460	SH3MD2
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## 6464	TCEB1
## 6465	KIAA0470L, CEP170L
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## 6467	C21orf38, C21orf14
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## 6470	ATP5A, ATP5, ATPM, ATP5J
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## 6493	C6orf224, AKD2, C6orf199, AKD1
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## 6500	C6orf51
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## 6524	C7orf14
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## 6548	C6orf96
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##	6555	PQBP2
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##	6557	C9orf41
##	6558	C10orf42, CCDC109A
##	6559	C14orf117, C14orf43
##	6560	C14orf44
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##	6573	C21orf6
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##	6577	MXS1, TM4SF2, MRX58
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##	6580	CRD, RP3, RP15, COD1
##	6581	RNF134
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##	6583	C10orf78, MEIR5
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## 6680	C7orf48
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## 6718	C1orf188
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## 6726	C2orf29
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##	7068	C1orf7, CIAS1, DFNA34
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##	7082	C1orf58
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##	7086	C1orf71
##	7087	CCDC128, KLRAQ1
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##	7103	C2orf60
##	7104	C2orf47
##	7105	C2orf22, PQLC3
##	7106	ARL5
##	7107	C2orf63
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##	7109	CCDC104
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##	7113	C2orf44
##	7114	SMC6L1
##	7115	H3F3, H3F3A
##	7116	CABC1, ADCK3
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##	7118	LGMD2E
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##	7140	CAGB, CFAG
##	7141	
##	7142	C2orf31
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CASH, Casper, CLARP, FLAM

KIAA

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## 123	DKFZp686M0843,
## 124	
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## 126	HYLTK, CTK, HYL, Lsk, CHK, HH
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## 141	PITSLRE, CDK
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## 148	HSS, SYD1, KIAA0516, MGC14967, MGC74461, MGC117291, JLP, PHET, HLC4, FLJ13450, FLJ14006, FLJ261
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KIAA0246, STAB-1, FI

MBP-2, HIV

HNRPI, HI

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TBP7, S

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TEM5, DKFZp434C2  
FLJ10

SLIM1, KYO-T, bA535

KIAA0203, C

KIAA0629, AKAP220, PRKA



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TNFER, TI

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FLJ

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KIAA1235, E

HCCR1,

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PHP14, HSPC14

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CED1:

BL

SOXL, HM

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YB-1, YB1, DBPI

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TNF-R, TNF

KIAA028

GRASP-1, GRASP1, KIAA



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MGC19709, I

ORF  
E2A, ITF1, MGC12964

ERAB, MHBD,

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KIAA0

F-LA

D

RDH

DP8, DPRP1, I  
NCKX1, N  
MR60, I

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FAD104, DKFZ

SAP9

hRrp4

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hRrp46p, I

H2, H3, I

PIASX

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FLJ21759, FLJ23500, DKFZp434B2411,

DYNII,

KIAA0132, MGC10630, MGC1114, MGC2

BAF190, hSNF2a,

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CTRP3

FATP5, VLACSR, VLCS-H2, VI

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SRC1, F-S

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FLJ11209, LSR

ZRP-1, OIP1, MGC10556,

SUG1, p

CGI

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TRPML1  
FLJ23277, F

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## 1364	CLAN1, ipaf, CLAN1
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rififylin,

K

DKFZp7

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TAFII1

Wwp4

CIRIP, MBP-1, CRYBP1

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BACH, ACH

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BAF47, Ini1, Sn

FEL

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dJ796I17.1

CGI-51

RoX:



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MGC1346, SF3b14b

hCERK, FLJ23239, dA59H18.3, DKFZp434E021

NCoA-62, SK

M

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FLJ2070

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APE

IOTA, PROS

DKFZP727M231, DKFZp5

DKFZP

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TOM, bB152015.1, ANT-1,

DI01, dJ885

H13, dJ324017.1, S

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dJ1057B20.2, DKFZp434P0735, C

MDS

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DKFZ

I

JCL-1, BCG1,

BAI

KIAA0142, PIXB, DKFZp761K1021, Nbla10314, DKFZp686C12170, BETA-PIX, COOL1, P8

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TONEBP, K

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KIAA1005, COR

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BGM, FLJ30320

DKF  
CPD, Cupidin, Vesl-2



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SP75, F

FLJ204

P114-R  
MAG, EM9, M

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WSX

ANM, STNT,

209L8, AHAS, ILV2H

NUMB-R, (

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HCDH1, CD

CTS18.1, S

TI

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Dnahc11,

ZAP, FLB6421, FLJ13.

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WBSCR20C, MGC15057, FLJ

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FLJ2

URG4, KIAA1507, 1

CI

RIG-I,

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hRrp40p,

eIF3-the

SISP1, G

TNKL, TANK2, PA

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RP11-519K18.1, KIAA

KIAA1321, MGC

NTF97, IPOB, MGC2155

MST016, FLJ13660, C



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LUC7A, CROP, OA

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KBF1, p105, NFkB-1

AGO, FLJ11071, SE

DKFZp434

PDZ-C

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SAPLa, DKFZp781E2374, DKFZp78102362, DKFZp781E17107, SAP190, SAPL, PP6R3, FLJ11058, FLJ

PRR, PRR1, PVI

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TIRC7, OC-116

EEG1,

HFH-11, triden

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TNFCR, ' 1

TIP: 1

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FLJ20624,

K.

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ERFS, HBS1, HSPC276,

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ICI

EMC19,



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NPH3, KIAA2000, FL

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KIAA10

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MGC40423, KIAA0981

KIAA1548, F

EIF

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WRCH-1, DJ646B12.2, FLJ106

LFP  
MAPBP

NS1-BP, HSPCO

JCAP

RIZ, RIZ1

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AOP2, KIAA0106, 1-C

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SMN, C

TLP

FL



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RAB3-C

ICAP-1A, ICAP-1B

FLJ14525, MGC107081

PHAPII, 2L

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PLGF, P1G

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## 3463	Ly74, TROP1, GA733-2, EGP34, EGP40, EGP-2, KSA, CD326, Ep-CAM, HEA125, KS1/4, MK-1, MH99, MOC31
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OIP2, RRP4

TIS8, GOS30, NG

STA

SD  
DR5, KILLER, TRIC

AKAP121, AKAP149, SAKAP84, S-AKA

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BAL

LESTR, NPY3R, HM89, NPYY3R

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L21, FLJ27458, MGC71252,

KIAA1886

UMPH1, PSN1, PN-I, U

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MG

TIP-2, Hs.6454, (

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FL

RAC3, AIB1, ACTR, p/CIP, TRAM-1, CAGH16,

KIAA1



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P21, CIP1, WAF1, SD

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LERK5, Htk-L, I

KIAA

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PBP, TR

C1ql

DUEB, MGC119131, MG  
RBCK2,

MGC4816, MGC12866, I

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KNS2A, KLC, hKLC1S, hKLC1N, h

EAR-1, hRev, Rev-E  
ACR1, AOEB166, MGC142285, PRXV, PMP20, B166, PRD

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KRC, KBP1, KBP-1, SHN3, FLJ1675

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KIAA0465, ACF7, ABP62  
hSNF2b, BRG1, BAF190, SN

DYT8, PDC, DKFZp564N1362, FPD1, MR-1, BRP17, FKSG19, TAHCCP2, KIAA1

KIAA0803, AKAP350, AKAP450, CG-NAP, YOTIA0, HYPERION,

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HCCA3, MD

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## 4164	HC2, NU, PROS30, MGC14542, MGC14575, MGC14751, I
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## 4167	FLJ22
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## 4174	SCARD1, macro
## 4175	
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## 4179	CGI-72, I
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## 4183	NF90, MPHOSPH4, MPP4, NFAR-1, NFAR110, NFAR-2, TCP110, NF110, DRBP76, NFAR90, NF
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## 4186	I
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## 4207	alphaPIX, Cool
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PEREC

FA'  
NOL1R, p

GatA, FLJ10989, FL

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FLJ43070, FLJ31318,

K.

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SYNE-1B, KIAA0796, 8B, Nesprin-1, enaptin, MYNE1

C

RAB

MRP

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MASK, FLJ20288, FLJ11979

T-5

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FLJ14'

GTAR

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VPS4

MRPS29, DAP-3, MRP-S29, bMRP-10,

KIAA0  
ZFAND7, SMU

FLB7527, FLJ31599, FLJ35510, MGC19722, MGC

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HSP



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FLJ12560, FLJ14203, KIAA1151, MGC149

D18.

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SEEEG-1,

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MGC  
NSAP1, GRY-R  
hALP, FLJ10

MIC

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FLJ20297, FLJ20750

DKFZ

DKFZP434H0820, FLJ13518, FLJ13519

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MGC3067, PRO

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DKI

RI

FLJ13421, LNP, ANKT, I



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D40, AF15Q14, CT29, KIA

AMSH-LP, KIAA1373, AM

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SEC15L, FLJ1125, DK

ABI-2, A

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NYD-SP28, FL.

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PR01777, SE70

FATP2, h

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LANP, I

PSTPIP, C

RICH

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N-CoR, hCIT529I10, TRAC1, I

NAI

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HT019, P105, G

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PAI-RBP1, DKFZP564M

KIAA0

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PRAF3, J

PC3-5

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G.

TFIIIB150, TFC5, TF

ZTL1, Znt-5, FLJ

KIAA1785, EU

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MGC14993, I  
FLJ30899,

DI



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CGI-74, CGI-59, H\_NI

O-GL

CMPX1,

NO

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KL

CDK4I, p16, INK4a, MTS1, CMM2, ARF, p19

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K

PAR3,  
BZP, ZEB,  
I

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MALS-3, Lin

FLJ22347, FLJ

CUG-BP, hNab50, I

FLJ20

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SM22,

FT00

URP2, K

RPS30, FLJ2

TAO

FLJ22404, TALI, MEA6, cTAGE-5A,

TIM8B,

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hCAP-D3, CAP-I

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ARSACS, KIAA0730, DKF

CPAP, I

BP240, KIAA0728, FLJ21489, FLJ13425, FL

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FLJ35779, M



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SCR2, MSSP-1, MSSP-

p33ING1, p

FLJ10792, Z

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UNQ60

RPML5, MRP-L5, MGC104174, PRED66, PRED22, C21orf

DESR1, DE

HsT2645, PCCX1, h

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ZKSCAN6, I  
ECop, C

FL

MGC4415,

FL

CMPD

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FLJ20382, F

KIAA094:

MGC:

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PR02000, DKFZp667N

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SCAD-SRL

Pwdmp, KIAA1638, FLJ23127

IMP2, PSL4, MGC90402

ATG21, CGI-50, FLJ12979, FLJ14217, FLJ42984,  
ARH, ARH2, I

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EDA1, XLHED, HED,

RPML8, MRI

DBP-5, NREBP

CAF1P6



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MGC

GRF-1, p19

PNK, PKH,

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KNP-Ia, GT335, ES  
KIAA0653, GL50, B7-H2, B71

VWFCP, TTP, vWF-CP, FLJ42993

KIAA1361,

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DKFZP586K09

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AGTAVPRL, AII, AVP, I

HMAT1, MAT1, PED, PEA-15, I

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ETL1, D  
GST

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DKFZp7

P14, MIF, N

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## 429	5256	HGNC:8926
## 430	54875	HGNC:23432
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## 1020	55063	HGNC:23486
## 1021	9452	HGNC:6173
## 1022	4898	HGNC:7995
## 1023	7419	HGNC:12674
## 1024	5108	HGNC:8727
## 1025	57690	HGNC:29318
## 1026	9139	HGNC:1536
## 1027	83737	HGNC:13890
## 1028	27039	HGNC:9012
## 1029	58476	HGNC:16104
## 1030	51150	HGNC:24188
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## 1032	51619	HGNC:21647
## 1033	862	HGNC:1535
## 1034	9984	HGNC:19070
## 1035	51661	HGNC:3723
## 1036	7520	HGNC:12833
## 1037	56925	HGNC:13347
## 1038	8569	HGNC:7110
## 1039	7145	HGNC:11973
## 1040	57455	HGNC:24616
## 1041	56681	HGNC:10534
## 1042	8556	HGNC:1718
## 1043	10411	HGNC:16629
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## 1045	23152	HGNC:14214
## 1046	3991	HGNC:6621
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## 1052	1653	HGNC:2734
## 1053	1785	HGNC:2974
## 1054	2037	HGNC:3379
## 1055	8417	HGNC:11442
## 1056	11158	HGNC:9800
## 1057	9817	HGNC:23177
## 1058	51006	HGNC:17117
## 1059	131544	HGNC:34427
## 1060	55183	HGNC:23207
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## 1062	6595	HGNC:11098
## 1063	27244	HGNC:21595
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## 1068	5663	HGNC:9508
## 1069	1371	HGNC:2321
## 1070	56650	HGNC:1322
## 1071	3320	HGNC:5253
## 1072	5933	HGNC:9893
## 1073	22839	HGNC:24476
## 1074	114819	HGNC:29405
## 1075	10403	HGNC:16909
## 1076	23431	HGNC:573
## 1077	54665	HGNC:25642
## 1078	260425	HGNC:29647
## 1079	28962	HGNC:21652
## 1080	57092	HGNC:30023
## 1081	55218	HGNC:20217
## 1082	384	HGNC:664
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## 1084	5788	HGNC:9666
## 1085	79876	HGNC:23230
## 1086	9262	HGNC:11396
## 1087	22869	HGNC:29161
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## 1089	65094	HGNC:25724
## 1090	11266	HGNC:3067
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## 1098	55100	HGNC:25495
## 1099	2533	HGNC:4036
## 1100	55437	HGNC:13205
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## 1102	114899	HGNC:14326
## 1103	4200	HGNC:6984
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## 1105	905	HGNC:1600
## 1106	57579	HGNC:21084
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## 1108	25929	HGNC:20043
## 1109	4779	HGNC:7781
## 1110	2932	HGNC:4617
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## 1113	11342	HGNC:10057
## 1114	79728	HGNC:26144
## 1115	23033	HGNC:21194
## 1116	57226	HGNC:25229
## 1117	594	HGNC:987
## 1118	7994	HGNC:13013
## 1119	79670	HGNC:25817
## 1120	3842	HGNC:6401
## 1121	5351	HGNC:9081
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## 1123	3682	HGNC:6147
## 1124	22894	HGNC:20604
## 1125	10464	HGNC:23352
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## 1127	26747	HGNC:8057
## 1128	23047	HGNC:20418
## 1129	5019	HGNC:8527
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## 1131	1540	HGNC:2584
## 1132	10998	HGNC:10999
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## 1134	79891	HGNC:26279
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## 1139	6193	HGNC:10426
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## 1163	3732	HGNC:6210
## 1164	63035	HGNC:25657
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## 1166	102157402	HGNC:49151
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## 1168	9522	HGNC:10563
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## 1170	57531	HGNC:21033
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## 1172	22911	HGNC:29141
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## 1175	4216	HGNC:6856
## 1176	29992	HGNC:20396
## 1177	5243	HGNC:40
## 1178	7760	HGNC:13005
## 1179	231	HGNC:381
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## 1206	3049	HGNC:4833
## 1207	80271	HGNC:14897
## 1208	4680	HGNC:1818
## 1209	55696	HGNC:25503
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## 1212	54469	HGNC:30164

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## 1215	10075	HGNC:30892
## 1216	9183	HGNC:13194
## 1217	79796	HGNC:15672
## 1218	8310	HGNC:121
## 1219	8898	HGNC:7450
## 1220	23645	HGNC:14375
## 1221	7205	HGNC:12311
## 1222	2512	HGNC:3999
## 1223	51593	HGNC:24101
## 1224	581	HGNC:959
## 1225	51701	HGNC:29858
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## 1227	56970	HGNC:25416
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## 1231	54947	HGNC:26032
## 1232	55239	HGNC:25585
## 1233	6452	HGNC:10825
## 1234	8602	HGNC:16821
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## 1236	79944	HGNC:20499
## 1237	57544	HGNC:19965
## 1238	51637	HGNC:23169
## 1239	22795	HGNC:13389
## 1240	64395	HGNC:23843
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## 1243	2778	HGNC:4392
## 1244	10059	HGNC:2973
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## 1251	339175	HGNC:25755
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## 1269	2280	HGNC:3711
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## 1283	8550	HGNC:6889
## 1284	5027	HGNC:8537
## 1285	51575	HGNC:15898
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## 1298	5037	HGNC:8630
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## 1308	23415	HGNC:6253
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## 1310	51291	HGNC:24852
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## 1315	57062	HGNC:13266
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## 1319	55760	HGNC:16717
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## 1329	51650	HGNC:16634
## 1330	4708	HGNC:7697
## 1331	10726	HGNC:8045
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## 1333	3383	HGNC:5344
## 1334	29888	HGNC:15721
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## 1336	4069	HGNC:6740
## 1337	79594	HGNC:25762
## 1338	7023	HGNC:11745
## 1339	10081	HGNC:8767
## 1340	51324	HGNC:20373
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## 1342	2323	HGNC:3766
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## 1370	54918	HGNC:19177
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## 1372	51776	HGNC:17797
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## 1377	23594	HGNC:17151
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## 1391	11198	HGNC:11465
## 1392	9878	HGNC:20161
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## 1599	4627	HGNC:7579
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## 1606	11020	HGNC:18626
## 1607	23313	HGNC:1314
## 1608	4689	HGNC:7662
## 1609	1439	HGNC:2436
## 1610	10478	HGNC:10987
## 1611	7380	HGNC:12580
## 1612	55007	HGNC:1313
## 1613	79734	HGNC:25705
## 1614	6767	HGNC:11343
## 1615	9978	HGNC:9928
## 1616	2033	HGNC:3373
## 1617	83746	HGNC:18594
## 1618	150356	HGNC:25165
## 1619	5905	HGNC:9854
## 1620	23264	HGNC:30869
## 1621	84844	HGNC:18000
## 1622	50	HGNC:118
## 1623	171568	HGNC:30349
## 1624	55687	HGNC:25481
## 1625	5372	HGNC:9114
## 1626	27351	HGNC:24577
## 1627	64781	HGNC:19256
## 1628	23774	HGNC:1102
## 1629	9889	HGNC:20721
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## 1631	83933	HGNC:18128
## 1632	63874	HGNC:20154
## 1633	23351	HGNC:20166
## 1634	2287	HGNC:3719
## 1635	56948	HGNC:20275
## 1636	1511	HGNC:2532
## 1637	55147	HGNC:20155
## 1638	10419	HGNC:10894
## 1639	1690	HGNC:2180
## 1640	11154	HGNC:575
## 1641	5427	HGNC:9178
## 1642	79609	HGNC:20352
## 1643	6655	HGNC:11188
## 1644	8814	HGNC:1781

## 1645	51199	HGNC:14906
## 1646	5836	HGNC:9725
## 1647	5706	HGNC:9553
## 1648	64841	HGNC:19980
## 1649	80821	HGNC:19714
## 1650	1033	HGNC:1791
## 1651	10175	HGNC:19431
## 1652	10668	HGNC:15528
## 1653	51382	HGNC:13527
## 1654	5283	HGNC:8964
## 1655	5684	HGNC:9532
## 1656	10490	HGNC:17793
## 1657	26520	HGNC:11819
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## 1659	9786	HGNC:19960
## 1660	283578	HGNC:18633
## 1661	10598	HGNC:1189
## 1662	23002	HGNC:18142
## 1663	9517	HGNC:11278
## 1664	79890	HGNC:18751
## 1665	8846	HGNC:17911
## 1666	22938	HGNC:16696
## 1667	3705	HGNC:6177
## 1668	51635	HGNC:21524
## 1669	5494	HGNC:9275
## 1670	51804	HGNC:10890
## 1671	145508	HGNC:20359
## 1672	2079	HGNC:3447
## 1673	3091	HGNC:4910
## 1674	9766	HGNC:19956
## 1675	6430	HGNC:10787
## 1676	1983	HGNC:3299
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## 1678	79038	HGNC:20760
## 1679	4522	HGNC:7432
## 1680	79882	HGNC:20509
## 1681	9894	HGNC:29099
## 1682	22990	HGNC:19740
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## 1685	5700	HGNC:9547
## 1686	89932	HGNC:19262
## 1687	9252	HGNC:10434
## 1688	55671	HGNC:20219
## 1689	60686	HGNC:20162
## 1690	5693	HGNC:9542
## 1691	7528	HGNC:12856
## 1692	22985	HGNC:17066
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## 1694	9321	HGNC:12305
## 1695	328	HGNC:587
## 1696	8106	HGNC:8565
## 1697	394	HGNC:675
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## 1700	57680	HGNC:20153
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## 1702	9692	HGNC:19958
## 1703	80344	HGNC:20258
## 1704	5687	HGNC:9535
## 1705	4792	HGNC:7797
## 1706	51016	HGNC:20273
## 1707	5721	HGNC:9569
## 1708	84312	HGNC:20512
## 1709	9985	HGNC:16879
## 1710	10548	HGNC:11864
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## 1712	51292	HGNC:4377
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## 1714	5875	HGNC:9795
## 1715	5360	HGNC:9093
## 1716	63935	HGNC:16200
## 1717	2937	HGNC:4624
## 1718	26133	HGNC:16181
## 1719	5834	HGNC:9723
## 1720	26090	HGNC:15868
## 1721	10544	HGNC:9452
## 1722	9837	HGNC:28980
## 1723	22981	HGNC:29163
## 1724	55245	HGNC:15891
## 1725	23613	HGNC:9397
## 1726	51098	HGNC:15901
## 1727	4605	HGNC:7548
## 1728	57446	HGNC:14462
## 1729	84174	HGNC:17329
## 1730	55969	HGNC:15870
## 1731	4773	HGNC:7776
## 1732	80336	HGNC:15797
## 1733	6789	HGNC:11408
## 1734	23394	HGNC:15766
## 1735	5203	HGNC:8868
## 1736	1477	HGNC:2483
## 1737	8480	HGNC:9828
## 1738	7165	HGNC:12007
## 1739	80331	HGNC:16235
## 1740	51497	HGNC:15934
## 1741	1522	HGNC:2547
## 1742	24148	HGNC:15860
## 1743	51012	HGNC:15892
## 1744	26164	HGNC:16239
## 1745	5688	HGNC:9536
## 1746	28231	HGNC:10953
## 1747	4923	HGNC:8039
## 1748	55257	HGNC:15866
## 1749	10732	HGNC:11646
## 1750	11083	HGNC:2680
## 1751	54994	HGNC:15857
## 1752	63910	HGNC:16192

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## 1754	26205	HGNC:4371
## 1755	54976	HGNC:15873
## 1756	994	HGNC:1726
## 1757	11237	HGNC:13779
## 1758	10139	HGNC:662
## 1759	79133	HGNC:15899
## 1760	57761	HGNC:16228
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## 1762	1457	HGNC:2457
## 1763	113278	HGNC:16187
## 1764	8760	HGNC:1801
## 1765	81502	HGNC:16435
## 1766	85366	HGNC:16243
## 1767	10326	HGNC:15928
## 1768	10483	HGNC:10702
## 1769	55612	HGNC:15889
## 1770	3055	HGNC:4840
## 1771	9777	HGNC:30797
## 1772	140711	HGNC:16112
## 1773	51340	HGNC:15762
## 1774	23509	HGNC:14988
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## 1776	9371	HGNC:6320
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## 1780	3420	HGNC:5385
## 1781	22919	HGNC:6890
## 1782	182	HGNC:6188
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## 1786	58490	HGNC:16209
## 1787	11264	HGNC:15920
## 1788	128866	HGNC:16171
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## 1790	1471	HGNC:2475
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## 1792	191	HGNC:343
## 1793	81610	HGNC:16122
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## 1798	57136	HGNC:13238
## 1799	9658	HGNC:28990
## 1800	28316	HGNC:1760
## 1801	22850	HGNC:23803
## 1802	79863	HGNC:26120
## 1803	9097	HGNC:12612
## 1804	9218	HGNC:12648
## 1805	64863	HGNC:24726
## 1806	9663	HGNC:14450

## 1807	23347	HGNC:29090
## 1808	10627	HGNC:16701
## 1809	79959	HGNC:25727
## 1810	29906	HGNC:17827
## 1811	55125	HGNC:25515
## 1812	8731	HGNC:10075
## 1813	4092	HGNC:6773
## 1814	54941	HGNC:21150
## 1815	23253	HGNC:29135
## 1816	11201	HGNC:9182
## 1817	57534	HGNC:21086
## 1818	5932	HGNC:9891
## 1819	8780	HGNC:11451
## 1820	1478	HGNC:2484
## 1821	5716	HGNC:9555
## 1822	115201	HGNC:16489
## 1823	412	HGNC:11425
## 1824	6907	HGNC:11585
## 1825	10857	HGNC:16090
## 1826	5422	HGNC:9173
## 1827	79576	HGNC:29873
## 1828	55916	HGNC:18151
## 1829	100101490	HGNC:49760
## 1830	79868	HGNC:30881
## 1831	5634	HGNC:9465
## 1832	56180	HGNC:25235
## 1833	9949	HGNC:467
## 1834	91851	HGNC:29861
## 1835	64743	HGNC:14352
## 1836	6839	HGNC:11479
## 1837	8406	HGNC:11309
## 1838	331	HGNC:592
## 1839	10735	HGNC:11355
## 1840	286410	HGNC:13554
## 1841	215	HGNC:61
## 1842	28952	HGNC:28909
## 1843	6855	HGNC:11506
## 1844	5355	HGNC:9087
## 1845	5358	HGNC:9091
## 1846	8260	HGNC:18704
## 1847	5973	HGNC:9959
## 1848	2000	HGNC:3319
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## 1850	340554	HGNC:17407
## 1851	5931	HGNC:9890
## 1852	9016	HGNC:10984
## 1853	2332	HGNC:3775
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## 1862	6611	HGNC:11123
## 1863	8266	HGNC:12505
## 1864	83692	HGNC:18237
## 1865	8411	HGNC:3185
## 1866	6102	HGNC:10274
## 1867	9767	HGNC:22982
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## 1869	8237	HGNC:12609
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## 1875	10916	HGNC:16353
## 1876	5935	HGNC:9900
## 1877	2491	HGNC:3968
## 1878	51260	HGNC:28790
## 1879	2717	HGNC:4296
## 1880	51566	HGNC:24065
## 1881	10673	HGNC:11929
## 1882	22862	HGNC:20296
## 1883	81602	HGNC:20299
## 1884	81617	HGNC:20290
## 1885	688	HGNC:6349
## 1886	8428	HGNC:11403
## 1887	5611	HGNC:9439
## 1888	8874	HGNC:15607
## 1889	143	HGNC:271
## 1890	55578	HGNC:20596
## 1891	10240	HGNC:16632
## 1892	10166	HGNC:10985
## 1893	3839	HGNC:6396
## 1894	2321	HGNC:3763
## 1895	28984	HGNC:20369
## 1896	23078	HGNC:29071
## 1897	160851	HGNC:2854
## 1898	84056	HGNC:28361
## 1899	26512	HGNC:14879
## 1900	79758	HGNC:25832
## 1901	8848	HGNC:16826
## 1902	1203	HGNC:2076
## 1903	10562	HGNC:17190
## 1904	23295	HGNC:20254
## 1905	23361	HGNC:29008
## 1906	8717	HGNC:12030
## 1907	3299	HGNC:5227
## 1908	11151	HGNC:2252
## 1909	5595	HGNC:6877
## 1910	79767	HGNC:17289
## 1911	5257	HGNC:8927
## 1912	57149	HGNC:25074
## 1913	10204	HGNC:13722
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## 1915	80152	HGNC:25787
## 1916	55815	HGNC:18586
## 1917	10725	HGNC:7774
## 1918	83752	HGNC:20598
## 1919	9683	HGNC:29850
## 1920	23568	HGNC:17146
## 1921	51090	HGNC:18553
## 1922	1723	HGNC:2867
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## 1925	5432	HGNC:9189
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## 1931	4832	HGNC:7851
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## 1933	79918	HGNC:26116
## 1934	55238	HGNC:25582
## 1935	55697	HGNC:25507
## 1936	3038	HGNC:4820
## 1937	79613	HGNC:25749
## 1938	25839	HGNC:18620
## 1939	55512	HGNC:14240
## 1940	84138	HGNC:25807
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## 1943	79726	HGNC:25706
## 1944	22879	HGNC:25020
## 1945	56942	HGNC:24447
## 1946	8312	HGNC:903
## 1947	54985	HGNC:21198
## 1948	8131	HGNC:14124
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## 1951	83693	HGNC:16475
## 1952	9013	HGNC:11534
## 1953	51172	HGNC:17378
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## 1955	23406	HGNC:18304
## 1956	9100	HGNC:12608
## 1957	7249	HGNC:12363
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## 1959	4833	HGNC:7852
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## 1962	64788	HGNC:14154
## 1963	64428	HGNC:14179
## 1964	64779	HGNC:25778
## 1965	1186	HGNC:2025
## 1966	84264	HGNC:14177
## 1967	65990	HGNC:14152
## 1968	8140	HGNC:11063

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## 1970	79791	HGNC:16510
## 1971	10273	HGNC:11427
## 1972	4682	HGNC:8041
## 1973	7329	HGNC:12485
## 1974	29904	HGNC:24615
## 1975	6650	HGNC:11182
## 1976	9780	HGNC:28993
## 1977	2935	HGNC:4621
## 1978	7727	HGNC:12963
## 1979	23059	HGNC:19009
## 1980	56061	HGNC:30565
## 1981	124454	HGNC:29419
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## 1983	23062	HGNC:16064
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## 1985	57478	HGNC:20060
## 1986	51283	HGNC:17613
## 1987	5934	HGNC:9894
## 1988	23475	HGNC:9755
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## 1990	29108	HGNC:16608
## 1991	23322	HGNC:29168
## 1992	4150	HGNC:6914
## 1993	6810	HGNC:11439
## 1994	10423	HGNC:1769
## 1995	10295	HGNC:16902
## 1996	84148	HGNC:17933
## 1997	23420	HGNC:30060
## 1998	9738	HGNC:24342
## 1999	57020	HGNC:24641
## 2000	9810	HGNC:16867
## 2001	400506	HGNC:34404
## 2002	79719	HGNC:25662
## 2003	114294	HGNC:16468
## 2004	1445	HGNC:2444
## 2005	8925	HGNC:4867
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## 2007	123263	HGNC:29666
## 2008	23205	HGNC:29567
## 2009	8766	HGNC:9760
## 2010	1512	HGNC:2535
## 2011	64927	HGNC:25730
## 2012	2184	HGNC:3579
## 2013	57214	HGNC:29213
## 2014	26015	HGNC:24567
## 2015	9455	HGNC:17513
## 2016	30844	HGNC:3245
## 2017	25963	HGNC:24522
## 2018	64397	HGNC:12886
## 2019	22995	HGNC:29298
## 2020	79895	HGNC:13536
## 2021	56986	HGNC:30926
## 2022	9333	HGNC:11781



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## 2024	2553	HGNC:4074
## 2025	90427	HGNC:24132
## 2026	23312	HGNC:2938
## 2027	55192	HGNC:25556
## 2028	8669	HGNC:3270
## 2029	80208	HGNC:11226
## 2030	57617	HGNC:15972
## 2031	11339	HGNC:20300
## 2032	26258	HGNC:8549
## 2033	23678	HGNC:10812
## 2034	79848	HGNC:26193
## 2035	51201	HGNC:18469
## 2036	55290	HGNC:17298
## 2037	23087	HGNC:16285
## 2038	79752	HGNC:25858
## 2039	760	HGNC:1373
## 2040	55756	HGNC:25592
## 2041	8767	HGNC:10020
## 2042	4683	HGNC:7652
## 2043	10404	HGNC:16910
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## 2046	55353	HGNC:13646
## 2047	55284	HGNC:25616
## 2048	10940	HGNC:30129
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## 2060	6674	HGNC:11212
## 2061	54108	HGNC:13544
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## 2063	51366	HGNC:16806
## 2064	79792	HGNC:25697
## 2065	7264	HGNC:12390
## 2066	1936	HGNC:3211
## 2067	6713	HGNC:11279
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## 2069	55174	HGNC:25548
## 2070	90459	HGNC:23994
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## 2072	66036	HGNC:14596
## 2073	23484	HGNC:6555
## 2074	10671	HGNC:16964
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## 2077	8797	HGNC:11904
## 2078	7993	HGNC:30307
## 2079	5516	HGNC:9300
## 2080	157697	HGNC:27234
## 2081	54758	HGNC:25272
## 2082	4173	HGNC:6947
## 2083	54793	HGNC:22401
## 2084	427	HGNC:735
## 2085	665	HGNC:1085
## 2086	4125	HGNC:6826
## 2087	3783	HGNC:6293
## 2088	4924	HGNC:8043
## 2089	2997	HGNC:4706
## 2090	11184	HGNC:6863
## 2091	1891	HGNC:3149
## 2092	3191	HGNC:5045
## 2093	4793	HGNC:7798
## 2094	10382	HGNC:20774
## 2095	54938	HGNC:17697
## 2096	6625	HGNC:11150
## 2097	1209	HGNC:2087
## 2098	5971	HGNC:9956
## 2099	11129	HGNC:17731
## 2100	64130	HGNC:17788
## 2101	284352	HGNC:27607
## 2102	2217	HGNC:3621
## 2103	55011	HGNC:26075
## 2104	23370	HGNC:17090
## 2105	2068	HGNC:3434
## 2106	84444	HGNC:24948
## 2107	55111	HGNC:18211
## 2108	10535	HGNC:18518
## 2109	147700	HGNC:20717
## 2110	951	HGNC:1666
## 2111	8175	HGNC:10766
## 2112	268	HGNC:464
## 2113	4066	HGNC:6734
## 2114	4946	HGNC:8095
## 2115	55621	HGNC:25980
## 2116	8677	HGNC:11428
## 2117	56729	HGNC:20389
## 2118	1760	HGNC:2933
## 2119	79735	HGNC:25699
## 2120	259307	HGNC:19094
## 2121	81576	HGNC:28118
## 2122	53635	HGNC:9632
## 2123	166	HGNC:307
## 2124	6449	HGNC:10819
## 2125	81857	HGNC:28845
## 2126	6618	HGNC:11135
## 2127	28974	HGNC:24991
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## 2129	729440	HGNC:33629
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## 2133	51231	HGNC:18996
## 2134	26017	HGNC:24563
## 2135	22870	HGNC:29195
## 2136	84167	HGNC:26141
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## 2138	64926	HGNC:26129
## 2139	10270	HGNC:378
## 2140	10994	HGNC:6041
## 2141	79744	HGNC:20648
## 2142	10775	HGNC:30081
## 2143	898	HGNC:1589
## 2144	8725	HGNC:13236
## 2145	9141	HGNC:8764
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## 2147	6217	HGNC:10396
## 2148	92609	HGNC:23656
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## 2150	9149	HGNC:3092
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## 2153	23646	HGNC:17158
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## 2155	51588	HGNC:17002
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## 2158	1155	HGNC:1989
## 2159	79187	HGNC:13745
## 2160	5438	HGNC:9196
## 2161	25999	HGNC:24314
## 2162	6510	HGNC:10943
## 2163	25865	HGNC:17293
## 2164	58509	HGNC:29938
## 2165	26093	HGNC:24560
## 2166	11100	HGNC:17011
## 2167	51343	HGNC:24824
## 2168	7040	HGNC:11766
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## 2171	1089	HGNC:1816
## 2172	10226	HGNC:16893
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## 2176	3386	HGNC:5347
## 2177	6223	HGNC:10402
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## 2180	7087	HGNC:5348
## 2181	2109	HGNC:3482
## 2182	945	HGNC:1659
## 2183	29086	HGNC:25008
## 2184	7297	HGNC:12440

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## 2186	8775	HGNC:7641
## 2187	10567	HGNC:9794
## 2188	5802	HGNC:9681
## 2189	84518	HGNC:30183
## 2190	1954	HGNC:3233
## 2191	10945	HGNC:6304
## 2192	9266	HGNC:9502
## 2193	83743	HGNC:21270
## 2194	6320	HGNC:10576
## 2195	93233	HGNC:26560
## 2196	22900	HGNC:17057
## 2197	3978	HGNC:6598
## 2198	7728	HGNC:12964
## 2199	8605	HGNC:9037
## 2200	8778	HGNC:10874
## 2201	9545	HGNC:9779
## 2202	1628	HGNC:2697
## 2203	374882	HGNC:29631
## 2204	828	HGNC:1487
## 2205	64748	HGNC:29566
## 2206	587	HGNC:977
## 2207	54531	HGNC:29210
## 2208	5518	HGNC:9302
## 2209	30000	HGNC:19998
## 2210	51398	HGNC:30203
## 2211	2639	HGNC:4189
## 2212	1777	HGNC:2960
## 2213	26121	HGNC:15446
## 2214	3718	HGNC:6193
## 2215	6142	HGNC:10311
## 2216	6528	HGNC:11040
## 2217	27106	HGNC:25225
## 2218	5296	HGNC:8980
## 2219	5864	HGNC:9777
## 2220	51477	HGNC:29821
## 2221	8178	HGNC:23114
## 2222	23373	HGNC:16062
## 2223	11316	HGNC:2234
## 2224	54555	HGNC:18684
## 2225	93436	HGNC:25049
## 2226	10430	HGNC:30414
## 2227	26330	HGNC:24864
## 2228	7392	HGNC:12594
## 2229	79036	HGNC:28420
## 2230	23770	HGNC:3724
## 2231	57794	HGNC:18643
## 2232	6324	HGNC:10586
## 2233	2077	HGNC:3444
## 2234	2931	HGNC:4616
## 2235	57130	HGNC:24215
## 2236	64763	HGNC:26166
## 2237	2901	HGNC:4583
## 2238	23094	HGNC:23801

## 2239	23474	HGNC:23287
## 2240	56006	HGNC:25763
## 2241	23080	HGNC:28994
## 2242	85865	HGNC:25106
## 2243	10156	HGNC:23181
## 2244	1021	HGNC:1777
## 2245	9512	HGNC:9119
## 2246	27000	HGNC:13192
## 2247	10282	HGNC:14562
## 2248	10135	HGNC:30092
## 2249	221830	HGNC:18027
## 2250	5294	HGNC:8978
## 2251	5445	HGNC:9205
## 2252	26959	HGNC:23200
## 2253	11062	HGNC:21517
## 2254	6671	HGNC:11209
## 2255	29062	HGNC:24997
## 2256	8701	HGNC:2942
## 2257	79872	HGNC:21225
## 2258	136319	HGNC:15667
## 2259	51678	HGNC:18167
## 2260	56829	HGNC:23721
## 2261	79989	HGNC:21882
## 2262	4967	HGNC:8124
## 2263	11033	HGNC:16486
## 2264	22797	HGNC:11754
## 2265	94239	HGNC:20664
## 2266	140545	HGNC:17118
## 2267	64327	HGNC:13243
## 2268	414200	HGNC:23582
## 2269	3198	HGNC:5099
## 2270	10049	HGNC:14888
## 2271	3200	HGNC:5104
## 2272	3202	HGNC:5106
## 2273	221927	HGNC:21701
## 2274	23288	HGNC:29171
## 2275	7434	HGNC:12695
## 2276	6742	HGNC:11317
## 2277	3209	HGNC:5102
## 2278	11112	HGNC:4907
## 2279	8887	HGNC:11575
## 2280	83451	HGNC:16407
## 2281	55033	HGNC:18625
## 2282	84725	HGNC:30037
## 2283	10392	HGNC:16390
## 2284	2617	HGNC:4162
## 2285	2051	HGNC:3396
## 2286	260294	HGNC:16609
## 2287	835	HGNC:1503
## 2288	51142	HGNC:21645
## 2289	3315	HGNC:5246
## 2290	11333	HGNC:14634
## 2291	8896	HGNC:29629
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## 2294	8662	HGNC:3280
## 2295	29886	HGNC:14972
## 2296	4521	HGNC:8048
## 2297	6878	HGNC:11540
## 2298	8976	HGNC:12735
## 2299	7965	HGNC:20609
## 2300	7036	HGNC:11762
## 2301	29999	HGNC:3961
## 2302	64598	HGNC:25078
## 2303	5118	HGNC:8738
## 2304	55131	HGNC:21863
## 2305	84132	HGNC:20068
## 2306	3614	HGNC:6052
## 2307	3268	HGNC:5177
## 2308	23658	HGNC:17162
## 2309	1174	HGNC:559
## 2310	56913	HGNC:24337
## 2311	8985	HGNC:9083
## 2312	6119	HGNC:10291
## 2313	10467	HGNC:21688
## 2314	24146	HGNC:2036
## 2315	113263	HGNC:18713
## 2316	9678	HGNC:22203
## 2317	4899	HGNC:7996
## 2318	54664	HGNC:22407
## 2319	2146	HGNC:3527
## 2320	95681	HGNC:12370
## 2321	643641	HGNC:34519
## 2322	4232	HGNC:7028
## 2323	57037	HGNC:25370
## 2324	27075	HGNC:21643
## 2325	54927	HGNC:21906
## 2326	26157	HGNC:21789
## 2327	2737	HGNC:4319
## 2328	5683	HGNC:9531
## 2329	64983	HGNC:14035
## 2330	55744	HGNC:21868
## 2331	55665	HGNC:30890
## 2332	55069	HGNC:25476
## 2333	64940	HGNC:33887
## 2334	6009	HGNC:10011
## 2335	51422	HGNC:9386
## 2336	5425	HGNC:9176
## 2337	9275	HGNC:1005
## 2338	10652	HGNC:16959
## 2339	26608	HGNC:11586
## 2340	7461	HGNC:2586
## 2341	7458	HGNC:12741
## 2342	3984	HGNC:6613
## 2343	2218	HGNC:3622
## 2344	83856	HGNC:13753
## 2345	10927	HGNC:11243
## 2346	23731	HGNC:1363

## 2347	1955	HGNC:3234
## 2348	9830	HGNC:16283
## 2349	7464	HGNC:2255
## 2350	7046	HGNC:11772
## 2351	10952	HGNC:16993
## 2352	727	HGNC:1331
## 2353	7091	HGNC:11840
## 2354	26468	HGNC:21735
## 2355	22949	HGNC:18429
## 2356	64420	HGNC:25413
## 2357	80709	HGNC:24108
## 2358	944	HGNC:11938
## 2359	1759	HGNC:2972
## 2360	2022	HGNC:3349
## 2361	203	HGNC:361
## 2362	55664	HGNC:17179
## 2363	55848	HGNC:23633
## 2364	54662	HGNC:25571
## 2365	57589	HGNC:17686
## 2366	23081	HGNC:17071
## 2367	81704	HGNC:19191
## 2368	23189	HGNC:19309
## 2369	7016	HGNC:11731
## 2370	8939	HGNC:4005
## 2371	10488	HGNC:2347
## 2372	9827	HGNC:21965
## 2373	23586	HGNC:19102
## 2374	8721	HGNC:3164
## 2375	573	HGNC:937
## 2376	2889	HGNC:4568
## 2377	23064	HGNC:445
## 2378	20	HGNC:32
## 2379	6461	HGNC:10838
## 2380	54926	HGNC:19907
## 2381	51104	HGNC:24278
## 2382	51010	HGNC:17944
## 2383	7763	HGNC:13008
## 2384	1855	HGNC:3084
## 2385	9124	HGNC:2067
## 2386	54619	HGNC:23434
## 2387	3257	HGNC:5163
## 2388	5264	HGNC:8940
## 2389	83937	HGNC:20793
## 2390	23268	HGNC:30373
## 2391	22841	HGNC:29152
## 2392	10613	HGNC:16947
## 2393	8661	HGNC:3271
## 2394	1787	HGNC:2977
## 2395	79009	HGNC:17906
## 2396	5599	HGNC:6881
## 2397	11196	HGNC:17018
## 2398	11101	HGNC:782
## 2399	54780	HGNC:25935
## 2400	59338	HGNC:14335

## 2401	27143	HGNC:23530
## 2402	64115	HGNC:30085
## 2403	10367	HGNC:1530
## 2404	5532	HGNC:9315
## 2405	54462	HGNC:29197
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## 2407	9562	HGNC:7102
## 2408	3988	HGNC:6617
## 2409	56652	HGNC:1160
## 2410	84445	HGNC:29381
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## 2412	6468	HGNC:10847
## 2413	10360	HGNC:7931
## 2414	80351	HGNC:15677
## 2415	8729	HGNC:4181
## 2416	57584	HGNC:23725
## 2417	22849	HGNC:21746
## 2418	79176	HGNC:28155
## 2419	79004	HGNC:28352
## 2420	51684	HGNC:16466
## 2421	22852	HGNC:29186
## 2422	91452	HGNC:23338
## 2423	64077	HGNC:30042
## 2424	23185	HGNC:28987
## 2425	23560	HGNC:21535
## 2426	26098	HGNC:24640
## 2427	56647	HGNC:978
## 2428	55149	HGNC:25532
## 2429	9148	HGNC:7761
## 2430	9644	HGNC:23664
## 2431	10531	HGNC:17663
## 2432	79991	HGNC:26200
## 2433	1326	HGNC:6860
## 2434	10539	HGNC:15987
## 2435	54906	HGNC:23484
## 2436	7511	HGNC:12822
## 2437	9126	HGNC:2468
## 2438	8036	HGNC:15454
## 2439	7019	HGNC:11741
## 2440	8030	HGNC:18782
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## 2442	219771	HGNC:23354
## 2443	27338	HGNC:17895
## 2444	6158	HGNC:10330
## 2445	57178	HGNC:16493
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## 2447	10105	HGNC:9259
## 2448	64081	HGNC:23301
## 2449	81619	HGNC:23303
## 2450	23232	HGNC:29082
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## 2452	28964	HGNC:4272
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## 2457	22794	HGNC:17040
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## 2460	5889	HGNC:9820
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## 2462	4591	HGNC:7523
## 2463	5023	HGNC:8533
## 2464	79665	HGNC:18018
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## 2466	3837	HGNC:6400
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## 2472	9400	HGNC:9950
## 2473	9487	HGNC:8966
## 2474	2584	HGNC:4118
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## 2476	23125	HGNC:18807
## 2477	9969	HGNC:22474
## 2478	2027	HGNC:3354
## 2479	5216	HGNC:8881
## 2480	26001	HGNC:24544
## 2481	8402	HGNC:10981
## 2482	10743	HGNC:9834
## 2483	4927	HGNC:8067
## 2484	708	HGNC:1243
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## 2486	1362	HGNC:2301
## 2487	9527	HGNC:4430
## 2488	57003	HGNC:24856
## 2489	51003	HGNC:24260
## 2490	1819	HGNC:3030
## 2491	117246	HGNC:17136
## 2492	11216	HGNC:368
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## 2494	3384	HGNC:5345
## 2495	9144	HGNC:11499
## 2496	27077	HGNC:24123
## 2497	55813	HGNC:18279
## 2498	1655	HGNC:2746
## 2499	64149	HGNC:30173
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## 2501	5717	HGNC:9556
## 2502	5193	HGNC:8854
## 2503	79132	HGNC:29517
## 2504	2648	HGNC:4201
## 2505	5878	HGNC:9785
## 2506	4669	HGNC:7632
## 2507	643646	HGNC:5216
## 2508	3292	HGNC:5210

## 2509	6945	HGNC:11645
## 2510	8506	HGNC:8011
## 2511	2145	HGNC:3526
## 2512	1748	HGNC:2917
## 2513	84687	HGNC:9298
## 2514	100885850	HGNC:43946
## 2515	51264	HGNC:14483
## 2516	10493	HGNC:16919
## 2517	55379	HGNC:28817
## 2518	239	HGNC:429
## 2519	10014	HGNC:14068
## 2520	51747	HGNC:24309
## 2521	64750	HGNC:16809
## 2522	1845	HGNC:3069
## 2523	9343	HGNC:30858
## 2524	3131	HGNC:4977
## 2525	9120	HGNC:10927
## 2526	5573	HGNC:9388
## 2527	7531	HGNC:12851
## 2528	NA	
## 2529	23531	HGNC:7153
## 2530	29098	HGNC:17679
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## 2560	27309	HGNC:15462
## 2561	8821	HGNC:6075
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## 2565	6164	HGNC:10340
## 2566	80273	HGNC:19696
## 2567	54433	HGNC:14264
## 2568	2483	HGNC:3954
## 2569	1182	HGNC:2021
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## 2572	1665	HGNC:2738
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## 2576	55247	HGNC:24573
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## 2578	152503	HGNC:30418
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## 2580	579	HGNC:951
## 2581	10227	HGNC:16894
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## 2584	9693	HGNC:16854
## 2585	83891	HGNC:21883
## 2586	55325	HGNC:25640
## 2587	51274	HGNC:16516
## 2588	51088	HGNC:6356
## 2589	64151	HGNC:24304
## 2590	7358	HGNC:12525
## 2591	10553	HGNC:16637
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## 2593	91057	HGNC:25079
## 2594	7704	HGNC:12930
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## 2597	23788	HGNC:17587
## 2598	23360	HGNC:19752
## 2599	6309	HGNC:10547
## 2600	3312	HGNC:5241
## 2601	3338	HGNC:5271
## 2602	54414	HGNC:18187
## 2603	29907	HGNC:14978
## 2604	9404	HGNC:14061
## 2605	23220	HGNC:29151
## 2606	23130	HGNC:29028
## 2607	10938	HGNC:3242
## 2608	5007	HGNC:8503
## 2609	81622	HGNC:13481
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## 2612	51111	HGNC:24283
## 2613	55572	HGNC:26927
## 2614	55291	HGNC:1173
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## 2617	6484	HGNC:10864
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## 2619	595	HGNC:1582
## 2620	79080	HGNC:28359
## 2621	27339	HGNC:17896
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## 2627	9828	HGNC:21726
## 2628	22897	HGNC:29182
## 2629	50862	HGNC:21159
## 2630	1982	HGNC:3297
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## 2639	26273	HGNC:13582
## 2640	8050	HGNC:21350
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## 2643	4192	HGNC:6972
## 2644	55626	HGNC:25990
## 2645	8567	HGNC:6766
## 2646	114971	HGNC:26965
## 2647	79829	HGNC:25845
## 2648	833	HGNC:1493
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## 2658	4728	HGNC:7715
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## 2662	2965	HGNC:4655
## 2663	5715	HGNC:9567
## 2664	10536	HGNC:19318
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## 2669	9976	HGNC:2053
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## 2672	23603	HGNC:2254
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## 2674	65981	HGNC:21259
## 2675	83892	HGNC:23236
## 2676	4891	HGNC:10908
## 2677	9761	HGNC:28973
## 2678	4598	HGNC:7530
## 2679	81566	HGNC:16006
## 2680	10645	HGNC:1470
## 2681	51411	HGNC:1053
## 2682	506	HGNC:830
## 2683	10728	HGNC:16049
## 2684	605	HGNC:1004
## 2685	65117	HGNC:30559
## 2686	1594	HGNC:2606
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## 2688	79611	HGNC:24723
## 2689	57460	HGNC:18583
## 2690	10988	HGNC:16672
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## 2692	2004	HGNC:3325
## 2693	55110	HGNC:25504
## 2694	55846	HGNC:30879
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## 2697	10094	HGNC:706
## 2698	51184	HGNC:30186
## 2699	51699	HGNC:14340
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## 2702	10019	HGNC:29605
## 2703	80824	HGNC:17909
## 2704	1389	HGNC:2350
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## 2707	80018	HGNC:25783
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## 2709	79676	HGNC:25823
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## 2720	283383	HGNC:19893
## 2721	22818	HGNC:2243
## 2722	23329	HGNC:29164
## 2723	55832	HGNC:30688
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## 2725	56890	HGNC:29917
## 2726	57122	HGNC:29914
## 2727	4848	HGNC:7878
## 2728	8914	HGNC:11813
## 2729	11052	HGNC:13871
## 2730	11103	HGNC:5176
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## 2735	23074	HGNC:29102
## 2736	50813	HGNC:16758
## 2737	51147	HGNC:19423
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## 2739	83461	HGNC:14624
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## 2743	79158	HGNC:29670
## 2744	84727	HGNC:29522
## 2745	2026	HGNC:3353
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## 2747	113246	HGNC:29521
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## 2749	10162	HGNC:30244
## 2750	51559	HGNC:30826
## 2751	64426	HGNC:29545
## 2752	51026	HGNC:20175
## 2753	3945	HGNC:6541
## 2754	5564	HGNC:9378
## 2755	55907	HGNC:18290
## 2756	29915	HGNC:24972
## 2757	9847	HGNC:29062
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## 2759	1911	HGNC:3182
## 2760	1337	HGNC:2277
## 2761	NA	
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## 2763	8683	HGNC:10791
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## 2773	4739	HGNC:7733
## 2774	387119	HGNC:21638
## 2775	25842	HGNC:20995
## 2776	254394	HGNC:21484
## 2777	8732	HGNC:10073
## 2778	4121	HGNC:6821

## 2779	57515	HGNC:13464
## 2780	51020	HGNC:21078
## 2781	135114	HGNC:18468
## 2782	135112	HGNC:21081
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## 2788	5467	HGNC:9235
## 2789	2178	HGNC:3586
## 2790	1432	HGNC:6876
## 2791	222658	HGNC:21052
## 2792	11329	HGNC:17847
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## 2795	29074	HGNC:14477
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## 2803	55776	HGNC:21025
## 2804	79865	HGNC:21092
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## 2818	2822	HGNC:4459
## 2819	7915	HGNC:408
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## 2821	55856	HGNC:20999
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## 2823	6206	HGNC:10385
## 2824	81688	HGNC:20998
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## 2826	51053	HGNC:17493
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## 2828	10767	HGNC:4834
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## 2830	5191	HGNC:8860
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## 2836	7957	HGNC:3413
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## 2838	51596	HGNC:21101
## 2839	9444	HGNC:21100
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## 2889	57396	HGNC:13659
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## 2893	9685	HGNC:23186
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## 2897	900	HGNC:1592
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## 3377	4709	HGNC:7698
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## 3379	23314	HGNC:21637
## 3380	7320	HGNC:12473
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## 3382	687	HGNC:1123
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## 3414	85365	HGNC:23159
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## 3416	2531	HGNC:4021
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## 3952	22913	HGNC:15921
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## 3954	8894	HGNC:3266
## 3955	51614	HGNC:15927
## 3956	140823	HGNC:16185
## 3957	11190	HGNC:1859
## 3958	5326	HGNC:9047
## 3959	101410538	HGNC:44421
## 3960	8242	HGNC:11114
## 3961	154796	HGNC:17810
## 3962	11070	HGNC:30055
## 3963	5690	HGNC:9539
## 3964	192669	HGNC:18421
## 3965	7389	HGNC:12591
## 3966	6487	HGNC:10866

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## 3968	79654	HGNC:26117
## 3969	3831	HGNC:6387
## 3970	7517	HGNC:12830
## 3971	10426	HGNC:18598
## 3972	55795	HGNC:25653
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## 3974	79713	HGNC:23620
## 3975	826	HGNC:1481
## 3976	84306	HGNC:28194
## 3977	79171	HGNC:28117
## 3978	10054	HGNC:30661
## 3979	10870	HGNC:16977
## 3980	1340	HGNC:2280
## 3981	7067	HGNC:11796
## 3982	9572	HGNC:7962
## 3983	83786	HGNC:25462
## 3984	25824	HGNC:9355
## 3985	83596	HGNC:13787
## 3986	3661	HGNC:6118
## 3987	3276	HGNC:5187
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## 3989	58506	HGNC:30403
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## 3993	51119	HGNC:19440
## 3994	6776	HGNC:11366
## 3995	65266	HGNC:14544
## 3996	8678	HGNC:1034
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## 3999	22826	HGNC:15470
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## 4001	2537	HGNC:4054
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## 4003	10436	HGNC:16912
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## 4006	2002	HGNC:3321
## 4007	10245	HGNC:17310
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## 4009	22863	HGNC:19962
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## 4013	3306	HGNC:5235
## 4014	22890	HGNC:20259
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## 4017	55288	HGNC:21168
## 4018	2123	HGNC:3499
## 4019	55112	HGNC:21862
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## 4032	64768	HGNC:14645
## 4033	83744	HGNC:23385
## 4034	89846	HGNC:16027
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## 4039	79575	HGNC:23759
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## 4055	23309	HGNC:19354
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## 4057	58513	HGNC:24634
## 4058	10365	HGNC:6347
## 4059	10975	HGNC:30862
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## 4062	9088	HGNC:29650
## 4063	84219	HGNC:20852
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## 4068	23030	HGNC:29136
## 4069	148022	HGNC:18348
## 4070	84190	HGNC:26228
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## 4078	1892	HGNC:3151
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## 4080	7979	HGNC:10845
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## 4084	51657	HGNC:18165
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## 4091	163131	HGNC:33109
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## 4093	7538	HGNC:12862
## 4094	79644	HGNC:25812
## 4095	65997	HGNC:23804
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## 4097	3791	HGNC:6307
## 4098	5471	HGNC:9238
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## 4104	7533	HGNC:12853
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## 4130	611	HGNC:1012
## 4131	6183	HGNC:10380
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## 4220	8226	HGNC:16818
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## 4222	84766	HGNC:28657
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## 4239	147965	HGNC:27119
## 4240	9667	HGNC:21605
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## 4261	4301	HGNC:7137
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## 4266	57688	HGNC:29316
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## 4523	55544	HGNC:15818
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## 4526	5509	HGNC:9294
## 4527	8546	HGNC:566
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## 4530	93611	HGNC:24847
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## 4535	10208	HGNC:20294
## 4536	64328	HGNC:17796
## 4537	51371	HGNC:20330
## 4538	1024	HGNC:1779
## 4539	241	HGNC:436
## 4540	10354	HGNC:4997
## 4541	10810	HGNC:12734
## 4542	4628	HGNC:7568
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## 4544	6341	HGNC:10603
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## 4547	5287	HGNC:8972
## 4548	25778	HGNC:29043
## 4549	254428	HGNC:19429
## 4550	9911	HGNC:24239
## 4551	8900	HGNC:1577
## 4552	57511	HGNC:18621
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## 4554	5994	HGNC:9988
## 4555	7178	HGNC:12022
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## 4557	5983	HGNC:9971
## 4558	90627	HGNC:19164
## 4559	79921	HGNC:26121
## 4560	84923	HGNC:25918

## 4561	201266	HGNC:14463
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## 4563	55643	HGNC:15504
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## 4565	84787	HGNC:28405
## 4566	84330	HGNC:20630
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## 4568	23640	HGNC:24989
## 4569	1455	HGNC:2455
## 4570	84250	HGNC:25408
## 4571	55748	HGNC:24437
## 4572	28992	HGNC:29598
## 4573	54663	HGNC:25529
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## 4575	10313	HGNC:10469
## 4576	84246	HGNC:28760
## 4577	22880	HGNC:23573
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## 4579	66035	HGNC:14239
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## 4582	90956	HGNC:19039
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## 4586	79970	HGNC:21884
## 4587	57180	HGNC:17256
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## 4589	91298	HGNC:25322
## 4590	79572	HGNC:24113
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## 4593	10526	HGNC:9853
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## 4598	29080	HGNC:25005
## 4599	23075	HGNC:17070
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## 4601	272	HGNC:470
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## 4701	747	HGNC:1165
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## 5702	2052	HGNC:3401
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## 5704	5778	HGNC:9659
## 5705	127829	HGNC:25192
## 5706	10130	HGNC:30168
## 5707	388	HGNC:668
## 5708	245973	HGNC:18264
## 5709	92906	HGNC:25127
## 5710	27436	HGNC:1316
## 5711	805	HGNC:1445
## 5712	494143	HGNC:32363
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## 5714	51057	HGNC:28027
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## 5726	94097	HGNC:16073
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## 5736	51601	HGNC:29569
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## 5759	51281	HGNC:20987
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## 5761	129563	HGNC:28648
## 5762	2177	HGNC:3585
## 5763	132001	HGNC:25187
## 5764	9686	HGNC:28966
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## 5767	58190	HGNC:21614
## 5768	9125	HGNC:10445
## 5769	114790	HGNC:19184
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## 6854	5316	HGNC:9022
## 6855	7307	HGNC:12453
## 6856	23076	HGNC:23818
## 6857	8566	HGNC:8819
## 6858	2539	HGNC:4057
## 6859	1476	HGNC:2482
## 6860	8568	HGNC:18785
## 6861	56894	HGNC:326
## 6862	7109	HGNC:11868
## 6863	139716	HGNC:17515
## 6864	8209	HGNC:1273
## 6865	23308	HGNC:17087
## 6866	755	HGNC:1260
## 6867	81543	HGNC:14965
## 6868	3689	HGNC:6155
## 6869	85395	HGNC:15811
## 6870	5900	HGNC:9842
## 6871	84221	HGNC:1298
## 6872	4047	HGNC:6708
## 6873	8888	HGNC:6946
## 6874	54058	HGNC:1300
## 6875	5116	HGNC:16068
## 6876	23181	HGNC:17217
## 6877	6285	HGNC:10500
## 6878	3275	HGNC:5186
## 6879	11093	HGNC:1366
## 6880	148206	HGNC:27124
## 6881	126526	HGNC:26723
## 6882	286207	HGNC:27843

## 6883	27433	HGNC:11996
## 6884	30815	HGNC:23364
## 6885	92799	HGNC:19214
## 6886	10444	HGNC:30960
## 6887	84885	HGNC:19159
## 6888	29941	HGNC:17999
## 6889	57551	HGNC:29259
## 6890	9442	HGNC:2377
## 6891	162989	HGNC:24450
## 6892	23387	HGNC:29165
## 6893	284086	HGNC:13387
## 6894	116238	HGNC:25177
## 6895	9159	HGNC:8748
## 6896	6294	HGNC:10520
## 6897	6271	HGNC:10486
## 6898	26097	HGNC:24511
## 6899	643	HGNC:1060
## 6900	51043	HGNC:18668
## 6901	80308	HGNC:24671
## 6902	6464	HGNC:10840
## 6903	55823	HGNC:14583
## 6904	79671	HGNC:29890
## 6905	103	HGNC:225
## 6906	3570	HGNC:6019
## 6907	55585	HGNC:15698
## 6908	200186	HGNC:27301
## 6909	55129	HGNC:25519
## 6910	2224	HGNC:3631
## 6911	23623	HGNC:17153
## 6912	79957	HGNC:30132
## 6913	11243	HGNC:9112
## 6914	9673	HGNC:29036
## 6915	4000	HGNC:6636
## 6916	23218	HGNC:31928
## 6917	151903	HGNC:28332
## 6918	56893	HGNC:1237
## 6919	221908	HGNC:28320
## 6920	54865	HGNC:25982
## 6921	112939	HGNC:20967
## 6922	9592	HGNC:28871
## 6923	84124	HGNC:18832
## 6924	10898	HGNC:2327
## 6925	4061	HGNC:6727
## 6926	51160	HGNC:18178
## 6927	4796	HGNC:7801
## 6928	84939	HGNC:29641
## 6929	9401	HGNC:9949
## 6930	9684	HGNC:20419
## 6931	84449	HGNC:15624
## 6932	84988	HGNC:14941
## 6933	8928	HGNC:3814
## 6934	80228	HGNC:21667
## 6935	54784	HGNC:21900
## 6936	10603	HGNC:17381

## 6937	51149	HGNC:30817
## 6938	8878	HGNC:11280
## 6939	11282	HGNC:7048
## 6940	6132	HGNC:10368
## 6941	9794	HGNC:13632
## 6942	222229	HGNC:21769
## 6943	92304	HGNC:18384
## 6944	5701	HGNC:9548
## 6945	126321	HGNC:28299
## 6946	150223	HGNC:27158
## 6947	1857	HGNC:3087
## 6948	1173	HGNC:564
## 6949	55324	HGNC:72
## 6950	5130	HGNC:8754
## 6951	199746	HGNC:23020
## 6952	622	HGNC:1027
## 6953	199745	HGNC:23191
## 6954	84911	HGNC:17409
## 6955	93210	HGNC:23719
## 6956	2232	HGNC:3642
## 6957	29115	HGNC:30785
## 6958	51	HGNC:119
## 6959	5635	HGNC:9466
## 6960	6427	HGNC:10783
## 6961	55260	HGNC:25603
## 6962	126133	HGNC:28114
## 6963	3678	HGNC:6141
## 6964	25946	HGNC:17521
## 6965	124801	HGNC:26407
## 6966	92591	HGNC:19768
## 6967	284361	HGNC:27609
## 6968	126119	HGNC:28853
## 6969	50944	HGNC:15474
## 6970	284069	HGNC:30480
## 6971	80174	HGNC:17883
## 6972	113026	HGNC:9061
## 6973	91010	HGNC:23698
## 6974	29127	HGNC:9804
## 6975	113251	HGNC:24320
## 6976	125950	HGNC:30296
## 6977	256126	HGNC:27411
## 6978	147841	HGNC:26913
## 6979	221496	HGNC:21244
## 6980	221442	HGNC:44143
## 6981	115950	HGNC:25196
## 6982	400569	HGNC:32687
## 6983	100529209	HGNC:44419
## 6984	8741	HGNC:11928
## 6985	26168	HGNC:17862
## 6986	2256	HGNC:3667
## 6987	1973	HGNC:3282
## 6988	6154	HGNC:10327
## 6989	51728	HGNC:14121
## 6990	79622	HGNC:14161

## 6991	197335	HGNC:26960
## 6992	339123	HGNC:14148
## 6993	90864	HGNC:30629
## 6994	80178	HGNC:25849
## 6995	899	HGNC:1591
## 6996	57465	HGNC:29203
## 6997	51005	HGNC:24262
## 6998	124222	HGNC:26386
## 6999	114984	HGNC:25178
## 7000	124220	HGNC:30456
## 7001	7627	HGNC:13146
## 7002	115	HGNC:240
## 7003	81570	HGNC:30664
## 7004	10825	HGNC:7760
## 7005	220002	HGNC:23014
## 7006	80150	HGNC:16448
## 7007	51035	HGNC:18402
## 7008	79081	HGNC:28351
## 7009	283237	HGNC:28432
## 7010	10629	HGNC:17305
## 7011	10482	HGNC:8071
## 7012	6811	HGNC:11440
## 7013	283130	HGNC:27442
## 7014	6159	HGNC:10331
## 7015	84447	HGNC:20738
## 7016	7542	HGNC:12868
## 7017	8986	HGNC:10433
## 7018	4041	HGNC:6697
## 7019	219931	HGNC:20820
## 7020	6886	HGNC:11556
## 7021	51727	HGNC:18170
## 7022	65260	HGNC:25716
## 7023	79699	HGNC:25820
## 7024	54987	HGNC:26059
## 7025	4116	HGNC:6815
## 7026	26027	HGNC:18156
## 7027	338094	HGNC:25032
## 7028	25973	HGNC:30563
## 7029	23358	HGNC:12623
## 7030	8613	HGNC:9229
## 7031	79707	HGNC:26265
## 7032	9903	HGNC:29041
## 7033	10691	HGNC:4370
## 7034	57190	HGNC:15999
## 7035	205	HGNC:363
## 7036	3716	HGNC:6190
## 7037	84328	HGNC:17497
## 7038	374946	HGNC:25054
## 7039	9249	HGNC:17693
## 7040	7805	HGNC:29612
## 7041	553115	HGNC:30009
## 7042	81493	HGNC:28897
## 7043	5928	HGNC:9887
## 7044	81629	HGNC:15473

## 7045	255104	HGNC:27393
## 7046	6339	HGNC:10601
## 7047	54587	HGNC:7542
## 7048	199990	HGNC:26428
## 7049	1953	HGNC:3232
## 7050	115209	HGNC:29661
## 7051	114803	HGNC:29401
## 7052	83941	HGNC:24142
## 7053	7398	HGNC:12607
## 7054	8880	HGNC:4004
## 7055	11080	HGNC:14886
## 7056	127253	HGNC:24757
## 7057	284611	HGNC:27637
## 7058	113802	HGNC:26400
## 7059	148423	HGNC:24871
## 7060	127002	HGNC:28713
## 7061	284695	HGNC:14104
## 7062	2672	HGNC:4237
## 7063	178	HGNC:321
## 7064	2135	HGNC:3516
## 7065	148867	HGNC:19306
## 7066	23528	HGNC:13075
## 7067	10092	HGNC:708
## 7068	114548	HGNC:16400
## 7069	84838	HGNC:23713
## 7070	93185	HGNC:17813
## 7071	8682	HGNC:8822
## 7072	5824	HGNC:9713
## 7073	23385	HGNC:17091
## 7074	148304	HGNC:26319
## 7075	28982	HGNC:24682
## 7076	467	HGNC:785
## 7077	64783	HGNC:14959
## 7078	79961	HGNC:26192
## 7079	51278	HGNC:5393
## 7080	25992	HGNC:24696
## 7081	10380	HGNC:1096
## 7082	148362	HGNC:26512
## 7083	100288142	HGNC:32000
## 7084	51205	HGNC:29609
## 7085	64216	HGNC:18559
## 7086	163882	HGNC:26486
## 7087	129285	HGNC:30595
## 7088	165140	HGNC:24884
## 7089	23498	HGNC:4796
## 7090	148789	HGNC:28596
## 7091	574431	HGNC:32061
## 7092	9261	HGNC:6887
## 7093	824	HGNC:1479
## 7094	128308	HGNC:16686
## 7095	80232	HGNC:21208
## 7096	5966	HGNC:9954
## 7097	150962	HGNC:26505
## 7098	5194	HGNC:8855

```

## 7099      84542 HGNC:29387
## 7100      27185 HGNC:2888
## 7101      51072 HGNC:14014
## 7102      84661 HGNC:24590
## 7103     129450 HGNC:26754
## 7104      79568 HGNC:26198
## 7105     130814 HGNC:28503
## 7106      26225  HGNC:696
## 7107     130162 HGNC:26453
## 7108     142679 HGNC:18894
## 7109     112942 HGNC:30540
## 7110     129401 HGNC:29797
## 7111     165055 HGNC:26531
## 7112     150726 HGNC:29409
## 7113      80304 HGNC:26157
## 7114      79677 HGNC:20466
## 7115       3020  HGNC:4764
## 7116     56997 HGNC:16812
## 7117     151473 HGNC:26417
## 7118       6443 HGNC:10806
## 7119     129880  HGNC:970
## 7120     56916 HGNC:18398
## 7121     27306 HGNC:17890
## 7122     10611 HGNC:17468
## 7123     23248 HGNC:29039
## 7124     200539 HGNC:24470
## 7125       1520  HGNC:2545
## 7126       4487  HGNC:7391
## 7127     133015 HGNC:28442
## 7128     79626 HGNC:26277
## 7129     79005 HGNC:23136
## 7130     29765 HGNC:11874
## 7131       6944 HGNC:11644
## 7132       2071  HGNC:3435
## 7133     284996 HGNC:23137
## 7134     55677 HGNC:25467
## 7135     388962 HGNC:24415
## 7136     10602 HGNC:16943
## 7137       6282 HGNC:10488
## 7138     90957 HGNC:20086
## 7139       9938 HGNC:28951
## 7140       6280 HGNC:10499
## 7141     151195 HGNC:26868
## 7142       7855  HGNC:4043
## [ reached 'max' / getOption("max.print") -- omitted 8410 rows ]

```

```

eejs <- eejs %>%
  left_join(expressed_genes %>% select(gene_id, gene_symbol, gene_name),
    by = "gene_id")

write.table(eejs, file.path(fd, "annotated_eej_nas.txt"), sep="\t", row.names = FALSE)

```

## Unique SSs from UCSC Annotation

```
ucsc_dinucl <- ucsc[(ucsc$ss == 5 & (ucsc$snp_pos_in_ss == 3 | ucsc$snp_pos_in_ss == 4)) |  
  (ucsc$ss == 3 & (ucsc$snp_pos_in_ss == 18 | ucsc$snp_pos_in_ss == 19)),]  
nrow(ucsc_dinucl)
```

```
## [1] 14
```

```
nrow(ucsc)
```

```
## [1] 111
```

```
ucsc$snp_pos_in_ss[(ucsc$ss == 3 & ucsc$strand == "-")] <- 22 - ucsc$snp_pos_in_ss[(ucsc$ss == 3 & ucsc$  
ucsc$snp_pos_in_ss[(ucsc$ss == 5 & ucsc$strand == "-")] <- 8 - ucsc$snp_pos_in_ss[(ucsc$ss == 5 & ucsc$  
ucsc <- ucsc %>%  
  left_join(expressed_genes %>% select(refseq_id, gene_symbol, gene_name),  
    by = "refseq_id")  
write.table(ucsc, file.path(fd, "annotated_intron_nas.txt"), sep="\t", row.names = FALSE)
```