

class13

```
blast <- read.delim("mm-second.x.zebrafish.tsv")
blast

##          YP_220550.1    NP_059331.1 X69.010 X313 X97 X0  X4 X316 X10 X322
## 1      YP_220551.1    NP_059332.1  44.509  346 188  3  1 344   1 344
## 2      YP_220551.1    NP_059341.1  24.540  163 112  3 112 263 231 393
## 3      YP_220551.1    NP_059340.1  26.804   97  65  2  98 188 200 296
## 4      YP_220552.1    NP_059333.1  88.132  514  61  0  1 514   1 514
## 5      YP_220552.1    XP_021326074.1 31.818   66  32  2 427 482 16 78
## 6      YP_220552.1    NP_001373511.1 31.818   66  32  2 427 482 48 110
## 7      YP_220553.1    NP_059334.1  70.925  227  66  0  1 227   1 227
## 8      YP_220553.1    NP_001038725.1 28.571   70  46  2 15 84 261 326
## 9      YP_220553.1    XP_005161478.1 28.571   70  46  2 15 84 261 326
## 10     YP_220553.1    XP_021324580.1 28.571   70  46  2 15 84 163 228
## 11     YP_220554.1    XP_002665692.3 25.862   58  42  1  5 61 2588 2645
## 12     YP_220554.1    XP_021324264.1 25.862   58  42  1  5 61 2278 2335
## 13     YP_220554.1    XP_009290033.1 50.000   30  13  1 26 55 42 69
## 14     YP_220554.1    XP_005156656.1 37.931   29  17  1 34 61 167 195
## 15     YP_220554.1    NP_001007391.1 37.931   29  17  1 34 61 167 195
## 16     YP_220555.1    NP_059336.1  52.212  226 107  1  1 225   1 226
## 17     YP_220556.1    NP_059337.1  78.161  261  57  0  1 261   1 261
## 18     YP_220556.1    XP_021330598.1 37.838   37  23  0  3 39 37 73
## 19     YP_220556.1    NP_001139036.1 37.838   37  23  0  3 39 37 73
## 20     YP_220556.1    NP_001070643.1 36.111   36  19  1 173 208 675 706
## 21     YP_220557.1    NP_059338.1  61.207  116  44  1  1 115   1 116
## 22     YP_220558.1    NP_059339.1  53.061   98  46  0  1 98   1 98
## 23     YP_220558.1    NP_001002376.1 57.895   19  8  0 20 38 136 154
## 24     YP_220558.1    XP_005158565.1 57.895   19  8  0 20 38 149 167
## 25     YP_220558.1    XP_706537.4  31.373   51  25  2 40 80 65 115
## 26     YP_220559.1    NP_059340.1  62.582  457 170  1  1 456   1 457
## 27     YP_220559.1    NP_059341.1  23.039  204 146  6 106 306 128 323
## 28     YP_220559.1    NP_059332.1  32.432  111  59  6 198 304 97 195
## 29     YP_220559.1    XP_009301289.1 24.074  108  65  4 169 276 148 238
## 30     YP_220560.1    NP_059341.1  55.126  595 257  8  7 597   9 597
## 31     YP_220560.1    NP_059340.1  23.077  351 246 11 107 442 84 425
## 32     YP_220560.1    NP_059332.1  24.171  211 145  6 226 433 105 303
## 33     YP_220560.1    XP_017210528.1 26.087   69  44  1 365 433 129 190
## 34     YP_220560.1    NP_001159387.1 26.087   69  44  1 365 433 142 203
## 35     YP_220560.1    XP_021330470.1 30.645   62  38  2 164 223 379 437
## 36     YP_220560.1    XP_689554.6  35.417   48  28  1 554 598 1107 1154
## 37     YP_220561.1    NP_059342.1  37.143  140  72  3  1 127   1 137
## 38     YP_220561.1    NP_001038688.1 29.412   85  54  3 33 112 306 389
## 39     YP_220562.1    NP_059343.1  73.810  378  99  0  1 378   1 378
## 40     YP_220562.1    XP_021322416.1 28.704  108  60  4 223 315 263 368
## 41     YP_220562.1    XP_021322415.1 28.704  108  60  4 223 315 263 368
## 42     YP_220562.1    XP_021322414.1 28.704  108  60  4 223 315 310 415
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## 43	YP_220562.1	XP_021322413.1	28.704	108	60	4	223	315	310	415
## 44	NP_904328.1	NP_059331.1	69.010	313	97	0	4	316	10	322
## 45	NP_904329.1	NP_059332.1	44.509	346	188	3	1	344	1	344
## 46	NP_904329.1	NP_059341.1	24.540	163	112	3	112	263	231	393
## 47	NP_904329.1	NP_059340.1	26.804	97	65	2	98	188	200	296
## 48	NP_904330.1	NP_059333.1	88.132	514	61	0	1	514	1	514
## 49	NP_904330.1	XP_021326074.1	31.818	66	32	2	427	482	16	78
## 50	NP_904330.1	NP_001373511.1	31.818	66	32	2	427	482	48	110
## 51	NP_904331.1	NP_059334.1	70.925	227	66	0	1	227	1	227
## 52	NP_904331.1	NP_001038725.1	28.571	70	46	2	15	84	261	326
## 53	NP_904331.1	XP_005161478.1	28.571	70	46	2	15	84	261	326
## 54	NP_904331.1	XP_021324580.1	28.571	70	46	2	15	84	163	228
## 55	NP_904332.1	XP_002665692.3	25.862	58	42	1	5	61	2588	2645
## 56	NP_904332.1	XP_021324264.1	25.862	58	42	1	5	61	2278	2335
## 57	NP_904332.1	XP_009290033.1	50.000	30	13	1	26	55	42	69
## 58	NP_904332.1	XP_005156656.1	37.931	29	17	1	34	61	167	195
## 59	NP_904332.1	NP_001007391.1	37.931	29	17	1	34	61	167	195
## 60	NP_904333.1	NP_059336.1	52.212	226	107	1	1	225	1	226
## 61	NP_904334.1	NP_059337.1	78.161	261	57	0	1	261	1	261
## 62	NP_904334.1	XP_021330598.1	37.838	37	23	0	3	39	37	73
## 63	NP_904334.1	NP_001139036.1	37.838	37	23	0	3	39	37	73
## 64	NP_904334.1	NP_001070643.1	36.111	36	19	1	173	208	675	706
## 65	NP_904335.1	NP_059338.1	61.207	116	44	1	1	115	1	116
## 66	NP_904336.1	NP_059339.1	53.061	98	46	0	1	98	1	98
## 67	NP_904336.1	NP_001002376.1	57.895	19	8	0	20	38	136	154
## 68	NP_904336.1	XP_005158565.1	57.895	19	8	0	20	38	149	167
## 69	NP_904336.1	XP_706537.4	31.373	51	25	2	40	80	65	115
## 70	NP_904337.1	NP_059340.1	62.582	457	170	1	1	456	1	457
## 71	NP_904337.1	NP_059341.1	23.039	204	146	6	106	306	128	323
## 72	NP_904337.1	NP_059332.1	32.432	111	59	6	198	304	97	195
## 73	NP_904337.1	XP_009301289.1	24.074	108	65	4	169	276	148	238
## 74	NP_904338.1	NP_059341.1	55.126	595	257	8	7	597	9	597
## 75	NP_904338.1	NP_059340.1	23.077	351	246	11	107	442	84	425
## 76	NP_904338.1	NP_059332.1	24.171	211	145	6	226	433	105	303
## 77	NP_904338.1	XP_017210528.1	26.087	69	44	1	365	433	129	190
## 78	NP_904338.1	NP_001159387.1	26.087	69	44	1	365	433	142	203
## 79	NP_904338.1	XP_021330470.1	30.645	62	38	2	164	223	379	437
## 80	NP_904338.1	XP_689554.6	35.417	48	28	1	554	598	1107	1154
## 81	NP_904339.1	NP_059342.1	37.143	140	72	3	1	127	1	137
## 82	NP_904339.1	NP_001038688.1	29.412	85	54	3	33	112	306	389
## 83	NP_904340.1	NP_059343.1	73.810	378	99	0	1	378	1	378
## 84	NP_904340.1	XP_021322416.1	28.704	108	60	4	223	315	263	368
## 85	NP_904340.1	XP_021322415.1	28.704	108	60	4	223	315	263	368
## 86	NP_904340.1	XP_021322414.1	28.704	108	60	4	223	315	310	415
## 87	NP_904340.1	XP_021322413.1	28.704	108	60	4	223	315	310	415
## 88	NP_598866.1	XP_009294521.1	46.154	273	130	6	4	267	420	684
## 89	NP_598866.1	NP_001313634.1	46.154	273	130	6	4	267	476	740
## 90	NP_598866.1	XP_009294513.1	46.154	273	130	6	4	267	475	739
## 91	NP_598866.1	NP_001186666.1	33.071	127	76	5	4	126	338	459
## 92	NP_598866.1	NP_001003517.1	30.400	125	82	4	4	126	344	465
## 93	NP_598866.1	NP_001003517.1	30.645	62	41	2	53	113	43	103
## 94	NP_598866.1	NP_956073.2	34.444	90	56	3	40	126	527	616
## 95	NP_598866.1	NP_956073.2	30.000	90	57	3	40	126	179	265
## 96	NP_598866.1	NP_956073.2	29.474	95	58	4	36	127	63	151

## 97	NP_598866.1	NP_998070.1	28.906	128	80	5	4	126	339	460
## 98	NP_598866.1	NP_998070.1	28.767	73	49	3	43	113	27	98
## 99	NP_598866.1	NP_998529.3	25.899	139	98	4	13	149	343	478
## 100	NP_598866.1	NP_998529.3	25.253	99	71	2	23	118	10	108
## 101	NP_598866.1	NP_001307463.1	23.438	128	93	4	2	127	371	495
## 102	NP_598866.1	NP_001307463.1	30.435	92	59	3	55	143	76	165
## 103	NP_598866.1	NP_001025330.1	27.097	155	103	7	17	170	12	157
## 104	NP_598866.1	XP_685017.4	24.528	106	75	4	37	140	388	490
## 105	NP_598866.1	NP_998181.1	23.894	113	80	3	42	152	88	196
## 106	NP_598866.1	NP_998181.1	28.571	77	52	3	40	113	221	297
## 107	NP_598866.1	XP_005162560.1	24.779	113	79	3	42	152	164	272
## 108	NP_598866.1	XP_005162560.1	28.571	77	52	3	40	113	297	373
## 109	NP_598866.1	NP_922915.2	27.848	79	46	3	40	117	40	108
## 110	NP_598866.1	NP_922915.2	26.829	82	55	2	37	113	162	243
## 111	NP_598866.1	NP_001107048.1	29.032	62	40	2	55	113	181	241
## 112	NP_598866.1	NP_001107048.1	24.211	95	66	3	37	127	408	500
## 113	NP_598866.1	NP_001107048.1	24.691	81	57	2	37	113	286	366
## 114	NP_598866.1	NP_001039026.1	27.174	92	58	5	51	138	32	118
## 115	NP_598866.1	NP_001092245.1	37.288	59	34	2	56	113	136	192
## 116	NP_598866.1	NP_991204.1	32.759	58	37	2	55	111	80	136
## 117	NP_598866.1	NP_001018393.2	26.000	100	63	6	43	138	28	120
## 118	NP_598866.1	NP_001019983.2	24.272	103	77	1	180	281	146	248
## 119	NP_598866.1	NP_001108605.1	24.719	89	62	4	40	127	40	124
## 120	NP_598866.1	XP_005157246.1	18.705	139	100	2	123	252	59	193
## 121	NP_598866.1	XP_021334745.1	27.536	69	49	1	194	261	1139	1207
## 122	NP_598866.1	NP_957186.1	22.727	88	62	2	32	113	26	113
## 123	NP_598866.1	XP_009293385.1	31.169	77	45	2	134	207	2379	2450
## 124	NP_598866.1	XP_009293389.1	31.169	77	45	2	134	207	2367	2438
## 125	NP_598866.1	XP_009293388.1	31.169	77	45	2	134	207	2414	2485
## 126	NP_598866.1	XP_009293386.1	31.169	77	45	2	134	207	2374	2445
## 127	NP_598866.1	NP_001121836.1	28.125	64	41	2	55	113	69	132
## 128	NP_598866.1	XP_009293384.1	31.169	77	45	2	134	207	2414	2485
## 129	NP_598866.1	XP_009293383.1	31.169	77	45	2	134	207	2414	2485
## 130	NP_598866.1	XP_021324431.1	31.169	77	45	2	134	207	2342	2413
## 131	NP_598866.1	XP_009293390.1	31.169	77	45	2	134	207	2342	2413
## 132	NP_598866.1	XP_001920501.5	24.286	70	53	0	190	259	1398	1467
## 133	NP_598866.1	XP_021334263.1	22.131	122	89	3	40	155	14	135
## 134	NP_598866.1	XP_021334262.1	22.131	122	89	3	40	155	14	135
## 135	NP_598866.1	NP_001082944.1	22.131	122	89	3	40	155	14	135
## 136	NP_598866.1	XP_021334265.1	22.131	122	89	3	40	155	14	135
## 137	NP_598866.1	XP_021334264.1	22.131	122	89	3	40	155	14	135
## 138	NP_598866.1	XP_021334746.1	27.692	65	46	1	198	261	952	1016
## 139	NP_598866.1	XP_003199098.1	26.471	102	65	2	173	274	279	370
## 140	NP_598866.1	XP_005173719.1	24.409	127	81	3	121	232	119	245
## 141	NP_598866.1	XP_009294942.1	48.148	27	14	0	236	262	255	281
## 142	NP_598866.1	XP_021325513.1	48.148	27	14	0	236	262	255	281
## 143	NP_776134.1	NP_001038578.1	25.635	394	256	12	1	367	50	433
## 144	NP_776134.1	XP_698357.3	35.433	127	82	0	241	367	383	509
## 145	NP_776134.1	XP_021325116.1	31.667	120	79	2	231	347	414	533
## 146	NP_776134.1	XP_005174054.1	32.075	106	69	2	243	345	2113	2218
## 147	NP_776134.1	XP_009295448.1	32.787	122	78	3	219	336	1031	1152
## 148	NP_776134.1	XP_009295447.1	32.787	122	78	3	219	336	1089	1210
## 149	NP_776134.1	XP_009295444.1	32.787	122	78	3	219	336	1263	1384
## 150	NP_776134.1	XP_009295444.1	28.141	199	113	9	172	345	910	1103

## 151	NP_776134.1	XP_005157868.1	27.619	105	74	1	243	345	857	961
## 152	NP_776134.1	XP_021325358.1	30.612	98	65	2	243	337	2023	2120
## 153	NP_776134.1	XP_021325358.1	31.395	86	54	2	270	354	1140	1221
## 154	NP_776134.1	XP_021325122.1	29.730	111	75	2	230	337	174	284
## 155	NP_776134.1	XP_021325121.1	29.730	111	75	2	230	337	216	326
## 156	NP_776134.1	XP_021325120.1	29.730	111	75	2	230	337	275	385
## 157	NP_776134.1	XP_021330982.1	31.933	119	75	4	219	335	882	996
## 158	NP_776134.1	XP_009290119.1	30.303	99	66	2	243	338	98	196
## 159	NP_776134.1	XP_009290118.1	30.303	99	66	2	243	338	350	448
## 160	NP_776134.1	XP_005157836.1	30.303	99	66	2	243	338	189	287
## 161	NP_776134.1	XP_690098.5	26.984	126	84	3	223	345	899	1019
## 162	NP_776134.1	XP_005160238.1	27.559	127	86	3	217	337	782	908
## 163	NP_776134.1	XP_021333113.1	27.559	127	86	3	217	337	665	791
## 164	NP_776134.1	XP_017206561.2	33.333	81	53	1	267	346	681	761
## 165	NP_776134.1	XP_021333111.1	27.559	127	86	3	217	337	723	849
## 166	NP_776134.1	XP_001921257.4	30.303	99	66	2	243	338	345	443
## 167	NP_776134.1	XP_009290117.1	30.303	99	66	2	243	338	350	448
## 168	NP_776134.1	XP_021325237.1	29.358	109	74	2	232	337	1049	1157
## 169	NP_776134.1	XP_009295766.1	26.991	226	137	9	124	338	337	545
## 170	NP_776134.1	XP_021325107.1	25.926	135	89	4	221	345	1488	1621
## 171	NP_776134.1	XP_021325109.1	25.926	135	89	4	221	345	1486	1619
## 172	NP_776134.1	XP_021325106.1	25.926	135	89	4	221	345	2006	2139
## 173	NP_776134.1	XP_021325105.1	25.926	135	89	4	221	345	2121	2254
## 174	NP_776134.1	XP_021325110.1	25.926	135	89	4	221	345	1430	1563
## 175	NP_776134.1	XP_017208755.1	25.926	135	89	4	221	345	2183	2316
## 176	NP_776134.1	XP_021325103.1	25.926	135	89	4	221	345	2236	2369
## 177	NP_776134.1	XP_021322154.1	32.283	127	74	6	219	338	967	1088
## 178	NP_776134.1	XP_009290195.1	32.283	127	74	6	219	338	967	1088
## 179	NP_776134.1	XP_698776.5	32.283	127	74	6	219	338	967	1088
## 180	NP_776134.1	XP_021325097.1	25.926	135	89	4	221	345	2409	2542
## 181	NP_776134.1	XP_021325100.1	25.926	135	89	4	221	345	2351	2484
## 182	NP_776134.1	XP_021325108.1	25.926	135	89	4	221	345	1486	1619
## 183	NP_776134.1	XP_021325101.1	25.926	135	89	4	221	345	2351	2484
## 184	NP_776134.1	XP_021325099.1	25.926	135	89	4	221	345	2354	2487
## 185	NP_776134.1	XP_021325098.1	25.926	135	89	4	221	345	2354	2487
## 186	NP_776134.1	XP_021325104.1	25.926	135	89	4	221	345	2236	2369
## 187	NP_776134.1	XP_021325096.1	25.926	135	89	4	221	345	2582	2715
## 188	NP_001348394.1	XP_021331254.1	42.523	214	123	0	153	366	116	329
## 189	NP_001348394.1	XP_021331254.1	41.589	214	125	0	153	366	60	273
## 190	NP_001348394.1	XP_021331254.1	41.395	215	126	0	153	367	200	414
## 191	NP_001348394.1	XP_021331254.1	41.589	214	125	0	153	366	172	385
## 192	NP_001348394.1	XP_021331254.1	41.121	214	126	0	153	366	4	217
## 193	NP_001348394.1	XP_021331254.1	42.857	189	108	0	178	366	1	189
## 194	NP_001348394.1	XP_021331254.1	40.187	214	128	0	153	366	32	245
## 195	NP_001348394.1	XP_021331254.1	41.589	214	125	0	153	366	144	357
## 196	NP_001348394.1	XP_021331254.1	40.722	194	115	0	153	346	228	421
## 197	NP_001348394.1	XP_021331048.1	43.458	214	121	0	153	366	266	479
## 198	NP_001348394.1	XP_021331048.1	42.056	214	124	0	153	366	322	535
## 199	NP_001348394.1	XP_021331048.1	46.114	193	104	0	174	366	7	199
## 200	NP_001348394.1	XP_021331048.1	40.654	214	127	0	153	366	210	423
## 201	NP_001348394.1	XP_021331048.1	42.523	214	123	0	153	366	70	283
## 202	NP_001348394.1	XP_021331048.1	43.925	214	120	0	153	366	154	367
## 203	NP_001348394.1	XP_021331048.1	40.930	215	127	0	153	367	350	564
## 204	NP_001348394.1	XP_021331048.1	36.957	276	158	2	99	366	44	311

## 205	NP_001348394.1	XP_021331048.1	41.589	214	125	0	153	366	42	255
## 206	NP_001348394.1	XP_021331048.1	40.187	214	128	0	153	366	182	395
## 207	NP_001348394.1	XP_021331048.1	39.720	214	129	0	153	366	126	339
## 208	NP_001348394.1	XP_021331048.1	39.252	214	130	0	153	366	238	451
## 209	NP_001348394.1	XP_021331048.1	45.294	170	93	0	197	366	2	171
## 210	NP_001348394.1	XP_021331048.1	41.237	194	114	0	153	346	378	571
## 211	NP_001348394.1	XP_021331048.1	45.977	87	47	0	280	366	1	87
## 212	NP_001348394.1	XP_021330830.1	43.458	214	121	0	153	366	58	271
## 213	NP_001348394.1	XP_021330830.1	45.550	191	104	0	176	366	25	215
## 214	NP_001348394.1	XP_021330830.1	40.969	227	133	1	140	366	18	243
## 215	NP_001348394.1	XP_021330830.1	35.333	300	176	3	77	366	8	299
## 216	NP_001348394.1	XP_021330830.1	42.236	161	93	0	153	313	142	302
## 217	NP_001348394.1	XP_021326985.1	45.794	214	116	0	153	366	232	445
## 218	NP_001348394.1	XP_021326985.1	42.991	214	122	0	153	366	204	417
## 219	NP_001348394.1	XP_021326985.1	41.589	214	125	0	153	366	176	389
## 220	NP_001348394.1	XP_021326985.1	41.441	222	130	0	145	366	112	333
## 221	NP_001348394.1	XP_021326985.1	41.589	214	125	0	153	366	148	361
## 222	NP_001348394.1	XP_021326985.1	41.615	161	94	0	153	313	288	448
## 223	NP_001348394.1	XP_021326985.1	44.144	111	62	0	256	366	111	221
## 224	NP_001348394.1	XP_021330513.1	45.794	214	116	0	153	366	232	445
## 225	NP_001348394.1	XP_021330513.1	42.991	214	122	0	153	366	204	417
## 226	NP_001348394.1	XP_021330513.1	41.589	214	125	0	153	366	176	389
## 227	NP_001348394.1	XP_021330513.1	41.441	222	130	0	145	366	112	333
## 228	NP_001348394.1	XP_021330513.1	41.589	214	125	0	153	366	148	361
## 229	NP_001348394.1	XP_021330513.1	41.615	161	94	0	153	313	288	448
## 230	NP_001348394.1	XP_021330513.1	44.144	111	62	0	256	366	111	221
## 231	NP_001348394.1	XP_021331394.1	44.860	214	118	0	153	366	5	218
## 232	NP_001348394.1	XP_021331394.1	37.319	276	157	2	99	366	7	274
## 233	NP_001348394.1	XP_021331394.1	46.032	189	102	0	178	366	2	190
## 234	NP_001348394.1	XP_021331394.1	36.101	277	161	2	99	367	35	303
## 235	NP_001348394.1	XP_021331394.1	40.206	194	116	0	153	346	117	310
## 236	NP_001348394.1	XP_021331394.1	36.646	161	101	1	153	313	173	332
## 237	NP_001348394.1	XP_021331394.1	38.000	50	31	0	317	366	1	50
## 238	NP_001348394.1	XP_017211047.2	45.794	214	116	0	153	366	267	480
## 239	NP_001348394.1	XP_017211047.2	40.074	272	155	2	99	366	409	676
## 240	NP_001348394.1	XP_017211047.2	42.523	214	123	0	153	366	323	536
## 241	NP_001348394.1	XP_017211047.2	42.523	214	123	0	153	366	155	368
## 242	NP_001348394.1	XP_017211047.2	42.523	214	123	0	153	366	211	424
## 243	NP_001348394.1	XP_017211047.2	42.056	214	124	0	153	366	379	592
## 244	NP_001348394.1	XP_017211047.2	42.056	214	124	0	153	366	127	340
## 245	NP_001348394.1	XP_017211047.2	42.991	214	122	0	153	366	99	312
## 246	NP_001348394.1	XP_017211047.2	40.654	214	127	0	153	366	239	452
## 247	NP_001348394.1	XP_017211047.2	41.121	214	126	0	153	366	351	564
## 248	NP_001348394.1	XP_017211047.2	42.708	192	110	0	175	366	9	200
## 249	NP_001348394.1	XP_017211047.2	39.720	214	129	0	153	366	71	284
## 250	NP_001348394.1	XP_017211047.2	40.654	214	127	0	153	366	15	228
## 251	NP_001348394.1	XP_017211047.2	39.720	214	129	0	153	366	43	256
## 252	NP_001348394.1	XP_017211047.2	35.938	256	148	2	99	346	437	684
## 253	NP_001348394.1	XP_017211047.2	42.690	171	98	0	196	366	2	172
## 254	NP_001348394.1	XP_017211047.2	41.525	118	69	0	253	370	3	120
## 255	NP_001348394.1	XP_021328514.1	44.651	215	119	0	152	366	98	312
## 256	NP_001348394.1	XP_021328514.1	41.589	214	125	0	153	366	71	284
## 257	NP_001348394.1	XP_021328514.1	45.596	193	105	0	174	366	8	200
## 258	NP_001348394.1	XP_021328514.1	42.523	214	123	0	153	366	43	256

## 259	NP_001348394.1	XP_021328514.1	42.523	214	123	0	153	366	15	228
## 260	NP_001348394.1	XP_021328514.1	41.589	214	125	0	153	366	211	424
## 261	NP_001348394.1	XP_021328514.1	42.523	214	123	0	153	366	155	368
## 262	NP_001348394.1	XP_021328514.1	47.059	170	90	0	197	366	3	172
## 263	NP_001348394.1	XP_021328514.1	34.783	276	164	2	99	366	129	396
## 264	NP_001348394.1	XP_021328514.1	42.632	190	109	0	153	342	267	456
## 265	NP_001348394.1	XP_021328514.1	45.455	165	90	0	153	317	295	459
## 266	NP_001348394.1	XP_021328514.1	48.252	143	74	0	224	366	2	144
## 267	NP_001348394.1	XP_021326559.1	44.186	215	120	0	152	366	32	246
## 268	NP_001348394.1	XP_021326559.1	36.594	276	159	2	99	366	63	330
## 269	NP_001348394.1	XP_021326559.1	41.589	214	125	0	153	366	5	218
## 270	NP_001348394.1	XP_021326559.1	37.879	264	148	2	99	354	119	374
## 271	NP_001348394.1	XP_021326559.1	42.056	214	124	0	153	366	145	358
## 272	NP_001348394.1	XP_021326559.1	44.974	189	104	0	178	366	2	190
## 273	NP_001348394.1	XP_021326559.1	43.000	100	57	0	174	273	278	377
## 274	NP_001348394.1	XP_021326559.1	34.722	72	47	0	146	217	306	377
## 275	NP_001348394.1	XP_021326559.1	38.000	50	31	0	317	366	1	50
## 276	NP_001348394.1	XP_021328522.1	44.651	215	119	0	152	366	98	312
## 277	NP_001348394.1	XP_021328522.1	42.991	214	122	0	153	366	211	424
## 278	NP_001348394.1	XP_021328522.1	36.594	276	159	2	99	366	129	396
## 279	NP_001348394.1	XP_021328522.1	42.056	214	124	0	153	366	239	452
## 280	NP_001348394.1	XP_021328522.1	45.596	193	105	0	174	366	8	200
## 281	NP_001348394.1	XP_021328522.1	41.589	214	125	0	153	366	71	284
## 282	NP_001348394.1	XP_021328522.1	42.523	214	123	0	153	366	43	256
## 283	NP_001348394.1	XP_021328522.1	42.523	214	123	0	153	366	15	228
## 284	NP_001348394.1	XP_021328522.1	47.059	170	90	0	197	366	3	172
## 285	NP_001348394.1	XP_021328522.1	44.211	190	106	0	153	342	267	456
## 286	NP_001348394.1	XP_021328522.1	47.273	165	87	0	153	317	295	459
## 287	NP_001348394.1	XP_021328522.1	48.252	143	74	0	224	366	2	144
## 288	NP_001348394.1	XP_021328508.1	44.651	215	119	0	152	366	98	312
## 289	NP_001348394.1	XP_021328508.1	42.056	214	124	0	153	366	211	424
## 290	NP_001348394.1	XP_021328508.1	42.523	214	123	0	153	366	267	480
## 291	NP_001348394.1	XP_021328508.1	41.589	214	125	0	153	366	71	284
## 292	NP_001348394.1	XP_021328508.1	45.596	193	105	0	174	366	8	200
## 293	NP_001348394.1	XP_021328508.1	42.523	214	123	0	153	366	43	256
## 294	NP_001348394.1	XP_021328508.1	42.523	214	123	0	153	366	15	228
## 295	NP_001348394.1	XP_021328508.1	42.523	214	123	0	153	366	155	368
## 296	NP_001348394.1	XP_021328508.1	41.121	214	126	0	153	366	239	452
## 297	NP_001348394.1	XP_021328508.1	35.870	276	161	2	99	366	129	396
## 298	NP_001348394.1	XP_021328508.1	47.059	170	90	0	197	366	3	172
## 299	NP_001348394.1	XP_021328508.1	43.158	190	108	0	153	342	295	484
## 300	NP_001348394.1	XP_021328508.1	46.061	165	89	0	153	317	323	487
## 301	NP_001348394.1	XP_021328508.1	48.252	143	74	0	224	366	2	144
## 302	NP_001348394.1	XP_021328503.1	44.651	215	119	0	152	366	98	312
## 303	NP_001348394.1	XP_021328503.1	42.523	214	123	0	153	366	211	424
## 304	NP_001348394.1	XP_021328503.1	42.991	214	122	0	153	366	267	480
## 305	NP_001348394.1	XP_021328503.1	41.589	214	125	0	153	366	71	284
## 306	NP_001348394.1	XP_021328503.1	45.596	193	105	0	174	366	8	200
## 307	NP_001348394.1	XP_021328503.1	42.523	214	123	0	153	366	43	256
## 308	NP_001348394.1	XP_021328503.1	42.523	214	123	0	153	366	15	228
## 309	NP_001348394.1	XP_021328503.1	42.523	214	123	0	153	366	155	368
## 310	NP_001348394.1	XP_021328503.1	41.589	214	125	0	153	366	239	452
## 311	NP_001348394.1	XP_021328503.1	35.870	276	161	2	99	366	129	396
## 312	NP_001348394.1	XP_021328503.1	47.059	170	90	0	197	366	3	172

## 313	NP_001348394.1	XP_021328503.1	43.684	190	107	0	153	342	295	484
## 314	NP_001348394.1	XP_021328503.1	46.667	165	88	0	153	317	323	487
## 315	NP_001348394.1	XP_021328503.1	48.252	143	74	0	224	366	2	144
## 316	NP_001348394.1	XP_021328513.1	44.651	215	119	0	152	366	98	312
## 317	NP_001348394.1	XP_021328513.1	42.056	214	124	0	153	366	211	424
## 318	NP_001348394.1	XP_021328513.1	41.589	214	125	0	153	366	71	284
## 319	NP_001348394.1	XP_021328513.1	45.596	193	105	0	174	366	8	200
## 320	NP_001348394.1	XP_021328513.1	42.523	214	123	0	153	366	43	256
## 321	NP_001348394.1	XP_021328513.1	42.523	214	123	0	153	366	15	228
## 322	NP_001348394.1	XP_021328513.1	42.523	214	123	0	153	366	155	368
## 323	NP_001348394.1	XP_021328513.1	42.056	214	123	1	153	366	267	479
## 324	NP_001348394.1	XP_021328513.1	35.870	276	161	2	99	366	129	396
## 325	NP_001348394.1	XP_021328513.1	47.059	170	90	0	197	366	3	172
## 326	NP_001348394.1	XP_021328513.1	40.654	214	126	1	153	366	239	451
## 327	NP_001348394.1	XP_021328513.1	43.684	190	106	1	153	342	295	483
## 328	NP_001348394.1	XP_021328513.1	46.667	165	87	1	153	317	323	486
## 329	NP_001348394.1	XP_021328513.1	48.252	143	74	0	224	366	2	144
## 330	NP_001348394.1	XP_021328513.1	35.849	53	34	0	152	204	433	485
## 331	NP_001348394.1	XP_021330455.1	41.410	227	133	0	140	366	99	325
## 332	NP_001348394.1	XP_021330455.1	42.056	214	124	0	153	366	84	297
## 333	NP_001348394.1	XP_021330455.1	38.785	214	131	0	153	366	168	381
## 334	NP_001348394.1	XP_021330455.1	41.589	214	125	0	153	366	140	353
## 335	NP_001348394.1	XP_021330455.1	41.294	201	118	0	153	353	196	396
## 336	NP_001348394.1	XP_021330455.1	38.785	214	131	0	153	366	224	437
## 337	NP_001348394.1	XP_021330455.1	36.777	242	125	1	153	366	280	521
## 338	NP_001348394.1	XP_021330455.1	37.383	214	134	0	153	366	252	465
## 339	NP_001348394.1	XP_021330455.1	36.916	214	135	0	153	366	336	549
## 340	NP_001348394.1	XP_021330455.1	40.123	162	97	0	153	314	392	553
## 341	NP_001348394.1	XP_021330455.1	30.208	192	126	3	99	286	366	553
## 342	NP_001348394.1	XP_021330454.1	41.410	227	133	0	140	366	99	325
## 343	NP_001348394.1	XP_021330454.1	42.056	214	124	0	153	366	84	297
## 344	NP_001348394.1	XP_021330454.1	38.785	214	131	0	153	366	168	381
## 345	NP_001348394.1	XP_021330454.1	41.589	214	125	0	153	366	140	353
## 346	NP_001348394.1	XP_021330454.1	41.294	201	118	0	153	353	196	396
## 347	NP_001348394.1	XP_021330454.1	38.785	214	131	0	153	366	224	437
## 348	NP_001348394.1	XP_021330454.1	36.777	242	125	1	153	366	280	521
## 349	NP_001348394.1	XP_021330454.1	37.383	214	134	0	153	366	252	465
## 350	NP_001348394.1	XP_021330454.1	36.916	214	135	0	153	366	336	549
## 351	NP_001348394.1	XP_021330454.1	40.123	162	97	0	153	314	392	553
## 352	NP_001348394.1	XP_021330454.1	30.208	192	126	3	99	286	366	553
## 353	NP_001348394.1	XP_017211133.2	46.729	214	114	0	153	366	350	563
## 354	NP_001348394.1	XP_017211133.2	42.731	227	129	1	141	366	225	451
## 355	NP_001348394.1	XP_017211133.2	42.291	227	130	1	141	366	309	535
## 356	NP_001348394.1	XP_017211133.2	42.326	215	124	0	153	367	434	648
## 357	NP_001348394.1	XP_017211133.2	42.523	214	123	0	153	366	378	591
## 358	NP_001348394.1	XP_017211133.2	42.523	214	123	0	153	366	154	367
## 359	NP_001348394.1	XP_017211133.2	42.523	214	123	0	153	366	210	423
## 360	NP_001348394.1	XP_017211133.2	44.393	214	119	0	153	366	182	395
## 361	NP_001348394.1	XP_017211133.2	41.589	214	125	0	153	366	126	339
## 362	NP_001348394.1	XP_017211133.2	40.187	214	128	0	153	366	294	507
## 363	NP_001348394.1	XP_017211133.2	40.654	214	127	0	153	366	406	619
## 364	NP_001348394.1	XP_017211133.2	41.204	216	127	0	153	368	98	313
## 365	NP_001348394.1	XP_017211133.2	38.767	227	138	1	140	366	58	283
## 366	NP_001348394.1	XP_017211133.2	37.778	225	136	1	144	368	37	257

## 367	NP_001348394.1	XP_017211133.2	37.209	215	134	1	153	367	462	675
## 368	NP_001348394.1	XP_017211133.2	33.862	189	98	1	153	314	490	678
## 369	NP_001348394.1	XP_017211133.2	35.294	51	32	1	153	203	630	679
## 370	NP_001348394.1	XP_021331033.1	43.498	223	126	0	146	368	517	739
## 371	NP_001348394.1	XP_021331033.1	44.860	214	118	0	153	366	214	427
## 372	NP_001348394.1	XP_021331033.1	43.925	214	120	0	153	366	552	765
## 373	NP_001348394.1	XP_021331033.1	38.889	270	163	1	99	366	102	371
## 374	NP_001348394.1	XP_021331033.1	42.991	214	122	0	153	366	186	399
## 375	NP_001348394.1	XP_021331033.1	42.453	212	122	0	153	364	298	509
## 376	NP_001348394.1	XP_021331033.1	37.500	280	157	3	99	368	328	599
## 377	NP_001348394.1	XP_021331033.1	43.814	194	109	0	153	346	580	773
## 378	NP_001348394.1	XP_021331033.1	40.271	221	130	1	148	366	489	709
## 379	NP_001348394.1	XP_021331033.1	41.589	214	125	0	153	366	242	455
## 380	NP_001348394.1	XP_021331033.1	40.187	214	128	0	153	366	270	483
## 381	NP_001348394.1	XP_021331033.1	37.295	244	123	3	153	366	16	259
## 382	NP_001348394.1	XP_021331033.1	41.538	195	112	1	174	366	9	203
## 383	NP_001348394.1	XP_021331033.1	44.379	169	94	0	194	362	1	169
## 384	NP_001348394.1	XP_021331033.1	44.828	145	80	0	222	366	1	145
## 385	NP_001348394.1	XP_021331266.1	45.581	215	117	0	152	366	2265	2479
## 386	NP_001348394.1	XP_021331266.1	43.925	214	120	0	153	366	1902	2115
## 387	NP_001348394.1	XP_021331266.1	39.706	272	156	2	99	366	924	1191
## 388	NP_001348394.1	XP_021331266.1	43.519	216	122	0	153	368	1986	2201
## 389	NP_001348394.1	XP_021331266.1	39.273	275	161	2	99	370	1904	2175
## 390	NP_001348394.1	XP_021331266.1	44.393	214	119	0	153	366	1482	1695
## 391	NP_001348394.1	XP_021331266.1	38.768	276	153	2	99	366	1876	2143
## 392	NP_001348394.1	XP_021331266.1	43.925	214	120	0	153	366	698	911
## 393	NP_001348394.1	XP_021331266.1	39.114	271	159	2	99	366	2156	2423
## 394	NP_001348394.1	XP_021331266.1	43.925	214	120	0	153	366	670	883
## 395	NP_001348394.1	XP_021331266.1	44.860	214	118	0	153	366	1146	1359
## 396	NP_001348394.1	XP_021331266.1	43.458	214	121	0	153	366	502	715
## 397	NP_001348394.1	XP_021331266.1	40.074	272	155	2	99	366	2408	2675
## 398	NP_001348394.1	XP_021331266.1	43.925	214	120	0	153	366	726	939
## 399	NP_001348394.1	XP_021331266.1	43.458	214	121	0	153	366	1426	1639
## 400	NP_001348394.1	XP_021331266.1	42.523	214	123	0	153	366	642	855
## 401	NP_001348394.1	XP_021331266.1	43.925	214	120	0	153	366	1874	2087
## 402	NP_001348394.1	XP_021331266.1	42.056	214	124	0	153	366	1314	1527
## 403	NP_001348394.1	XP_021331266.1	42.009	219	127	0	148	366	1449	1667
## 404	NP_001348394.1	XP_021331266.1	39.419	241	133	1	139	366	307	547
## 405	NP_001348394.1	XP_021331266.1	41.589	214	125	0	153	366	2126	2339
## 406	NP_001348394.1	XP_021331266.1	42.523	214	123	0	153	366	1510	1723
## 407	NP_001348394.1	XP_021331266.1	43.925	214	120	0	153	366	586	799
## 408	NP_001348394.1	XP_021331266.1	42.056	214	124	0	153	366	2238	2451
## 409	NP_001348394.1	XP_021331266.1	37.681	276	156	2	99	366	504	771
## 410	NP_001348394.1	XP_021331266.1	41.589	214	125	0	153	366	614	827
## 411	NP_001348394.1	XP_021331266.1	42.922	219	125	0	148	366	1197	1415
## 412	NP_001348394.1	XP_021331266.1	43.925	214	120	0	153	366	838	1051
## 413	NP_001348394.1	XP_021331266.1	43.458	214	121	0	153	366	1062	1275
## 414	NP_001348394.1	XP_021331266.1	43.925	214	120	0	153	366	1258	1471
## 415	NP_001348394.1	XP_021331266.1	41.860	215	125	0	153	367	1398	1612
## 416	NP_001348394.1	XP_021331266.1	44.560	193	107	0	174	366	439	631
## 417	NP_001348394.1	XP_021331266.1	42.523	214	123	0	153	366	2322	2535
## 418	NP_001348394.1	XP_021331266.1	42.523	214	123	0	153	366	810	1023
## 419	NP_001348394.1	XP_021331266.1	43.458	214	121	0	153	366	866	1079
## 420	NP_001348394.1	XP_021331266.1	37.363	273	161	2	99	366	700	967

## 421	NP_001348394.1	XP_021331266.1	44.393	214	119	0	153	366	1006	1219
## 422	NP_001348394.1	XP_021331266.1	36.232	276	160	2	99	366	2436	2703
## 423	NP_001348394.1	XP_021331266.1	37.681	276	156	2	99	366	840	1107
## 424	NP_001348394.1	XP_021331266.1	42.523	214	123	0	153	366	446	659
## 425	NP_001348394.1	XP_021331266.1	43.056	216	123	0	153	368	950	1165
## 426	NP_001348394.1	XP_021331266.1	38.007	271	162	2	99	366	728	995
## 427	NP_001348394.1	XP_021331266.1	40.654	214	127	0	153	366	1566	1779
## 428	NP_001348394.1	XP_021331266.1	44.041	193	108	0	174	366	1811	2003
## 429	NP_001348394.1	XP_021331266.1	42.523	214	123	0	153	366	474	687
## 430	NP_001348394.1	XP_021331266.1	42.056	214	124	0	153	366	1818	2031
## 431	NP_001348394.1	XP_021331266.1	42.056	214	124	0	153	366	2378	2591
## 432	NP_001348394.1	XP_021331266.1	42.411	224	129	0	143	366	1612	1835
## 433	NP_001348394.1	XP_021331266.1	42.254	213	123	0	154	366	1707	1919
## 434	NP_001348394.1	XP_021331266.1	42.523	214	123	0	153	366	1846	2059
## 435	NP_001348394.1	XP_021331266.1	41.860	215	125	0	153	367	390	604
## 436	NP_001348394.1	XP_021331266.1	42.523	214	123	0	153	366	1538	1751
## 437	NP_001348394.1	XP_021331266.1	40.254	236	140	1	132	366	2496	2731
## 438	NP_001348394.1	XP_021331266.1	41.121	214	126	0	153	366	1370	1583
## 439	NP_001348394.1	XP_021331266.1	37.687	268	167	0	99	366	1036	1303
## 440	NP_001348394.1	XP_021331266.1	42.056	214	124	0	153	366	2574	2787
## 441	NP_001348394.1	XP_021331266.1	36.957	276	158	2	99	366	868	1135
## 442	NP_001348394.1	XP_021331266.1	41.121	214	126	0	153	366	1118	1331
## 443	NP_001348394.1	XP_021331266.1	41.860	215	125	0	153	367	1762	1976
## 444	NP_001348394.1	XP_021331266.1	42.056	214	124	0	153	366	2630	2843
## 445	NP_001348394.1	XP_021331266.1	35.870	276	161	2	99	366	2296	2563
## 446	NP_001348394.1	XP_021331266.1	41.589	214	125	0	153	366	2546	2759
## 447	NP_001348394.1	XP_021331266.1	40.187	214	128	0	153	366	2070	2283
## 448	NP_001348394.1	XP_021331266.1	34.333	300	188	3	69	366	1207	1499
## 449	NP_001348394.1	XP_021331266.1	36.594	276	159	2	99	366	2548	2815
## 450	NP_001348394.1	XP_021331266.1	43.005	193	110	0	174	366	2119	2311
## 451	NP_001348394.1	XP_021331266.1	37.269	271	164	2	99	366	224	491
## 452	NP_001348394.1	XP_021331266.1	38.356	219	135	0	148	366	133	351
## 453	NP_001348394.1	XP_021331266.1	39.720	214	129	0	153	366	306	519
## 454	NP_001348394.1	XP_021331266.1	38.785	214	131	0	153	366	2042	2255
## 455	NP_001348394.1	XP_021331266.1	41.667	192	112	0	175	366	216	407
## 456	NP_001348394.1	XP_021331266.1	40.930	215	127	0	153	367	2658	2872
## 457	NP_001348394.1	XP_021331266.1	35.656	244	153	1	127	366	52	295
## 458	NP_001348394.1	XP_021331266.1	39.896	193	116	0	174	366	131	323
## 459	NP_001348394.1	XP_021331266.1	43.558	163	92	0	153	315	2714	2876
## 460	NP_001348394.1	XP_021328500.1	44.651	215	119	0	152	366	98	312
## 461	NP_001348394.1	XP_021328500.1	43.925	214	120	0	153	366	323	536
## 462	NP_001348394.1	XP_021328500.1	42.056	214	124	0	153	366	211	424
## 463	NP_001348394.1	XP_021328500.1	45.596	193	105	0	174	366	8	200
## 464	NP_001348394.1	XP_021328500.1	41.589	214	125	0	153	366	71	284
## 465	NP_001348394.1	XP_021328500.1	42.991	214	122	0	153	366	295	508
## 466	NP_001348394.1	XP_021328500.1	42.523	214	123	0	153	366	43	256
## 467	NP_001348394.1	XP_021328500.1	42.056	214	124	0	153	366	267	480
## 468	NP_001348394.1	XP_021328500.1	42.523	214	123	0	153	366	15	228
## 469	NP_001348394.1	XP_021328500.1	42.523	214	123	0	153	366	155	368
## 470	NP_001348394.1	XP_021328500.1	35.870	276	161	2	99	366	129	396
## 471	NP_001348394.1	XP_021328500.1	47.059	170	90	0	197	366	3	172
## 472	NP_001348394.1	XP_021328500.1	40.654	214	127	0	153	366	239	452
## 473	NP_001348394.1	XP_021328500.1	44.970	169	93	0	174	342	372	540
## 474	NP_001348394.1	XP_021328500.1	37.600	250	144	4	75	317	299	543

## 475	NP_001348394.1	XP_021328500.1	48.252	143	74	0	224	366	2	144
## 476	NP_001348394.1	XP_021328499.1	44.651	215	119	0	152	366	98	312
## 477	NP_001348394.1	XP_021328499.1	42.056	214	124	0	153	366	211	424
## 478	NP_001348394.1	XP_021328499.1	45.596	193	105	0	174	366	8	200
## 479	NP_001348394.1	XP_021328499.1	41.589	214	125	0	153	366	71	284
## 480	NP_001348394.1	XP_021328499.1	42.523	214	123	0	153	366	43	256
## 481	NP_001348394.1	XP_021328499.1	43.318	217	120	1	153	366	323	539
## 482	NP_001348394.1	XP_021328499.1	42.523	214	123	0	153	366	15	228
## 483	NP_001348394.1	XP_021328499.1	42.523	214	123	0	153	366	155	368
## 484	NP_001348394.1	XP_021328499.1	43.069	202	115	0	153	354	267	468
## 485	NP_001348394.1	XP_021328499.1	35.870	276	161	2	99	366	129	396
## 486	NP_001348394.1	XP_021328499.1	47.059	170	90	0	197	366	3	172
## 487	NP_001348394.1	XP_021328499.1	40.654	214	127	0	153	366	239	452
## 488	NP_001348394.1	XP_021328499.1	37.549	253	143	5	75	317	299	546
## 489	NP_001348394.1	XP_021328499.1	48.252	143	74	0	224	366	2	144
## 490	NP_001348394.1	XP_021328528.1	44.651	215	119	0	152	366	126	340
## 491	NP_001348394.1	XP_021328528.1	43.925	214	120	0	153	366	15	228
## 492	NP_001348394.1	XP_021328528.1	46.114	193	104	0	174	366	8	200
## 493	NP_001348394.1	XP_021328528.1	42.056	214	124	0	153	366	239	452
## 494	NP_001348394.1	XP_021328528.1	41.589	214	125	0	153	366	99	312
## 495	NP_001348394.1	XP_021328528.1	42.523	214	123	0	153	366	71	284
## 496	NP_001348394.1	XP_021328528.1	42.523	214	123	0	153	366	43	256
## 497	NP_001348394.1	XP_021328528.1	42.523	214	123	0	153	366	183	396
## 498	NP_001348394.1	XP_021328528.1	41.589	214	125	0	153	366	295	508
## 499	NP_001348394.1	XP_021328528.1	42.991	214	122	0	153	366	351	564
## 500	NP_001348394.1	XP_021328528.1	35.870	276	161	2	99	366	157	424
## 501	NP_001348394.1	XP_021328528.1	41.589	214	125	0	153	366	323	536
## 502	NP_001348394.1	XP_021328528.1	48.235	170	88	0	197	366	3	172
## 503	NP_001348394.1	XP_021328528.1	40.654	214	127	0	153	366	267	480
## 504	NP_001348394.1	XP_021328528.1	37.200	250	145	4	75	317	327	571
## 505	NP_001348394.1	XP_021328528.1	44.828	87	48	0	280	366	2	88
## 506	NP_001348394.1	XP_021331018.1	46.114	193	104	0	174	366	198	390
## 507	NP_001348394.1	XP_021331018.1	42.991	214	122	0	153	366	205	418
## 508	NP_001348394.1	XP_021331018.1	41.026	234	133	1	138	366	129	362
## 509	NP_001348394.1	XP_021331018.1	43.684	190	107	0	153	342	233	422
## 510	NP_001348394.1	XP_021331018.1	37.255	51	32	0	153	203	373	423
## 511	NP_001348394.1	XP_021331293.1	43.925	214	120	0	153	366	99	312
## 512	NP_001348394.1	XP_021331293.1	37.681	276	156	2	99	366	129	396
## 513	NP_001348394.1	XP_021331293.1	42.523	214	123	0	153	366	43	256
## 514	NP_001348394.1	XP_021331293.1	44.560	193	107	0	174	366	8	200
## 515	NP_001348394.1	XP_021331293.1	42.056	214	124	0	153	366	15	228
## 516	NP_001348394.1	XP_021331293.1	40.654	214	127	0	153	366	71	284
## 517	NP_001348394.1	XP_021331293.1	46.471	170	91	0	197	366	3	172
## 518	NP_001348394.1	XP_021331293.1	41.791	201	117	0	153	353	211	411
## 519	NP_001348394.1	XP_021331293.1	44.828	87	48	0	280	366	2	88
## 520	NP_001348394.1	XP_009299203.2	42.982	228	129	1	140	366	207	434
## 521	NP_001348394.1	XP_009299203.2	43.925	214	120	0	153	366	249	462
## 522	NP_001348394.1	XP_009299203.2	41.322	242	137	1	125	366	282	518
## 523	NP_001348394.1	XP_009299203.2	42.523	214	123	0	153	366	165	378
## 524	NP_001348394.1	XP_009299203.2	42.358	229	131	1	141	368	264	492
## 525	NP_001348394.1	XP_009299203.2	37.594	266	150	3	109	366	149	406
## 526	NP_001348394.1	XP_009299203.2	42.056	214	124	0	153	366	109	322
## 527	NP_001348394.1	XP_009299203.2	37.549	253	148	2	99	346	279	526
## 528	NP_001348394.1	XP_009299203.2	40.415	193	115	0	174	366	102	294

## 529	NP_001348394.1	XP_009299203.2	42.697	178	102	0	191	368	91	268
## 530	NP_001348394.1	XP_009299203.2	46.154	156	84	0	211	366	83	238
## 531	NP_001348394.1	XP_009299203.2	42.308	130	75	0	239	368	83	212
## 532	NP_001348394.1	XP_021331294.1	43.925	214	120	0	153	366	99	312
## 533	NP_001348394.1	XP_021331294.1	38.043	276	155	2	99	366	129	396
## 534	NP_001348394.1	XP_021331294.1	42.523	214	123	0	153	366	43	256
## 535	NP_001348394.1	XP_021331294.1	44.560	193	107	0	174	366	8	200
## 536	NP_001348394.1	XP_021331294.1	42.056	214	124	0	153	366	15	228
## 537	NP_001348394.1	XP_021331294.1	40.654	214	127	0	153	366	71	284
## 538	NP_001348394.1	XP_021331294.1	42.857	203	116	0	153	355	211	413
## 539	NP_001348394.1	XP_021331294.1	46.471	170	91	0	197	366	3	172
## 540	NP_001348394.1	XP_021331294.1	33.610	241	116	3	99	303	185	417
## 541	NP_001348394.1	XP_021331294.1	44.828	87	48	0	280	366	2	88
## 542	NP_001348394.1	XP_021327006.1	42.991	214	122	0	153	366	86	299
## 543	NP_001348394.1	XP_021327006.1	36.594	276	159	2	99	366	172	439
## 544	NP_001348394.1	XP_021327006.1	44.845	194	107	0	153	346	310	503
## 545	NP_001348394.1	XP_021327006.1	38.153	249	146	1	118	366	227	467
## 546	NP_001348394.1	XP_021327006.1	39.189	222	135	0	145	366	50	271
## 547	NP_001348394.1	XP_021327006.1	41.121	214	126	0	153	366	142	355
## 548	NP_001348394.1	XP_021327006.1	40.000	215	129	0	153	367	282	496
## 549	NP_001348394.1	XP_021327006.1	43.713	167	94	0	200	366	49	215
## 550	NP_001348394.1	XP_009299198.1	40.698	258	153	0	109	366	127	384
## 551	NP_001348394.1	XP_009299198.1	39.179	268	163	0	99	366	145	412
## 552	NP_001348394.1	XP_009299198.1	39.184	245	145	2	126	366	56	300
## 553	NP_001348394.1	XP_009299198.1	39.352	216	131	0	153	368	227	442
## 554	NP_001348394.1	XP_009299198.1	36.260	262	167	0	109	370	211	472
## 555	NP_001348394.1	XP_009299198.1	40.299	201	120	0	168	368	74	274
## 556	NP_001348394.1	XP_021331063.1	39.462	223	135	0	145	367	7	229
## 557	NP_001348394.1	XP_021331063.1	43.529	170	96	0	197	366	3	172
## 558	NP_001348394.1	XP_021331063.1	42.268	194	112	0	153	346	43	236
## 559	NP_001348394.1	XP_021331063.1	43.357	143	81	0	224	366	2	144
## 560	NP_001348394.1	XP_021331208.1	40.541	222	132	0	145	366	7	228
## 561	NP_001348394.1	XP_021331208.1	43.925	214	120	0	153	366	43	256
## 562	NP_001348394.1	XP_021331208.1	43.925	214	120	0	153	366	155	368
## 563	NP_001348394.1	XP_021331208.1	38.406	276	154	2	99	366	157	424
## 564	NP_001348394.1	XP_021331208.1	38.406	276	154	2	99	366	185	452
## 565	NP_001348394.1	XP_021331208.1	42.523	214	123	0	153	366	127	340
## 566	NP_001348394.1	XP_021331208.1	42.056	214	124	0	153	366	71	284
## 567	NP_001348394.1	XP_021331208.1	42.523	214	123	0	153	366	99	312
## 568	NP_001348394.1	XP_021331208.1	43.455	191	108	0	153	343	267	457
## 569	NP_001348394.1	XP_021331208.1	43.529	170	96	0	197	366	3	172
## 570	NP_001348394.1	XP_021331208.1	43.678	87	49	0	280	366	2	88
## 571	NP_001348394.1	XP_021331433.1	44.393	214	119	0	153	366	5	218
## 572	NP_001348394.1	XP_021331433.1	42.009	219	127	0	153	371	145	363
## 573	NP_001348394.1	XP_021331433.1	36.232	276	160	2	99	366	7	274
## 574	NP_001348394.1	XP_021331433.1	45.789	190	103	0	177	366	1	190
## 575	NP_001348394.1	XP_021331433.1	41.589	214	125	0	153	366	173	386
## 576	NP_001348394.1	XP_021331433.1	34.868	304	154	4	99	366	35	330
## 577	NP_001348394.1	XP_021331433.1	36.508	252	144	2	99	342	147	390
## 578	NP_001348394.1	XP_021331277.1	44.144	222	124	0	145	366	113	334
## 579	NP_001348394.1	XP_021331277.1	35.052	291	188	1	77	367	102	391
## 580	NP_001348394.1	XP_021331277.1	44.059	202	107	1	173	368	79	280
## 581	NP_001348394.1	XP_021331277.1	39.070	215	131	0	153	367	205	419
## 582	NP_001348394.1	XP_021331277.1	36.527	167	106	0	148	314	256	422

## 583	NP_001348394.1	XP_021331277.1	33.333	51	34	0	153	203	373	423
## 584	NP_001348394.1	XP_021331031.1	42.523	214	123	0	153	366	41	254
## 585	NP_001348394.1	XP_021331031.1	43.455	191	108	0	176	366	36	226
## 586	NP_001348394.1	XP_021331031.1	41.237	194	114	0	153	346	69	262
## 587	NP_001348394.1	XP_021331392.1	44.393	214	119	0	153	366	99	312
## 588	NP_001348394.1	XP_021331392.1	36.949	295	169	3	77	366	2	284
## 589	NP_001348394.1	XP_021331392.1	42.081	221	128	0	146	366	148	368
## 590	NP_001348394.1	XP_021331392.1	43.056	216	123	0	153	368	127	342
## 591	NP_001348394.1	XP_021331392.1	43.827	162	91	0	153	314	211	372
## 592	NP_001348394.1	XP_021331323.1	43.182	220	124	1	153	371	74	293
## 593	NP_001348394.1	XP_021331323.1	40.654	214	127	0	153	366	18	231
## 594	NP_001348394.1	XP_021331323.1	43.005	193	110	0	174	366	11	203
## 595	NP_001348394.1	XP_021331323.1	40.654	214	127	0	153	366	46	259
## 596	NP_001348394.1	XP_021331323.1	42.775	173	99	0	194	366	3	175
## 597	NP_001348394.1	XP_003198540.5	44.651	215	119	0	152	366	347	561
## 598	NP_001348394.1	XP_003198540.5	39.855	276	150	2	99	366	546	813
## 599	NP_001348394.1	XP_003198540.5	44.393	214	119	0	153	366	404	617
## 600	NP_001348394.1	XP_003198540.5	44.860	214	118	0	153	366	236	449
## 601	NP_001348394.1	XP_003198540.5	47.959	196	102	0	171	366	198	393
## 602	NP_001348394.1	XP_003198540.5	42.795	229	130	1	138	366	194	421
## 603	NP_001348394.1	XP_003198540.5	44.393	214	119	0	153	366	544	757
## 604	NP_001348394.1	XP_003198540.5	42.991	214	122	0	153	366	292	505
## 605	NP_001348394.1	XP_003198540.5	42.056	214	124	0	153	366	460	673
## 606	NP_001348394.1	XP_003198540.5	41.589	214	125	0	153	366	320	533
## 607	NP_001348394.1	XP_003198540.5	42.523	214	123	0	153	366	516	729
## 608	NP_001348394.1	XP_003198540.5	42.056	214	124	0	153	366	656	869
## 609	NP_001348394.1	XP_003198540.5	37.319	276	157	2	99	366	574	841
## 610	NP_001348394.1	XP_003198540.5	36.594	276	159	2	99	366	378	645
## 611	NP_001348394.1	XP_003198540.5	42.523	214	123	0	153	366	264	477
## 612	NP_001348394.1	XP_003198540.5	36.594	276	159	2	99	366	434	701
## 613	NP_001348394.1	XP_003198540.5	40.796	201	119	0	153	353	684	884
## 614	NP_001348394.1	XP_003198540.5	43.820	178	100	0	152	329	711	888
## 615	NP_001348394.1	XP_003198540.5	33.721	258	155	3	113	366	8	253
## 616	NP_001348394.1	XP_021327018.1	44.393	214	119	0	153	366	60	273
## 617	NP_001348394.1	XP_021327018.1	42.791	215	123	0	153	367	88	302
## 618	NP_001348394.1	XP_021327018.1	43.005	193	110	0	174	366	53	245
## 619	NP_001348394.1	XP_021327018.1	41.589	214	125	0	153	366	116	329
## 620	NP_001348394.1	XP_021327018.1	44.706	170	94	0	197	366	48	217
## 621	NP_001348394.1	XP_021327018.1	34.343	297	157	4	99	362	90	381
## 622	NP_001348394.1	XP_021329626.1	44.595	222	123	0	145	366	53	274
## 623	NP_001348394.1	XP_021329626.1	44.792	192	106	0	176	367	56	247
## 624	NP_001348394.1	XP_021329626.1	37.743	257	160	0	110	366	74	330
## 625	NP_001348394.1	XP_021329626.1	41.837	196	114	0	153	348	173	368
## 626	NP_001348394.1	XP_021329625.1	44.595	222	123	0	145	366	53	274
## 627	NP_001348394.1	XP_021329625.1	44.792	192	106	0	176	367	56	247
## 628	NP_001348394.1	XP_021329625.1	37.743	257	160	0	110	366	74	330
## 629	NP_001348394.1	XP_021329625.1	41.837	196	114	0	153	348	173	368
## 630	NP_001348394.1	XP_021329624.1	44.595	222	123	0	145	366	53	274
## 631	NP_001348394.1	XP_021329624.1	44.792	192	106	0	176	367	56	247
## 632	NP_001348394.1	XP_021329624.1	37.743	257	160	0	110	366	74	330
## 633	NP_001348394.1	XP_021329624.1	41.837	196	114	0	153	348	173	368
## 634	NP_001348394.1	XP_021329623.1	44.595	222	123	0	145	366	53	274
## 635	NP_001348394.1	XP_021329623.1	44.792	192	106	0	176	367	56	247
## 636	NP_001348394.1	XP_021329623.1	37.743	257	160	0	110	366	74	330

## 637	NP_001348394.1	XP_021329623.1	41.837	196	114	0	153	348	173	368
## 638	NP_001348394.1	XP_021331264.1	43.458	214	121	0	153	366	78	291
## 639	NP_001348394.1	XP_021331264.1	42.056	214	124	0	153	366	50	263
## 640	NP_001348394.1	XP_021331264.1	40.187	214	128	0	153	366	22	235
## 641	NP_001348394.1	XP_021331264.1	44.041	193	108	0	174	366	15	207
## 642	NP_001348394.1	XP_021331264.1	43.820	178	100	0	189	366	2	179
## 643	NP_001348394.1	XP_021331264.1	39.896	193	116	0	153	345	106	298
## 644	NP_001348394.1	XP_021331264.1	44.715	123	68	0	244	366	1	123
## 645	NP_001348394.1	XP_021331206.1	40.541	222	132	0	145	366	7	228
## 646	NP_001348394.1	XP_021331206.1	44.393	214	119	0	153	366	43	256
## 647	NP_001348394.1	XP_021331206.1	43.925	214	120	0	153	366	155	368
## 648	NP_001348394.1	XP_021331206.1	43.458	214	121	0	153	366	183	396
## 649	NP_001348394.1	XP_021331206.1	42.523	214	123	0	153	366	127	340
## 650	NP_001348394.1	XP_021331206.1	37.681	276	156	2	99	366	157	424
## 651	NP_001348394.1	XP_021331206.1	41.589	214	125	0	153	366	71	284
## 652	NP_001348394.1	XP_021331206.1	41.589	214	125	0	153	366	99	312
## 653	NP_001348394.1	XP_021331206.1	36.957	276	158	2	99	366	185	452
## 654	NP_001348394.1	XP_021331206.1	42.056	214	124	0	153	366	267	480
## 655	NP_001348394.1	XP_021331206.1	43.529	170	96	0	197	366	3	172
## 656	NP_001348394.1	XP_021331206.1	41.361	191	112	0	153	343	295	485
## 657	NP_001348394.1	XP_021331206.1	43.678	87	49	0	280	366	2	88
## 658	NP_001348394.1	XP_017210929.2	45.596	193	105	0	174	366	41	233
## 659	NP_001348394.1	XP_017210929.2	43.458	214	121	0	153	366	48	261
## 660	NP_001348394.1	XP_017210929.2	42.056	214	124	0	153	366	76	289
## 661	NP_001348394.1	XP_017210929.2	39.130	253	144	2	99	346	50	297
## 662	NP_001348394.1	XP_017210929.2	43.299	194	110	0	173	366	12	205
## 663	NP_001348394.1	XP_017210929.2	44.633	177	98	0	190	366	1	177
## 664	NP_001348394.1	XP_017210929.2	40.690	145	86	0	153	297	160	304
## 665	NP_001348394.1	XP_017210929.2	36.975	119	75	0	153	271	188	306
## 666	NP_001348394.1	XP_021330537.1	45.327	214	117	0	153	366	61	274
## 667	NP_001348394.1	XP_021330537.1	44.503	191	106	0	176	366	56	246
## 668	NP_001348394.1	XP_021330537.1	38.132	257	159	0	110	366	74	330
## 669	NP_001348394.1	XP_021330537.1	41.753	194	113	0	153	346	173	366
## 670	NP_001348394.1	XP_021330537.1	45.455	165	90	0	202	366	54	218
## 671	NP_001348394.1	XP_021331375.1	44.186	215	120	0	152	366	98	312
## 672	NP_001348394.1	XP_021331375.1	39.493	276	151	2	99	366	269	536
## 673	NP_001348394.1	XP_021331375.1	42.991	214	122	0	153	366	43	256
## 674	NP_001348394.1	XP_021331375.1	37.319	276	157	2	99	366	101	368
## 675	NP_001348394.1	XP_021331375.1	42.523	214	123	0	153	366	239	452
## 676	NP_001348394.1	XP_021331375.1	45.596	193	105	0	174	366	8	200
## 677	NP_001348394.1	XP_021331375.1	42.991	214	122	0	153	366	15	228
## 678	NP_001348394.1	XP_021331375.1	35.870	276	161	2	99	366	129	396
## 679	NP_001348394.1	XP_021331375.1	41.121	214	126	0	153	366	71	284
## 680	NP_001348394.1	XP_021331375.1	40.654	214	127	0	153	366	211	424
## 681	NP_001348394.1	XP_021331375.1	46.471	170	91	0	197	366	3	172
## 682	NP_001348394.1	XP_021331375.1	49.645	141	71	0	224	364	2	142
## 683	NP_001348394.1	XP_021331375.1	46.957	115	61	0	252	366	2	116
## 684	NP_001348394.1	XP_021331419.1	39.925	268	161	0	99	366	85	352
## 685	NP_001348394.1	XP_021331419.1	42.523	214	123	0	153	366	83	296
## 686	NP_001348394.1	XP_021331419.1	41.860	215	125	0	153	367	195	409
## 687	NP_001348394.1	XP_021331419.1	41.589	214	125	0	153	366	55	268
## 688	NP_001348394.1	XP_021331419.1	36.502	263	151	2	99	353	169	423
## 689	NP_001348394.1	XP_021331419.1	40.314	191	114	0	176	366	50	240
## 690	NP_001348394.1	XP_021331419.1	39.130	138	84	0	229	366	47	184

## 691	NP_001348394.1	XP_021330828.1	44.186	215	120	0	152	366	209	423
## 692	NP_001348394.1	XP_021330828.1	44.860	214	118	0	153	366	434	647
## 693	NP_001348394.1	XP_021330828.1	44.393	214	119	0	153	366	98	311
## 694	NP_001348394.1	XP_021330828.1	44.444	216	120	0	151	366	68	283
## 695	NP_001348394.1	XP_021330828.1	43.458	214	121	0	153	366	406	619
## 696	NP_001348394.1	XP_021330828.1	42.523	214	123	0	153	366	266	479
## 697	NP_001348394.1	XP_021330828.1	43.458	214	121	0	153	366	154	367
## 698	NP_001348394.1	XP_021330828.1	41.589	214	125	0	153	366	182	395
## 699	NP_001348394.1	XP_021330828.1	43.458	214	121	0	153	366	126	339
## 700	NP_001348394.1	XP_021330828.1	42.056	214	124	0	153	366	490	703
## 701	NP_001348394.1	XP_021330828.1	43.925	214	120	0	153	366	378	591
## 702	NP_001348394.1	XP_021330828.1	42.056	214	124	0	153	366	322	535
## 703	NP_001348394.1	XP_021330828.1	42.991	214	122	0	153	366	462	675
## 704	NP_001348394.1	XP_021330828.1	40.187	214	128	0	153	366	294	507
## 705	NP_001348394.1	XP_021330828.1	41.667	192	112	0	153	344	518	709
## 706	NP_001348394.1	XP_021330828.1	44.848	165	91	0	152	316	545	709
## 707	NP_001348394.1	XP_021330829.1	42.991	214	122	0	153	366	24	237
## 708	NP_001348394.1	XP_021330829.1	41.885	191	111	0	176	366	19	209
## 709	NP_001348394.1	XP_021330829.1	41.579	190	111	0	153	342	80	269
## 710	NP_001348394.1	XP_021330829.1	38.117	223	128	3	99	316	54	271
## 711	NP_001348394.1	XP_021330829.1	42.975	121	69	0	248	368	7	127
## 712	NP_001348394.1	XP_017211221.1	41.633	245	139	2	126	366	56	300
## 713	NP_001348394.1	XP_017211221.1	46.597	191	102	0	176	366	138	328
## 714	NP_001348394.1	XP_017211221.1	39.352	216	131	0	153	368	143	358
## 715	NP_001348394.1	XP_017211221.1	36.466	266	161	2	109	370	127	388
## 716	NP_001348394.1	XP_017211221.1	43.119	109	62	0	260	368	82	190
## 717	NP_001348394.1	XP_021330855.1	42.056	214	124	0	153	366	161	374
## 718	NP_001348394.1	XP_021330855.1	41.704	223	130	0	146	368	182	404
## 719	NP_001348394.1	XP_021330855.1	42.523	214	123	0	153	366	105	318
## 720	NP_001348394.1	XP_021330855.1	40.724	221	131	0	146	366	126	346
## 721	NP_001348394.1	XP_021330855.1	41.589	214	125	0	153	366	49	262
## 722	NP_001348394.1	XP_021330855.1	36.594	276	159	3	99	366	23	290
## 723	NP_001348394.1	XP_021330855.1	40.000	225	135	0	142	366	10	234
## 724	NP_001348394.1	XP_021330855.1	40.654	214	127	0	153	366	217	430
## 725	NP_001348394.1	XP_021330855.1	39.086	197	120	0	146	342	238	434
## 726	NP_001348394.1	XP_021330855.1	42.331	163	94	0	153	315	273	435
## 727	NP_001348394.1	XP_017208652.1	42.009	219	127	0	153	371	280	498
## 728	NP_001348394.1	XP_017208652.1	39.070	215	131	0	152	366	195	409
## 729	NP_001348394.1	XP_017208652.1	39.904	208	125	0	159	366	146	353
## 730	NP_001348394.1	XP_017208652.1	38.889	234	123	1	153	366	92	325
## 731	NP_001348394.1	XP_017208652.1	38.140	215	133	0	152	366	167	381
## 732	NP_001348394.1	XP_017208652.1	39.535	215	130	0	152	366	223	437
## 733	NP_001348394.1	XP_017208652.1	34.404	218	95	1	199	368	82	299
## 734	NP_001348394.1	NP_001103332.1	42.291	227	130	1	140	366	48	273
## 735	NP_001348394.1	NP_001103332.1	43.316	187	106	0	153	339	116	302
## 736	NP_001348394.1	XP_021331368.1	38.849	278	154	3	99	368	113	382
## 737	NP_001348394.1	XP_021331368.1	42.056	214	124	0	153	366	27	240
## 738	NP_001348394.1	XP_021331368.1	42.056	214	124	0	153	366	83	296
## 739	NP_001348394.1	XP_021331368.1	42.523	214	123	0	153	366	55	268
## 740	NP_001348394.1	XP_021331368.1	41.038	212	125	0	155	366	1	212
## 741	NP_001348394.1	XP_021331368.1	35.870	276	161	2	99	366	141	408
## 742	NP_001348394.1	XP_021331368.1	40.491	163	97	0	153	315	251	413
## 743	NP_001348394.1	XP_021331015.1	45.026	191	105	0	176	366	1	191
## 744	NP_001348394.1	XP_021331015.1	44.271	192	107	0	153	344	6	197

##	745	NP_001348394.1	XP_009298771.1	43.439	221	125	0	148	368	82	302
##	746	NP_001348394.1	XP_009298771.1	45.550	191	104	0	176	366	138	328
##	747	NP_001348394.1	XP_009298771.1	36.122	263	160	2	109	367	127	385
##	748	NP_001348394.1	XP_009298771.1	37.963	216	134	0	153	368	143	358
##	749	NP_001348394.1	XP_009298771.1	35.928	167	107	0	148	314	222	388
##	750	NP_001348394.1	XP_017209999.1	42.991	214	122	0	153	366	71	284
##	751	NP_001348394.1	XP_017209999.1	45.550	191	104	0	176	366	66	256
##	752	NP_001348394.1	XP_017209999.1	42.523	214	123	0	153	366	99	312
##	753	NP_001348394.1	XP_017209999.1	43.256	215	122	0	153	367	127	341
##	754	NP_001348394.1	XP_017211176.1	43.458	214	121	0	153	366	70	283
##	755	NP_001348394.1	XP_017211176.1	43.636	220	118	1	153	366	126	345
##	756	NP_001348394.1	XP_017211176.1	42.408	191	110	0	176	366	65	255
##	757	NP_001348394.1	XP_017211176.1	41.624	197	109	1	153	343	154	350
##	758	NP_001348394.1	XP_021331369.1	37.681	276	156	2	99	366	63	330
##	759	NP_001348394.1	XP_021331369.1	40.654	214	127	0	153	366	5	218
##	760	NP_001348394.1	XP_021331369.1	41.850	227	131	1	141	366	48	274
##	761	NP_001348394.1	XP_021331369.1	41.589	214	125	0	153	366	145	358
##	762	NP_001348394.1	XP_021331369.1	44.737	190	105	0	177	366	1	190
##	763	NP_001348394.1	XP_021331369.1	42.500	160	92	0	153	312	201	360
##	764	NP_001348394.1	XP_021331369.1	32.692	52	35	0	317	368	1	52
##	765	NP_001348394.1	XP_021331369.1	26.606	109	70	2	99	202	259	362
##	766	NP_001348394.1	XP_021327009.1	43.458	214	120	1	153	366	61	273
##	767	NP_001348394.1	XP_021327009.1	42.130	216	124	1	153	368	89	303
##	768	NP_001348394.1	XP_021327009.1	39.726	219	132	0	148	366	111	329
##	769	NP_001348394.1	XP_021327009.1	45.775	142	76	1	229	370	53	193
##	770	NP_001348394.1	XP_021327009.1	33.790	219	135	2	99	312	118	331
##	771	NP_001348394.1	XP_021327008.1	43.458	214	120	1	153	366	61	273
##	772	NP_001348394.1	XP_021327008.1	42.130	216	124	1	153	368	89	303
##	773	NP_001348394.1	XP_021327008.1	39.726	219	132	0	148	366	111	329
##	774	NP_001348394.1	XP_021327008.1	45.775	142	76	1	229	370	53	193
##	775	NP_001348394.1	XP_021327008.1	33.790	219	135	2	99	312	118	331
##	776	NP_001348394.1	XP_021327007.1	43.458	214	120	1	153	366	61	273
##	777	NP_001348394.1	XP_021327007.1	42.130	216	124	1	153	368	89	303
##	778	NP_001348394.1	XP_021327007.1	39.726	219	132	0	148	366	111	329
##	779	NP_001348394.1	XP_021327007.1	45.775	142	76	1	229	370	53	193
##	780	NP_001348394.1	XP_021327007.1	33.790	219	135	2	99	312	118	331
##	781	NP_001348394.1	XP_021331332.1	45.327	214	117	0	153	366	603	816
##	782	NP_001348394.1	XP_021331332.1	36.594	276	159	2	99	366	661	928
##	783	NP_001348394.1	XP_021331332.1	35.354	297	180	3	77	366	609	900
##	784	NP_001348394.1	XP_021331332.1	39.033	269	162	2	99	366	45	312
##	785	NP_001348394.1	XP_021331332.1	42.523	214	123	0	153	366	267	480
##	786	NP_001348394.1	XP_021331332.1	42.056	214	124	0	153	366	743	956
##	787	NP_001348394.1	XP_021331332.1	42.523	214	123	0	153	366	883	1096
##	788	NP_001348394.1	XP_021331332.1	42.731	227	130	0	140	366	2	228
##	789	NP_001348394.1	XP_021331332.1	42.056	214	124	0	153	366	547	760
##	790	NP_001348394.1	XP_021331332.1	42.523	214	123	0	153	366	239	452
##	791	NP_001348394.1	XP_021331332.1	42.056	214	124	0	153	366	295	508
##	792	NP_001348394.1	XP_021331332.1	35.811	296	162	2	99	366	129	424
##	793	NP_001348394.1	XP_021331332.1	40.991	222	131	0	145	366	567	788
##	794	NP_001348394.1	XP_021331332.1	40.090	222	132	1	145	366	903	1123
##	795	NP_001348394.1	XP_021331332.1	40.654	214	127	0	153	366	855	1068
##	796	NP_001348394.1	XP_021331332.1	35.145	276	163	2	99	366	773	1040
##	797	NP_001348394.1	XP_021331332.1	43.523	193	109	0	174	366	484	676
##	798	NP_001348394.1	XP_021331332.1	41.121	214	126	0	153	366	351	564

## 799	NP_001348394.1	XP_021331332.1	35.870	276	161	2	99	366	745	1012
## 800	NP_001348394.1	XP_021331332.1	35.145	276	163	2	99	366	717	984
## 801	NP_001348394.1	XP_021331332.1	36.594	276	159	2	99	366	269	536
## 802	NP_001348394.1	XP_021331332.1	40.187	214	128	0	153	366	379	592
## 803	NP_001348394.1	XP_021331332.1	35.507	276	162	2	99	366	437	704
## 804	NP_001348394.1	XP_021331332.1	40.187	214	128	0	153	366	519	732
## 805	NP_001348394.1	XP_021331332.1	34.130	293	176	3	77	364	338	618
## 806	NP_001348394.1	XP_021331332.1	38.785	214	131	0	153	366	435	648
## 807	NP_001348394.1	XP_021331332.1	42.784	194	110	1	153	346	1079	1271
## 808	NP_001348394.1	XP_021331332.1	33.779	299	163	3	99	366	969	1263
## 809	NP_001348394.1	XP_021331332.1	43.023	172	98	0	197	368	3	174
## 810	NP_001348394.1	XP_021331332.1	42.424	33	19	0	336	368	2	34
## 811	NP_001348394.1	XP_017211134.1	41.150	226	133	0	141	366	59	284
## 812	NP_001348394.1	XP_017211134.1	42.523	214	123	0	153	366	99	312
## 813	NP_001348394.1	XP_017211134.1	42.523	214	123	0	153	366	155	368
## 814	NP_001348394.1	XP_017211134.1	36.957	276	158	3	99	366	73	340
## 815	NP_001348394.1	XP_017211134.1	40.838	191	113	0	153	343	183	373
## 816	NP_001348394.1	XP_021330854.1	38.043	276	155	3	99	366	26	293
## 817	NP_001348394.1	XP_021330854.1	41.121	214	126	0	153	366	24	237
## 818	NP_001348394.1	XP_021330854.1	40.187	214	128	0	153	366	136	349
## 819	NP_001348394.1	XP_021330854.1	41.294	201	118	0	153	353	164	364
## 820	NP_001348394.1	XP_021330854.1	43.005	193	110	0	174	366	17	209
## 821	NP_001348394.1	XP_021330854.1	43.503	177	100	0	194	370	9	185
## 822	NP_001348394.1	XP_021330854.1	36.719	128	81	0	153	280	248	375
## 823	NP_001348394.1	XP_021330854.1	41.176	34	20	0	333	366	8	41
## 824	NP_001348394.1	XP_017210822.1	41.463	246	140	2	127	368	57	302
## 825	NP_001348394.1	XP_017210822.1	45.026	191	105	0	176	366	138	328
## 826	NP_001348394.1	XP_017210822.1	35.741	263	161	2	109	367	127	385
## 827	NP_001348394.1	XP_017210822.1	35.329	167	108	0	148	314	222	388
## 828	NP_001348394.1	XP_021331366.1	44.860	214	118	0	153	366	87	300
## 829	NP_001348394.1	XP_021331366.1	42.130	216	125	0	153	368	59	274
## 830	NP_001348394.1	XP_021331366.1	42.523	214	123	0	153	366	3	216
## 831	NP_001348394.1	XP_021331366.1	40.271	221	132	0	146	366	24	244
## 832	NP_001348394.1	XP_021331366.1	40.930	215	126	1	153	366	143	357
## 833	NP_001348394.1	XP_021331366.1	36.434	258	135	1	140	368	158	415
## 834	NP_001348394.1	XP_021331366.1	43.478	161	91	0	208	368	2	162
## 835	NP_001348394.1	XP_021331366.1	42.593	162	92	1	153	313	255	416
## 836	NP_001348394.1	XP_021331366.1	37.209	86	54	0	144	229	331	416
## 837	NP_001348394.1	XP_021331202.1	44.393	214	119	0	153	366	71	284
## 838	NP_001348394.1	XP_021331202.1	42.523	214	123	0	153	366	43	256
## 839	NP_001348394.1	XP_021331202.1	38.406	276	154	2	99	366	129	396
## 840	NP_001348394.1	XP_021331202.1	40.541	222	132	0	145	366	7	228
## 841	NP_001348394.1	XP_021331202.1	43.458	214	121	0	153	366	211	424
## 842	NP_001348394.1	XP_021331202.1	37.681	276	156	2	99	366	185	452
## 843	NP_001348394.1	XP_021331202.1	42.056	214	124	0	153	366	99	312
## 844	NP_001348394.1	XP_021331202.1	41.589	214	125	0	153	366	127	340
## 845	NP_001348394.1	XP_021331202.1	36.957	276	158	2	99	366	213	480
## 846	NP_001348394.1	XP_021331202.1	42.056	214	124	0	153	366	295	508
## 847	NP_001348394.1	XP_021331202.1	43.529	170	96	0	197	366	3	172
## 848	NP_001348394.1	XP_021331202.1	36.948	249	149	2	99	343	269	513
## 849	NP_001348394.1	XP_021331202.1	43.678	87	49	0	280	366	2	88
## 850	NP_001348394.1	XP_021330549.1	43.925	214	120	0	153	366	60	273
## 851	NP_001348394.1	XP_021330549.1	42.791	215	123	0	153	367	88	302
## 852	NP_001348394.1	XP_021330549.1	43.005	193	110	0	174	366	53	245

## 853	NP_001348394.1	XP_021330549.1	41.589	214	125	0	153	366	116	329
## 854	NP_001348394.1	XP_021330549.1	44.118	170	95	0	197	366	48	217
## 855	NP_001348394.1	XP_021330549.1	34.007	297	158	4	99	362	90	381
## 856	NP_001348394.1	XP_021330548.1	43.925	214	120	0	153	366	60	273
## 857	NP_001348394.1	XP_021330548.1	42.791	215	123	0	153	367	88	302
## 858	NP_001348394.1	XP_021330548.1	43.005	193	110	0	174	366	53	245
## 859	NP_001348394.1	XP_021330548.1	41.589	214	125	0	153	366	116	329
## 860	NP_001348394.1	XP_021330548.1	44.118	170	95	0	197	366	48	217
## 861	NP_001348394.1	XP_021330548.1	34.007	297	158	4	99	362	90	381
## 862	NP_001348394.1	XP_017210088.1	43.925	214	120	0	153	366	60	273
## 863	NP_001348394.1	XP_017210088.1	42.791	215	123	0	153	367	88	302
## 864	NP_001348394.1	XP_017210088.1	43.005	193	110	0	174	366	53	245
## 865	NP_001348394.1	XP_017210088.1	41.589	214	125	0	153	366	116	329
## 866	NP_001348394.1	XP_017210088.1	44.118	170	95	0	197	366	48	217
## 867	NP_001348394.1	XP_017210088.1	34.007	297	158	4	99	362	90	381
## 868	NP_001348394.1	XP_021330547.1	43.925	214	120	0	153	366	60	273
## 869	NP_001348394.1	XP_021330547.1	42.791	215	123	0	153	367	88	302
## 870	NP_001348394.1	XP_021330547.1	43.005	193	110	0	174	366	53	245
## 871	NP_001348394.1	XP_021330547.1	41.589	214	125	0	153	366	116	329
## 872	NP_001348394.1	XP_021330547.1	44.118	170	95	0	197	366	48	217
## 873	NP_001348394.1	XP_021330547.1	34.007	297	158	4	99	362	90	381
## 874	NP_001348394.1	XP_021330858.1	44.762	210	116	0	153	362	464	673
## 875	NP_001348394.1	XP_021330858.1	42.056	214	124	0	153	366	352	565
## 876	NP_001348394.1	XP_021330858.1	42.991	214	122	0	153	366	380	593
## 877	NP_001348394.1	XP_021330858.1	41.553	219	128	0	148	366	235	453
## 878	NP_001348394.1	XP_021330858.1	43.925	214	120	0	153	366	100	313
## 879	NP_001348394.1	XP_021330858.1	42.991	214	122	0	153	366	212	425
## 880	NP_001348394.1	XP_021330858.1	40.654	214	127	0	153	366	408	621
## 881	NP_001348394.1	XP_021330858.1	41.121	214	126	0	153	366	324	537
## 882	NP_001348394.1	XP_021330858.1	39.754	244	144	1	126	366	14	257
## 883	NP_001348394.1	XP_021330858.1	40.187	214	128	0	153	366	296	509
## 884	NP_001348394.1	XP_021330858.1	39.269	219	133	0	148	366	123	341
## 885	NP_001348394.1	XP_021330858.1	35.075	268	174	0	99	366	102	369
## 886	NP_001348394.1	XP_021330858.1	41.791	201	117	0	153	353	802	1002
## 887	NP_001348394.1	XP_021330858.1	42.188	192	111	0	175	366	94	285
## 888	NP_001348394.1	XP_021330858.1	40.741	216	128	0	153	368	774	989
## 889	NP_001348394.1	XP_021330858.1	38.326	227	139	1	140	366	734	959
## 890	NP_001348394.1	XP_021330858.1	40.933	193	114	0	176	368	741	933
## 891	NP_001348394.1	XP_021330858.1	40.314	191	114	0	153	343	830	1020
## 892	NP_001348394.1	XP_021330858.1	29.412	306	170	4	99	366	550	847
## 893	NP_001348394.1	XP_021330858.1	34.632	231	121	4	153	353	548	778
## 894	NP_001348394.1	XP_021330857.1	42.991	214	122	0	153	366	67	280
## 895	NP_001348394.1	XP_021330857.1	41.743	218	127	0	153	370	95	312
## 896	NP_001348394.1	XP_021330857.1	42.731	227	128	2	140	366	28	252
## 897	NP_001348394.1	XP_021331421.1	43.458	214	121	0	153	366	43	256
## 898	NP_001348394.1	XP_021331421.1	44.393	214	119	0	153	366	211	424
## 899	NP_001348394.1	XP_021331421.1	44.560	193	107	0	174	366	8	200
## 900	NP_001348394.1	XP_021331421.1	34.228	298	173	3	77	366	58	340
## 901	NP_001348394.1	XP_021331421.1	42.523	214	123	0	153	366	183	396
## 902	NP_001348394.1	XP_021331421.1	41.589	214	125	0	153	366	15	228
## 903	NP_001348394.1	XP_021331421.1	42.991	214	122	0	153	366	155	368
## 904	NP_001348394.1	XP_021331421.1	42.784	194	111	0	153	346	239	432
## 905	NP_001348394.1	XP_021331421.1	44.706	170	94	0	197	366	3	172
## 906	NP_001348394.1	XP_021331421.1	46.154	143	77	0	224	366	2	144

## 907	NP_001348394.1	XP_021331199.1	45.116	215	118	0	152	366	238	452
## 908	NP_001348394.1	XP_021331199.1	44.860	214	118	0	153	366	99	312
## 909	NP_001348394.1	XP_021331199.1	43.925	214	120	0	153	366	43	256
## 910	NP_001348394.1	XP_021331199.1	45.327	214	117	0	153	366	71	284
## 911	NP_001348394.1	XP_021331199.1	43.458	214	121	0	153	366	15	228
## 912	NP_001348394.1	XP_021331199.1	42.991	214	122	0	153	366	295	508
## 913	NP_001348394.1	XP_021331199.1	42.991	214	122	0	153	366	183	396
## 914	NP_001348394.1	XP_021331199.1	42.523	214	123	0	153	366	407	620
## 915	NP_001348394.1	XP_021331199.1	41.589	214	125	0	153	366	211	424
## 916	NP_001348394.1	XP_021331199.1	45.596	193	105	0	174	366	8	200
## 917	NP_001348394.1	XP_021331199.1	38.745	271	160	2	99	366	101	368
## 918	NP_001348394.1	XP_021331199.1	36.957	276	158	2	99	366	269	536
## 919	NP_001348394.1	XP_021331199.1	38.043	276	155	2	99	366	437	704
## 920	NP_001348394.1	XP_021331199.1	37.319	276	155	4	99	366	717	982
## 921	NP_001348394.1	XP_021331199.1	41.121	214	126	0	153	366	351	564
## 922	NP_001348394.1	XP_021331199.1	35.117	299	192	2	68	366	659	955
## 923	NP_001348394.1	XP_021331199.1	40.654	214	127	0	153	366	379	592
## 924	NP_001348394.1	XP_021331199.1	38.589	241	121	1	153	366	826	1066
## 925	NP_001348394.1	XP_021331199.1	44.118	170	95	0	197	366	3	172
## 926	NP_001348394.1	XP_021331199.1	35.145	276	163	2	99	366	465	732
## 927	NP_001348394.1	XP_021331199.1	35.950	242	126	2	153	366	575	815
## 928	NP_001348394.1	XP_021331199.1	36.531	271	161	4	79	343	806	1071
## 929	NP_001348394.1	XP_021331199.1	44.828	87	48	0	280	366	2	88
## 930	NP_001348394.1	XP_017211078.1	43.836	219	123	0	148	366	80	298
## 931	NP_001348394.1	XP_017211078.1	43.590	195	110	0	174	368	162	356
## 932	NP_001348394.1	XP_017211078.1	44.279	201	112	0	153	353	113	313
## 933	NP_001348394.1	XP_017211078.1	38.393	224	137	1	148	371	164	386
## 934	NP_001348394.1	XP_017211078.1	43.976	166	93	0	203	368	79	244
## 935	NP_001348394.1	XP_017211078.1	32.558	215	145	0	99	313	171	385
## 936	NP_001348394.1	XP_021331276.1	39.552	268	162	0	99	366	171	438
## 937	NP_001348394.1	XP_021331276.1	37.954	303	173	4	69	366	230	522
## 938	NP_001348394.1	XP_021331276.1	41.525	236	137	1	134	368	233	468
## 939	NP_001348394.1	XP_021331276.1	38.060	268	166	0	99	366	311	578
## 940	NP_001348394.1	XP_021331276.1	42.466	219	126	0	148	366	136	354
## 941	NP_001348394.1	XP_021331276.1	40.183	219	131	0	148	366	444	662
## 942	NP_001348394.1	XP_021331276.1	40.541	222	132	0	145	366	581	802
## 943	NP_001348394.1	XP_021331276.1	43.379	219	124	0	148	366	80	298
## 944	NP_001348394.1	XP_021331276.1	43.781	201	113	0	153	353	393	593
## 945	NP_001348394.1	XP_021331276.1	40.654	214	127	0	153	366	505	718
## 946	NP_001348394.1	XP_021331276.1	40.187	214	128	0	153	366	561	774
## 947	NP_001348394.1	XP_021331276.1	40.654	214	127	0	153	366	533	746
## 948	NP_001348394.1	XP_021331276.1	35.907	259	166	0	108	366	432	690
## 949	NP_001348394.1	XP_021331276.1	38.785	214	131	0	153	366	421	634
## 950	NP_001348394.1	XP_021331276.1	42.268	194	112	0	173	366	77	270
## 951	NP_001348394.1	XP_021331276.1	43.373	166	94	0	203	368	79	244
## 952	NP_001348394.1	XP_021331276.1	42.767	159	91	0	153	311	645	803
## 953	NP_001348394.1	XP_021331276.1	42.647	136	78	0	148	283	668	803
## 954	NP_001348394.1	XP_021331276.1	32.738	168	97	3	99	258	647	806
## 955	NP_001348394.1	XP_017211205.2	45.794	214	116	0	153	366	491	704
## 956	NP_001348394.1	XP_017211205.2	43.231	229	129	1	141	368	506	734
## 957	NP_001348394.1	XP_017211205.2	43.172	227	128	1	141	366	226	452
## 958	NP_001348394.1	XP_017211205.2	41.204	216	127	0	153	368	295	510
## 959	NP_001348394.1	XP_017211205.2	42.056	214	124	0	153	366	155	368
## 960	NP_001348394.1	XP_017211205.2	43.925	214	120	0	153	366	575	788

##	961	NP_001348394.1	XP_017211205.2	42.991	214	122	0	153	366	547	760
##	962	NP_001348394.1	XP_017211205.2	43.925	214	120	0	153	366	463	676
##	963	NP_001348394.1	XP_017211205.2	36.232	276	160	2	99	366	381	648
##	964	NP_001348394.1	XP_017211205.2	42.009	219	127	0	148	366	626	844
##	965	NP_001348394.1	XP_017211205.2	41.589	214	125	0	153	366	211	424
##	966	NP_001348394.1	XP_017211205.2	41.589	214	125	0	153	366	127	340
##	967	NP_001348394.1	XP_017211205.2	43.458	214	121	0	153	366	183	396
##	968	NP_001348394.1	XP_017211205.2	40.187	214	128	0	153	366	351	564
##	969	NP_001348394.1	XP_017211205.2	40.271	221	132	0	148	368	710	930
##	970	NP_001348394.1	XP_017211205.2	38.428	229	140	1	141	368	310	538
##	971	NP_001348394.1	XP_017211205.2	40.741	216	128	0	153	368	99	314
##	972	NP_001348394.1	XP_017211205.2	40.741	216	128	0	153	368	379	594
##	973	NP_001348394.1	XP_017211205.2	39.252	214	130	0	153	366	659	872
##	974	NP_001348394.1	XP_017211205.2	38.767	227	138	1	140	366	59	284
##	975	NP_001348394.1	XP_017211205.2	40.654	214	127	0	153	366	687	900
##	976	NP_001348394.1	XP_017211205.2	37.097	248	156	0	99	346	689	936
##	977	NP_001348394.1	XP_017211205.2	40.102	197	118	0	172	368	62	258
##	978	NP_001348394.1	XP_021331166.1	44.393	214	119	0	153	366	323	536
##	979	NP_001348394.1	XP_021331166.1	43.925	214	120	0	153	366	15	228
##	980	NP_001348394.1	XP_021331166.1	42.081	221	128	0	146	366	64	284
##	981	NP_001348394.1	XP_021331166.1	43.925	214	120	0	153	366	351	564
##	982	NP_001348394.1	XP_021331166.1	38.406	276	154	2	99	366	241	508
##	983	NP_001348394.1	XP_021331166.1	43.379	219	124	0	153	371	211	429
##	984	NP_001348394.1	XP_021331166.1	35.179	307	176	3	68	366	357	648
##	985	NP_001348394.1	XP_021331166.1	42.291	227	130	1	141	366	142	368
##	986	NP_001348394.1	XP_021331166.1	38.406	276	154	2	99	366	465	732
##	987	NP_001348394.1	XP_021331166.1	43.925	214	120	0	153	366	463	676
##	988	NP_001348394.1	XP_021331166.1	43.458	214	121	0	153	366	43	256
##	989	NP_001348394.1	XP_021331166.1	38.043	276	155	2	99	366	493	760
##	990	NP_001348394.1	XP_021331166.1	41.589	214	125	0	153	366	99	312
##	991	NP_001348394.1	XP_021331166.1	42.056	214	124	0	153	366	239	452
##	992	NP_001348394.1	XP_021331166.1	33.225	307	182	3	68	366	49	340
##	993	NP_001348394.1	XP_021331166.1	42.523	214	123	0	153	366	183	396
##	994	NP_001348394.1	XP_021331166.1	41.969	193	112	0	174	366	8	200
##	995	NP_001348394.1	XP_021331166.1	42.932	191	109	0	153	343	575	765
##	996	NP_001348394.1	XP_021331166.1	42.353	170	98	0	197	366	3	172
##	997	NP_001348394.1	XP_021331166.1	42.759	145	83	0	224	368	2	146
##	998	NP_001348394.1	XP_021326473.1	43.111	225	128	0	142	366	1	225
##	999	NP_001348394.1	XP_021326473.1	38.406	276	154	2	99	366	70	337
##	1000	NP_001348394.1	XP_021326473.1	42.991	214	122	0	153	366	152	365
##	1001	NP_001348394.1	XP_021326473.1	37.681	276	156	2	99	366	126	393
##	1002	NP_001348394.1	XP_021326473.1	39.207	227	138	0	140	366	27	253
##	1003	NP_001348394.1	XP_021326473.1	42.523	214	123	0	153	366	68	281
##	1004	NP_001348394.1	XP_021326473.1	41.589	214	125	0	153	366	208	421
##	1005	NP_001348394.1	XP_021326473.1	41.589	214	125	0	153	366	236	449
##	1006	NP_001348394.1	XP_021326473.1	41.361	191	112	0	153	343	264	454
##	1007	NP_001348394.1	XP_021331395.1	42.991	214	122	0	153	366	2	215
##	1008	NP_001348394.1	XP_021331395.1	42.289	201	116	0	153	353	30	230
##	1009	NP_001348394.1	XP_021331395.1	44.025	159	89	0	208	366	1	159
##	1010	NP_001348394.1	XP_021331253.1	38.849	278	154	3	99	368	151	420
##	1011	NP_001348394.1	XP_021331253.1	41.121	214	126	0	153	366	37	250
##	1012	NP_001348394.1	XP_021331253.1	42.523	214	123	0	153	366	93	306
##	1013	NP_001348394.1	XP_021331253.1	40.541	222	132	0	145	366	113	334
##	1014	NP_001348394.1	XP_021331253.1	41.589	214	125	0	153	366	65	278

## 1015	NP_001348394.1	XP_021331253.1	40.090	222	133	0	145	366	1	222
## 1016	NP_001348394.1	XP_021331253.1	35.294	255	149	2	99	345	179	425
## 1017	NP_001348394.1	NP_001314815.1	42.991	214	122	0	153	366	99	312
## 1018	NP_001348394.1	NP_001314815.1	45.078	193	106	0	174	366	92	284
## 1019	NP_001348394.1	NP_001314815.1	35.581	267	156	2	88	346	62	320
## 1020	NP_001348394.1	XP_021331115.1	40.698	258	153	0	109	366	127	384
## 1021	NP_001348394.1	XP_021331115.1	42.523	214	123	0	153	366	423	636
## 1022	NP_001348394.1	XP_021331115.1	42.991	214	122	0	153	366	367	580
## 1023	NP_001348394.1	XP_021331115.1	39.147	258	157	0	109	366	211	468
## 1024	NP_001348394.1	XP_021331115.1	39.592	245	144	2	126	366	56	300
## 1025	NP_001348394.1	XP_021331115.1	41.589	214	125	0	153	366	395	608
## 1026	NP_001348394.1	XP_021331115.1	42.453	212	122	0	153	364	507	718
## 1027	NP_001348394.1	XP_021331115.1	40.187	214	128	0	153	366	451	664
## 1028	NP_001348394.1	XP_021331115.1	40.639	219	130	0	148	366	306	524
## 1029	NP_001348394.1	XP_021331115.1	43.005	193	110	0	174	366	500	692
## 1030	NP_001348394.1	XP_021331115.1	39.720	214	129	0	153	366	339	552
## 1031	NP_001348394.1	XP_021331115.1	35.448	268	173	0	99	366	229	496
## 1032	NP_001348394.1	XP_021331115.1	41.327	196	115	0	173	368	79	274
## 1033	NP_001348394.1	XP_017209855.2	44.860	214	118	0	153	366	255	468
## 1034	NP_001348394.1	XP_017209855.2	42.523	214	123	0	153	366	199	412
## 1035	NP_001348394.1	XP_017209855.2	38.406	276	154	2	99	366	313	580
## 1036	NP_001348394.1	XP_017209855.2	37.687	268	167	0	99	366	173	440
## 1037	NP_001348394.1	XP_017209855.2	37.681	276	156	2	99	366	285	552
## 1038	NP_001348394.1	XP_017209855.2	42.991	214	122	0	153	366	395	608
## 1039	NP_001348394.1	XP_017209855.2	37.681	276	156	2	99	366	369	636
## 1040	NP_001348394.1	XP_017209855.2	41.121	214	126	0	153	366	283	496
## 1041	NP_001348394.1	XP_017209855.2	38.174	241	136	1	139	366	116	356
## 1042	NP_001348394.1	XP_017209855.2	36.594	276	159	2	99	366	397	664
## 1043	NP_001348394.1	XP_017209855.2	40.654	214	127	0	153	366	171	384
## 1044	NP_001348394.1	XP_017209855.2	41.589	214	125	0	153	366	479	692
## 1045	NP_001348394.1	XP_017209855.2	38.115	244	147	2	127	366	57	300
## 1046	NP_001348394.1	XP_017209855.2	41.361	191	112	0	153	343	507	697
## 1047	NP_001348394.1	XP_017209855.2	40.000	140	84	0	232	371	82	221
## 1048	NP_001348394.1	XP_021331020.1	43.458	214	121	0	153	366	3057	3270
## 1049	NP_001348394.1	XP_021331020.1	39.493	276	151	2	99	366	437	704
## 1050	NP_001348394.1	XP_021331020.1	39.130	276	152	2	99	366	3143	3410
## 1051	NP_001348394.1	XP_021331020.1	42.991	214	122	0	153	366	3728	3941
## 1052	NP_001348394.1	XP_021331020.1	45.327	214	117	0	153	366	1528	1741
## 1053	NP_001348394.1	XP_021331020.1	39.130	276	152	2	99	366	297	564
## 1054	NP_001348394.1	XP_021331020.1	43.458	214	121	0	153	366	1612	1825
## 1055	NP_001348394.1	XP_021331020.1	44.860	214	118	0	153	366	2581	2794
## 1056	NP_001348394.1	XP_021331020.1	45.327	214	117	0	153	366	5238	5451
## 1057	NP_001348394.1	XP_021331020.1	43.925	214	120	0	153	366	4539	4752
## 1058	NP_001348394.1	XP_021331020.1	42.342	222	128	0	145	366	2965	3186
## 1059	NP_001348394.1	XP_021331020.1	43.925	214	120	0	153	366	1248	1461
## 1060	NP_001348394.1	XP_021331020.1	43.458	214	121	0	153	366	1304	1517
## 1061	NP_001348394.1	XP_021331020.1	38.768	276	153	2	99	366	1306	1573
## 1062	NP_001348394.1	XP_021331020.1	39.130	276	154	3	99	366	3954	4223
## 1063	NP_001348394.1	XP_021331020.1	45.596	193	105	0	174	366	232	424
## 1064	NP_001348394.1	XP_021331020.1	43.458	214	121	0	153	366	1500	1713
## 1065	NP_001348394.1	XP_021331020.1	42.523	214	123	0	153	366	3113	3326
## 1066	NP_001348394.1	XP_021331020.1	42.991	214	122	0	153	366	1584	1797
## 1067	NP_001348394.1	XP_021331020.1	38.971	272	158	2	99	366	325	592
## 1068	NP_001348394.1	XP_021331020.1	37.319	276	157	2	99	366	353	620

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## 1069 NP_001348394.1 XP_021331020.1 41.892 222 129 0 145 366 2405 2626
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## 1071 NP_001348394.1 XP_021331020.1 42.523 214 123 0 153 366 4066 4279
## 1072 NP_001348394.1 XP_021331020.1 42.523 214 123 0 153 366 183 396
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## 1091 NP_001348394.1 XP_021331020.1 42.056 214 124 0 153 366 3365 3578
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## 1099 NP_001348394.1 XP_021331020.1 38.290 269 166 0 99 367 4068 4336
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## 1105 NP_001348394.1 XP_021331020.1 42.991 214 122 0 153 366 4234 4447
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## 1116 NP_001348394.1 XP_021331020.1 41.589 214 124 1 153 366 3393 3605
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## 1173 NP_001348394.1 XP_021331020.1 33.205 259 128 1 153 366 1864 2122
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## 1175 NP_001348394.1 XP_021331020.1 33.182 220 139 2 99 314 5408 5623
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## 1243 NP_001348394.1 XP_017211154.1 43.458 214 121 0 153 366 154 367
## 1244 NP_001348394.1 XP_017211154.1 43.458 214 121 0 153 366 210 423
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## 1267 NP_001348394.1 XP_021327001.1 42.523 214 123 0 153 366 55 268
## 1268 NP_001348394.1 XP_021327001.1 41.885 191 111 0 176 366 50 240
## 1269 NP_001348394.1 XP_021327001.1 41.875 160 93 0 153 312 139 298
## 1270 NP_001348394.1 XP_021327000.1 42.523 214 123 0 153 366 83 296
## 1271 NP_001348394.1 XP_021327000.1 42.523 214 123 0 153 366 55 268
## 1272 NP_001348394.1 XP_021327000.1 41.885 191 111 0 176 366 50 240
## 1273 NP_001348394.1 XP_021327000.1 41.875 160 93 0 153 312 139 298
## 1274 NP_001348394.1 XP_021326999.1 42.523 214 123 0 153 366 83 296
## 1275 NP_001348394.1 XP_021326999.1 42.523 214 123 0 153 366 55 268
## 1276 NP_001348394.1 XP_021326999.1 41.885 191 111 0 176 366 50 240
## 1277 NP_001348394.1 XP_021326999.1 41.875 160 93 0 153 312 139 298
## 1278 NP_001348394.1 XP_021330541.1 42.523 214 123 0 153 366 83 296
## 1279 NP_001348394.1 XP_021330541.1 42.523 214 123 0 153 366 55 268
## 1280 NP_001348394.1 XP_021330541.1 41.885 191 111 0 176 366 50 240
## 1281 NP_001348394.1 XP_021330541.1 41.875 160 93 0 153 312 139 298
## 1282 NP_001348394.1 XP_021330540.1 42.523 214 123 0 153 366 83 296
## 1283 NP_001348394.1 XP_021330540.1 42.523 214 123 0 153 366 55 268
## 1284 NP_001348394.1 XP_021330540.1 41.885 191 111 0 176 366 50 240

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## 1285	NP_001348394.1	XP_021330540.1	41.875	160	93	0	153	312	139	298
## 1286	NP_001348394.1	XP_021330539.1	42.523	214	123	0	153	366	83	296
## 1287	NP_001348394.1	XP_021330539.1	42.523	214	123	0	153	366	55	268
## 1288	NP_001348394.1	XP_021330539.1	41.885	191	111	0	176	366	50	240
## 1289	NP_001348394.1	XP_021330539.1	41.875	160	93	0	153	312	139	298
## 1290	NP_001348394.1	XP_021330538.1	42.523	214	123	0	153	366	83	296
## 1291	NP_001348394.1	XP_021330538.1	42.523	214	123	0	153	366	55	268
## 1292	NP_001348394.1	XP_021330538.1	41.885	191	111	0	176	366	50	240
## 1293	NP_001348394.1	XP_021330538.1	41.875	160	93	0	153	312	139	298
## 1294	NP_001348394.1	NP_001107078.1	45.078	193	106	0	174	366	91	283
## 1295	NP_001348394.1	NP_001107078.1	41.553	219	127	1	153	371	98	315
## 1296	NP_001348394.1	NP_001107078.1	41.818	165	96	0	153	317	154	318
## 1297	NP_001348394.1	NP_001107078.1	34.343	99	64	1	269	366	45	143
## 1298	NP_001348394.1	NP_001116087.1	43.056	216	123	0	153	368	99	314
## 1299	NP_001348394.1	NP_001116087.1	43.721	215	121	0	153	367	155	369
## 1300	NP_001348394.1	NP_001116087.1	39.916	238	142	1	129	366	48	284
## 1301	NP_001348394.1	NP_001116087.1	43.458	214	121	0	153	366	127	340
## 1302	NP_001348394.1	NP_001116087.1	42.056	214	123	1	153	366	183	395
## 1303	NP_001348394.1	NP_001116087.1	37.037	189	92	1	153	314	211	399
## 1304	NP_001348394.1	NP_001116087.1	34.694	196	111	3	99	286	213	399
## 1305	NP_001348394.1	NP_001116087.1	34.545	55	36	0	316	370	66	120
## 1306	NP_001348394.1	XP_017211199.1	42.723	213	122	0	154	366	1	213
## 1307	NP_001348394.1	XP_017211199.1	42.132	197	114	0	153	349	28	224
## 1308	NP_001348394.1	XP_021330543.1	38.406	276	154	2	99	366	372	639
## 1309	NP_001348394.1	XP_021330543.1	38.971	272	160	2	99	366	118	387
## 1310	NP_001348394.1	XP_021330543.1	38.462	273	158	2	99	366	232	499
## 1311	NP_001348394.1	XP_021330543.1	38.554	249	145	1	118	366	315	555
## 1312	NP_001348394.1	XP_021330543.1	42.991	214	122	0	153	366	454	667
## 1313	NP_001348394.1	XP_021330543.1	37.319	276	157	2	99	366	260	527
## 1314	NP_001348394.1	XP_021330543.1	41.121	214	126	0	153	366	370	583
## 1315	NP_001348394.1	XP_021330543.1	42.593	216	121	2	153	366	61	275
## 1316	NP_001348394.1	XP_021330543.1	41.121	214	126	0	153	366	230	443
## 1317	NP_001348394.1	XP_021330543.1	40.187	214	128	0	153	366	482	695
## 1318	NP_001348394.1	XP_021330543.1	39.819	221	131	1	148	366	111	331
## 1319	NP_001348394.1	XP_021330543.1	39.720	214	129	0	153	366	510	723
## 1320	NP_001348394.1	XP_021330543.1	38.318	214	132	0	153	366	566	779
## 1321	NP_001348394.1	XP_021330543.1	37.895	190	118	0	153	342	594	783
## 1322	NP_001348394.1	XP_021330543.1	35.385	195	97	2	202	367	54	248
## 1323	NP_001348394.1	XP_021330543.1	44.286	140	75	2	229	366	53	191
## 1324	NP_001348394.1	XP_017210948.1	41.121	214	126	0	153	366	99	312
## 1325	NP_001348394.1	XP_017210948.1	42.291	227	130	1	140	366	59	284
## 1326	NP_001348394.1	XP_021327011.1	41.071	224	132	0	145	368	53	276
## 1327	NP_001348394.1	XP_021327011.1	44.330	194	108	0	153	346	89	282
## 1328	NP_001348394.1	XP_021327010.1	41.071	224	132	0	145	368	53	276
## 1329	NP_001348394.1	XP_021327010.1	44.330	194	108	0	153	346	89	282
## 1330	NP_001348394.1	XP_021326474.1	43.458	214	121	0	153	366	15	228
## 1331	NP_001348394.1	XP_021326474.1	42.056	214	124	0	153	366	71	284
## 1332	NP_001348394.1	XP_021326474.1	44.560	193	107	0	174	366	8	200
## 1333	NP_001348394.1	XP_021326474.1	44.041	193	108	0	174	366	64	256
## 1334	NP_001348394.1	XP_021326474.1	44.737	190	105	0	153	342	99	288
## 1335	NP_001348394.1	XP_021326474.1	44.118	170	95	0	197	366	3	172
## 1336	NP_001348394.1	XP_021326474.1	44.056	143	80	0	224	366	2	144
## 1337	NP_001348394.1	XP_021326474.1	35.294	51	33	0	153	203	239	289
## 1338	NP_001348394.1	XP_021333299.1	42.523	214	123	0	153	366	104	317

## 1339	NP_001348394.1	XP_021333299.1	45.912	159	86	0	208	366	103	261
## 1340	NP_001348394.1	XP_021333299.1	41.875	160	93	0	153	312	160	319
## 1341	NP_001348394.1	XP_021329622.1	38.235	272	160	2	99	366	119	386
## 1342	NP_001348394.1	XP_021329622.1	43.721	215	121	0	153	367	593	807
## 1343	NP_001348394.1	XP_021329622.1	42.731	227	130	0	140	366	440	666
## 1344	NP_001348394.1	XP_021329622.1	42.534	221	127	0	146	366	502	722
## 1345	NP_001348394.1	XP_021329622.1	42.991	214	122	0	153	366	425	638
## 1346	NP_001348394.1	XP_021329622.1	43.458	214	121	0	153	366	201	414
## 1347	NP_001348394.1	XP_021329622.1	43.925	214	120	0	153	366	565	778
## 1348	NP_001348394.1	XP_021329622.1	42.326	215	124	0	153	367	369	583
## 1349	NP_001348394.1	XP_021329622.1	43.458	214	121	0	153	366	621	834
## 1350	NP_001348394.1	XP_021329622.1	41.589	214	125	0	153	366	229	442
## 1351	NP_001348394.1	XP_021329622.1	42.523	214	123	0	153	366	285	498
## 1352	NP_001348394.1	XP_021329622.1	44.103	195	109	0	172	366	52	246
## 1353	NP_001348394.1	XP_021329622.1	41.121	214	126	0	153	366	537	750
## 1354	NP_001348394.1	XP_021329622.1	41.892	222	129	0	145	366	53	274
## 1355	NP_001348394.1	XP_021329622.1	41.121	214	126	0	153	366	257	470
## 1356	NP_001348394.1	XP_021329622.1	42.056	214	124	0	153	366	89	302
## 1357	NP_001348394.1	XP_021329622.1	41.121	214	126	0	153	366	117	330
## 1358	NP_001348394.1	XP_021329622.1	37.313	268	168	0	99	366	623	890
## 1359	NP_001348394.1	XP_021329622.1	38.318	214	132	0	153	366	341	554
## 1360	NP_001348394.1	XP_021329622.1	39.252	214	130	0	153	366	313	526
## 1361	NP_001348394.1	XP_021329622.1	41.837	196	114	0	153	348	733	928
## 1362	NP_001348394.1	XP_017210844.2	44.393	214	119	0	153	366	86	299
## 1363	NP_001348394.1	XP_017210844.2	42.130	216	125	0	153	368	58	273
## 1364	NP_001348394.1	XP_017210844.2	42.396	217	124	1	153	368	198	414
## 1365	NP_001348394.1	XP_017210844.2	42.523	214	123	0	153	366	2	215
## 1366	NP_001348394.1	XP_017210844.2	41.121	214	126	0	153	366	30	243
## 1367	NP_001348394.1	XP_017210844.2	40.930	215	126	1	153	366	142	356
## 1368	NP_001348394.1	XP_017210844.2	44.720	161	89	0	208	368	1	161
## 1369	NP_001348394.1	XP_017210844.2	43.210	162	91	1	153	313	254	415
## 1370	NP_001348394.1	XP_017210844.2	36.047	86	55	0	144	229	330	415
## 1371	NP_001348394.1	XP_021331209.1	43.925	214	120	0	153	366	99	312
## 1372	NP_001348394.1	XP_021331209.1	43.458	214	121	0	153	366	127	340
## 1373	NP_001348394.1	XP_021331209.1	45.596	193	105	0	174	366	8	200
## 1374	NP_001348394.1	XP_021331209.1	42.523	214	123	0	153	366	71	284
## 1375	NP_001348394.1	XP_021331209.1	42.991	214	122	0	153	366	155	368
## 1376	NP_001348394.1	XP_021331209.1	40.088	227	136	0	140	366	30	256
## 1377	NP_001348394.1	XP_021331209.1	42.056	214	124	0	153	366	183	396
## 1378	NP_001348394.1	XP_021331209.1	42.056	214	124	0	153	366	211	424
## 1379	NP_001348394.1	XP_021331209.1	43.529	170	96	0	197	366	3	172
## 1380	NP_001348394.1	XP_021331209.1	41.361	191	112	0	153	343	239	429
## 1381	NP_001348394.1	XP_021331209.1	44.755	143	79	0	224	366	2	144
## 1382	NP_001348394.1	XP_021331301.1	42.056	214	124	0	153	366	71	284
## 1383	NP_001348394.1	XP_021331301.1	42.991	214	122	0	153	366	15	228
## 1384	NP_001348394.1	XP_021331301.1	42.991	214	122	0	153	366	183	396
## 1385	NP_001348394.1	XP_021331301.1	41.589	214	125	0	153	366	127	340
## 1386	NP_001348394.1	XP_021331301.1	48.235	170	88	0	197	366	3	172
## 1387	NP_001348394.1	XP_021331301.1	41.121	214	126	0	153	366	155	368
## 1388	NP_001348394.1	XP_021331301.1	40.654	214	127	0	153	366	43	256
## 1389	NP_001348394.1	XP_021331301.1	37.319	276	157	3	99	366	45	312
## 1390	NP_001348394.1	XP_021331301.1	43.523	193	109	0	174	366	8	200
## 1391	NP_001348394.1	XP_021331301.1	43.787	169	95	0	174	342	232	400
## 1392	NP_001348394.1	XP_021331301.1	36.800	250	146	4	75	317	159	403

## 1393	NP_001348394.1	XP_021331301.1	45.455	143	78	0	224	366	2	144
## 1394	NP_001348394.1	NP_001315634.1	42.593	216	124	0	153	368	118	333
## 1395	NP_001348394.1	NP_001315634.1	40.969	227	133	1	140	366	50	275
## 1396	NP_001348394.1	NP_001315634.1	41.121	214	126	0	153	366	90	303
## 1397	NP_001348394.1	NP_001315634.1	43.558	163	92	0	153	315	174	336
## 1398	NP_001348394.1	XP_017211055.1	44.860	214	118	0	153	366	143	356
## 1399	NP_001348394.1	XP_017211055.1	42.534	221	127	0	148	368	82	302
## 1400	NP_001348394.1	XP_017211055.1	42.056	214	124	0	153	366	115	328
## 1401	NP_001348394.1	XP_017211055.1	35.688	269	173	0	99	367	145	413
## 1402	NP_001348394.1	XP_017211055.1	38.140	215	133	0	153	367	227	441
## 1403	NP_001348394.1	XP_017211055.1	37.126	167	105	0	148	314	278	444
## 1404	NP_001348394.1	XP_021331342.1	43.458	214	121	0	153	366	127	340
## 1405	NP_001348394.1	XP_021331342.1	42.056	214	124	0	153	366	183	396
## 1406	NP_001348394.1	XP_021331342.1	33.898	295	178	3	77	366	142	424
## 1407	NP_001348394.1	XP_021331342.1	41.589	214	125	0	153	366	99	312
## 1408	NP_001348394.1	XP_021331342.1	37.838	222	138	0	145	366	7	228
## 1409	NP_001348394.1	XP_021331342.1	37.545	277	166	3	99	371	213	486
## 1410	NP_001348394.1	XP_021331342.1	36.940	268	169	0	99	366	17	284
## 1411	NP_001348394.1	XP_021331342.1	43.077	195	111	0	174	368	8	202
## 1412	NP_001348394.1	XP_021331342.1	43.529	170	96	0	197	366	3	172
## 1413	NP_001348394.1	XP_021331342.1	43.678	87	49	0	280	366	2	88
## 1414	NP_001348394.1	NP_001314951.1	44.444	216	120	0	153	368	99	314
## 1415	NP_001348394.1	NP_001314951.1	41.410	227	132	1	140	366	59	284
## 1416	NP_001348394.1	NP_001314951.1	42.784	194	111	0	153	346	127	320
## 1417	NP_001348394.1	XP_021331163.1	46.875	192	102	0	175	366	568	759
## 1418	NP_001348394.1	XP_021331163.1	44.393	214	119	0	153	366	714	927
## 1419	NP_001348394.1	XP_021331163.1	37.681	276	156	2	99	366	604	871
## 1420	NP_001348394.1	XP_021331163.1	41.629	221	129	0	148	368	737	957
## 1421	NP_001348394.1	XP_021331163.1	41.589	214	125	0	153	366	182	395
## 1422	NP_001348394.1	XP_021331163.1	42.056	214	124	0	153	366	602	815
## 1423	NP_001348394.1	XP_021331163.1	41.121	214	126	0	153	366	574	787
## 1424	NP_001348394.1	XP_021331163.1	41.589	214	125	0	153	366	518	731
## 1425	NP_001348394.1	XP_021331163.1	41.589	214	125	0	153	366	686	899
## 1426	NP_001348394.1	XP_021331163.1	39.720	214	129	0	153	366	154	367
## 1427	NP_001348394.1	XP_021331163.1	41.121	214	126	0	153	366	490	703
## 1428	NP_001348394.1	XP_021331163.1	39.252	214	130	0	153	366	126	339
## 1429	NP_001348394.1	XP_021331163.1	39.720	214	129	0	153	366	210	423
## 1430	NP_001348394.1	XP_021331163.1	34.340	265	160	2	116	366	19	283
## 1431	NP_001348394.1	XP_021331163.1	41.589	214	125	0	153	366	406	619
## 1432	NP_001348394.1	XP_021331163.1	38.785	214	131	0	153	366	14	227
## 1433	NP_001348394.1	XP_021331163.1	36.594	276	158	3	99	366	716	982
## 1434	NP_001348394.1	XP_021331163.1	41.969	193	112	0	174	366	7	199
## 1435	NP_001348394.1	XP_021331163.1	40.367	218	130	0	153	370	266	483
## 1436	NP_001348394.1	XP_021331163.1	39.720	214	129	0	153	366	462	675
## 1437	NP_001348394.1	XP_021331163.1	38.785	214	131	0	153	366	98	311
## 1438	NP_001348394.1	XP_021331163.1	41.395	215	126	0	152	366	433	647
## 1439	NP_001348394.1	XP_021331163.1	41.121	214	126	0	153	366	294	507
## 1440	NP_001348394.1	XP_021331163.1	42.056	214	124	0	153	366	378	591
## 1441	NP_001348394.1	XP_021331163.1	40.187	214	128	0	153	366	350	563
## 1442	NP_001348394.1	XP_021331163.1	41.121	214	126	0	153	366	322	535
## 1443	NP_001348394.1	XP_021331163.1	38.318	214	132	0	153	366	238	451
## 1444	NP_001348394.1	XP_021331163.1	42.941	170	97	0	197	366	2	171
## 1445	NP_001348394.1	XP_021331163.1	39.175	194	117	1	153	346	826	1018
## 1446	NP_001348394.1	XP_021331163.1	42.529	87	50	0	280	366	1	87

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## 1447 NP_001348394.1 XP_021331184.1 42.056 214 124 0 153 366 144 357
## 1448 NP_001348394.1 XP_021331184.1 43.458 214 121 0 153 366 32 245
## 1449 NP_001348394.1 XP_021331184.1 43.256 215 122 0 152 366 87 301
## 1450 NP_001348394.1 XP_021331184.1 47.619 189 99 0 178 366 1 189
## 1451 NP_001348394.1 XP_021331184.1 42.991 214 122 0 153 366 4 217
## 1452 NP_001348394.1 XP_021331184.1 41.589 214 125 0 153 366 200 413
## 1453 NP_001348394.1 XP_021331184.1 42.523 214 123 0 153 366 256 469
## 1454 NP_001348394.1 XP_021331184.1 41.121 214 126 0 153 366 60 273
## 1455 NP_001348394.1 XP_021331184.1 41.121 214 126 0 153 366 228 441
## 1456 NP_001348394.1 XP_021331184.1 40.120 167 100 0 146 312 333 499
## 1457 NP_001348394.1 XP_021331203.1 43.925 214 120 0 153 366 71 284
## 1458 NP_001348394.1 XP_021331203.1 42.523 214 123 0 153 366 43 256
## 1459 NP_001348394.1 XP_021331203.1 38.406 276 154 2 99 366 129 396
## 1460 NP_001348394.1 XP_021331203.1 43.458 214 121 0 153 366 211 424
## 1461 NP_001348394.1 XP_021331203.1 39.189 222 135 0 145 366 7 228
## 1462 NP_001348394.1 XP_021331203.1 37.681 276 156 2 99 366 185 452
## 1463 NP_001348394.1 XP_021331203.1 42.056 214 124 0 153 366 99 312
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## 1465 NP_001348394.1 XP_021331203.1 36.957 276 158 2 99 366 213 480
## 1466 NP_001348394.1 XP_021331203.1 42.056 214 124 0 153 366 295 508
## 1467 NP_001348394.1 XP_021331203.1 42.941 170 97 0 197 366 3 172
## 1468 NP_001348394.1 XP_021331203.1 41.361 191 112 0 153 343 323 513
## 1469 NP_001348394.1 XP_021331203.1 43.678 87 49 0 280 366 2 88
## 1470 NP_001348394.1 XP_021331207.1 43.925 214 120 0 153 366 71 284
## 1471 NP_001348394.1 XP_021331207.1 43.925 214 120 0 153 366 183 396
## 1472 NP_001348394.1 XP_021331207.1 38.406 276 154 2 99 366 185 452
## 1473 NP_001348394.1 XP_021331207.1 38.406 276 154 2 99 366 213 480
## 1474 NP_001348394.1 XP_021331207.1 42.056 214 124 0 153 366 43 256
## 1475 NP_001348394.1 XP_021331207.1 42.523 214 123 0 153 366 155 368
## 1476 NP_001348394.1 XP_021331207.1 40.090 222 133 0 145 366 7 228
## 1477 NP_001348394.1 XP_021331207.1 41.589 214 125 0 153 366 99 312
## 1478 NP_001348394.1 XP_021331207.1 41.121 214 126 0 153 366 127 340
## 1479 NP_001348394.1 XP_021331207.1 43.455 191 108 0 153 343 295 485
## 1480 NP_001348394.1 XP_021331207.1 42.941 170 97 0 197 366 3 172
## 1481 NP_001348394.1 XP_021331207.1 43.678 87 49 0 280 366 2 88
## 1482 NP_001348394.1 XP_021331157.1 47.150 193 102 0 176 368 288 480
## 1483 NP_001348394.1 XP_021331157.1 43.458 214 121 0 153 366 293 506
## 1484 NP_001348394.1 XP_021331157.1 40.541 222 131 1 145 366 34 254
## 1485 NP_001348394.1 XP_021331157.1 41.589 214 124 1 153 366 238 450
## 1486 NP_001348394.1 XP_021331157.1 42.268 194 112 0 153 346 321 514
## 1487 NP_001348394.1 XP_021331157.1 42.487 193 110 1 174 366 8 199
## 1488 NP_001348394.1 XP_021331157.1 42.353 170 97 1 197 366 3 171
## 1489 NP_001348394.1 XP_021331157.1 42.373 59 33 1 308 366 2 59
## 1490 NP_001348394.1 XP_021331231.1 39.852 271 157 2 99 366 133 400
## 1491 NP_001348394.1 XP_021331231.1 41.121 214 126 0 153 366 131 344
## 1492 NP_001348394.1 XP_021331231.1 43.458 214 121 0 153 366 103 316
## 1493 NP_001348394.1 XP_021331231.1 42.661 218 121 1 153 366 15 232
## 1494 NP_001348394.1 XP_021331231.1 44.670 197 105 1 174 366 8 204
## 1495 NP_001348394.1 XP_021331231.1 44.041 193 108 0 174 366 96 288
## 1496 NP_001348394.1 XP_021331231.1 38.281 256 142 2 99 346 161 408
## 1497 NP_001348394.1 XP_021331231.1 45.143 175 92 1 197 367 3 177
## 1498 NP_001348394.1 XP_021331231.1 43.537 147 79 1 224 366 2 148
## 1499 NP_001348394.1 XP_021331231.1 44.318 88 49 0 281 368 3 90
## 1500 NP_001348394.1 XP_017210987.1 46.939 196 104 0 173 368 79 274

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## 1501	NP_001348394.1	XP_017210987.1	45.550	191	104	0	176	366	110	300
## 1502	NP_001348394.1	XP_017210987.1	35.897	273	167	2	99	367	89	357
## 1503	NP_001348394.1	XP_017210987.1	37.963	216	134	0	153	368	115	330
## 1504	NP_001348394.1	XP_017210987.1	35.928	167	107	0	148	314	194	360
## 1505	NP_001348394.1	XP_021331164.1	37.209	301	176	3	69	366	134	424
## 1506	NP_001348394.1	XP_021331164.1	46.632	193	103	0	174	366	8	200
## 1507	NP_001348394.1	XP_021331164.1	42.523	214	123	0	153	366	239	452
## 1508	NP_001348394.1	XP_021331164.1	42.523	214	123	0	153	366	407	620
## 1509	NP_001348394.1	XP_021331164.1	42.056	214	124	0	153	366	463	676
## 1510	NP_001348394.1	XP_021331164.1	34.768	302	179	3	75	366	187	480
## 1511	NP_001348394.1	XP_021331164.1	40.969	227	134	0	140	366	86	312
## 1512	NP_001348394.1	XP_021331164.1	42.991	214	122	0	153	366	631	844
## 1513	NP_001348394.1	XP_021331164.1	42.991	214	122	0	153	366	43	256
## 1514	NP_001348394.1	XP_021331164.1	38.060	268	166	0	99	366	17	284
## 1515	NP_001348394.1	XP_021331164.1	36.395	294	172	3	77	366	114	396
## 1516	NP_001348394.1	XP_021331164.1	41.667	228	132	1	141	367	2	229
## 1517	NP_001348394.1	XP_021331164.1	36.264	273	164	2	99	366	269	536
## 1518	NP_001348394.1	XP_021331164.1	40.654	214	127	0	153	366	351	564
## 1519	NP_001348394.1	XP_021331164.1	42.523	214	123	0	153	366	687	900
## 1520	NP_001348394.1	XP_021331164.1	41.121	214	126	0	153	366	435	648
## 1521	NP_001348394.1	XP_021331164.1	40.654	214	127	0	153	366	519	732
## 1522	NP_001348394.1	XP_021331164.1	40.654	214	127	0	153	366	575	788
## 1523	NP_001348394.1	XP_021331164.1	40.654	214	127	0	153	366	715	928
## 1524	NP_001348394.1	XP_021331164.1	40.654	214	127	0	153	366	379	592
## 1525	NP_001348394.1	XP_021331164.1	42.784	194	111	0	174	367	624	817
## 1526	NP_001348394.1	XP_021331164.1	41.121	214	126	0	153	366	547	760
## 1527	NP_001348394.1	XP_021331164.1	41.237	194	114	0	153	346	743	936
## 1528	NP_001348394.1	XP_021331164.1	42.623	61	35	0	308	368	2	62
## 1529	NP_001348394.1	XP_021331446.1	43.925	214	120	0	153	366	267	480
## 1530	NP_001348394.1	XP_021331446.1	43.056	216	123	0	153	368	323	538
## 1531	NP_001348394.1	XP_021331446.1	43.458	214	121	0	153	366	351	564
## 1532	NP_001348394.1	XP_021331446.1	43.519	216	122	0	153	368	155	370
## 1533	NP_001348394.1	XP_021331446.1	42.523	214	123	0	153	366	295	508
## 1534	NP_001348394.1	XP_021331446.1	43.458	214	121	0	153	366	183	396
## 1535	NP_001348394.1	XP_021331446.1	42.523	214	123	0	153	366	127	340
## 1536	NP_001348394.1	XP_021331446.1	41.589	214	125	0	153	366	211	424
## 1537	NP_001348394.1	XP_021331446.1	40.969	227	133	1	140	366	59	284
## 1538	NP_001348394.1	XP_021331446.1	40.541	222	132	0	145	366	91	312
## 1539	NP_001348394.1	XP_021331446.1	42.029	207	119	1	141	346	366	572
## 1540	NP_001348394.1	XP_021331446.1	40.654	214	127	0	153	366	239	452
## 1541	NP_001348394.1	XP_021331448.1	42.991	214	122	0	153	366	183	396
## 1542	NP_001348394.1	XP_021331448.1	42.523	214	123	0	153	366	211	424
## 1543	NP_001348394.1	XP_021331448.1	43.925	214	120	0	153	366	267	480
## 1544	NP_001348394.1	XP_021331448.1	38.060	268	166	0	99	366	45	312
## 1545	NP_001348394.1	XP_021331448.1	46.632	193	103	0	174	366	36	228
## 1546	NP_001348394.1	XP_021331448.1	43.458	214	121	0	153	366	323	536
## 1547	NP_001348394.1	XP_021331448.1	41.969	193	112	0	174	366	8	200
## 1548	NP_001348394.1	XP_021331448.1	38.462	273	158	2	99	366	241	508
## 1549	NP_001348394.1	XP_021331448.1	42.056	214	124	0	153	366	127	340
## 1550	NP_001348394.1	XP_021331448.1	42.523	214	123	0	153	366	155	368
## 1551	NP_001348394.1	XP_021331448.1	42.991	214	122	0	153	366	239	452
## 1552	NP_001348394.1	XP_021331448.1	40.969	227	133	1	141	366	30	256
## 1553	NP_001348394.1	XP_021331448.1	41.294	201	118	0	146	346	344	544
## 1554	NP_001348394.1	XP_021331448.1	45.294	170	93	0	197	366	3	172

## 1555	NP_001348394.1	XP_021331448.1	44.755	143	79	0	224	366	2	144
## 1556	NP_001348394.1	XP_021331448.1	43.182	88	50	0	281	368	3	90
## 1557	NP_001348394.1	XP_021326475.1	41.850	227	131	1	140	366	38	263
## 1558	NP_001348394.1	XP_021326475.1	41.121	214	126	0	153	366	78	291
## 1559	NP_001348394.1	XP_021326475.1	41.053	190	112	0	153	342	106	295
## 1560	NP_001348394.1	XP_021326475.1	43.636	165	93	0	153	317	134	298
## 1561	NP_001348394.1	XP_021326475.1	38.384	99	60	1	269	366	25	123
## 1562	NP_001348394.1	XP_021331458.1	42.593	216	124	0	153	368	96	311
## 1563	NP_001348394.1	XP_021331458.1	40.529	227	134	1	140	366	28	253
## 1564	NP_001348394.1	XP_021331458.1	40.654	214	127	0	153	366	68	281
## 1565	NP_001348394.1	XP_021331458.1	43.558	163	92	0	153	315	152	314
## 1566	NP_001348394.1	XP_021331232.1	44.393	214	119	0	153	366	183	396
## 1567	NP_001348394.1	XP_021331232.1	42.991	214	122	0	153	366	43	256
## 1568	NP_001348394.1	XP_021331232.1	41.121	214	126	0	153	366	127	340
## 1569	NP_001348394.1	XP_021331232.1	42.991	214	122	0	153	366	15	228
## 1570	NP_001348394.1	XP_021331232.1	43.458	214	121	0	153	366	99	312
## 1571	NP_001348394.1	XP_021331232.1	42.056	214	124	0	153	366	71	284
## 1572	NP_001348394.1	XP_021331232.1	44.560	193	107	0	174	366	8	200
## 1573	NP_001348394.1	XP_021331232.1	38.281	256	142	2	99	346	157	404
## 1574	NP_001348394.1	XP_021331232.1	45.029	171	94	0	197	367	3	173
## 1575	NP_001348394.1	XP_021331232.1	45.455	143	78	0	224	366	2	144
## 1576	NP_001348394.1	XP_021331425.1	41.333	225	132	0	142	366	1	225
## 1577	NP_001348394.1	XP_021331425.1	42.593	216	124	0	153	368	68	283
## 1578	NP_001348394.1	XP_021331425.1	43.458	214	121	0	153	366	96	309
## 1579	NP_001348394.1	XP_021331425.1	41.121	214	126	0	153	366	40	253
## 1580	NP_001348394.1	XP_021331425.1	43.458	214	121	0	153	366	124	337
## 1581	NP_001348394.1	XP_021331425.1	41.753	194	113	0	153	346	152	345
## 1582	NP_001348394.1	XP_021331425.1	33.846	65	43	0	143	207	282	346
## 1583	NP_001348394.1	XP_017209942.1	42.130	216	125	0	153	368	98	313
## 1584	NP_001348394.1	XP_017209942.1	40.529	227	134	1	140	366	30	255
## 1585	NP_001348394.1	XP_017209942.1	39.640	222	134	0	145	366	62	283
## 1586	NP_001348394.1	XP_017209942.1	43.558	163	92	0	153	315	154	316
## 1587	NP_001348394.1	XP_021331239.1	42.991	214	122	0	153	366	14	227
## 1588	NP_001348394.1	XP_021331239.1	43.458	214	121	0	153	366	70	283
## 1589	NP_001348394.1	XP_021331239.1	41.121	214	126	0	153	366	98	311
## 1590	NP_001348394.1	XP_021331239.1	42.268	194	112	0	174	367	7	200
## 1591	NP_001348394.1	XP_021331239.1	40.206	194	116	0	153	346	126	319
## 1592	NP_001348394.1	XP_021331239.1	43.529	170	96	0	197	366	2	171
## 1593	NP_001348394.1	XP_021331239.1	45.977	87	47	0	280	366	1	87
## 1594	NP_001348394.1	XP_021331239.1	28.205	117	68	2	99	207	212	320
## 1595	NP_001348394.1	XP_017210947.1	40.969	227	133	1	140	366	59	284
## 1596	NP_001348394.1	XP_017210947.1	40.187	214	128	0	153	366	99	312
## 1597	NP_001348394.1	XP_021331509.1	40.541	222	132	0	145	366	110	331
## 1598	NP_001348394.1	XP_021331509.1	40.187	214	128	0	153	366	90	303
## 1599	NP_001348394.1	XP_021331509.1	42.932	191	109	0	176	366	57	247
## 1600	NP_001348394.1	XP_021331509.1	38.938	226	138	0	141	366	50	275
## 1601	NP_001348394.1	XP_021331509.1	42.767	159	91	0	153	311	174	332
## 1602	NP_001348394.1	XP_021331509.1	42.647	136	78	0	148	283	197	332
## 1603	NP_001348394.1	XP_021331509.1	32.738	168	97	3	99	258	176	335
## 1604	NP_001348394.1	XP_017210643.2	42.523	214	123	0	153	366	77	290
## 1605	NP_001348394.1	XP_017210643.2	42.932	191	109	0	176	366	44	234
## 1606	NP_001348394.1	XP_017210643.2	38.750	240	146	1	127	366	24	262
## 1607	NP_001348394.1	XP_017210643.2	39.070	215	131	0	153	367	133	347
## 1608	NP_001348394.1	XP_017210643.2	42.289	201	116	0	153	353	161	361

## 1609	NP_001348394.1	XP_021331338.1	42.056	214	124	0	153	366	351	564
## 1610	NP_001348394.1	XP_021331338.1	36.803	269	170	0	98	366	352	620
## 1611	NP_001348394.1	XP_021331338.1	42.056	214	124	0	153	366	435	648
## 1612	NP_001348394.1	XP_021331338.1	42.523	214	123	0	153	366	239	452
## 1613	NP_001348394.1	XP_021331338.1	42.523	214	123	0	153	366	99	312
## 1614	NP_001348394.1	XP_021331338.1	41.589	214	125	0	153	366	267	480
## 1615	NP_001348394.1	XP_021331338.1	43.523	193	109	0	174	366	232	424
## 1616	NP_001348394.1	XP_021331338.1	40.000	215	129	0	153	367	295	509
## 1617	NP_001348394.1	XP_021331338.1	41.589	214	125	0	153	366	323	536
## 1618	NP_001348394.1	XP_021331338.1	39.662	237	142	1	130	366	49	284
## 1619	NP_001348394.1	XP_021331338.1	41.429	210	123	0	153	362	463	672
## 1620	NP_001348394.1	XP_021331338.1	41.121	214	126	0	153	366	155	368
## 1621	NP_001348394.1	XP_021331338.1	35.145	276	163	2	99	366	129	396
## 1622	NP_001348394.1	XP_021329613.1	44.393	214	119	0	153	366	856	1069
## 1623	NP_001348394.1	XP_021329613.1	44.393	214	119	0	153	366	828	1041
## 1624	NP_001348394.1	XP_021329613.1	42.793	222	127	0	145	366	792	1013
## 1625	NP_001348394.1	XP_021329613.1	42.009	219	127	0	153	371	512	730
## 1626	NP_001348394.1	XP_021329613.1	44.615	195	108	0	172	366	475	669
## 1627	NP_001348394.1	XP_021329613.1	42.523	214	123	0	153	366	56	269
## 1628	NP_001348394.1	XP_021329613.1	39.076	238	144	1	130	367	462	698
## 1629	NP_001348394.1	XP_021329613.1	38.938	226	138	0	146	371	189	414
## 1630	NP_001348394.1	XP_021329613.1	41.121	214	126	0	153	366	884	1097
## 1631	NP_001348394.1	XP_021329613.1	41.667	216	126	0	153	368	168	383
## 1632	NP_001348394.1	XP_021329613.1	42.056	214	124	0	153	366	140	353
## 1633	NP_001348394.1	XP_021329613.1	42.326	215	124	0	153	367	84	298
## 1634	NP_001348394.1	XP_021329613.1	40.654	214	127	0	153	366	112	325
## 1635	NP_001348394.1	XP_021329613.1	42.932	191	109	0	176	366	51	241
## 1636	NP_001348394.1	XP_021329613.1	40.654	214	127	0	153	366	940	1153
## 1637	NP_001348394.1	XP_021329613.1	37.083	240	123	1	99	338	514	725
## 1638	NP_001348394.1	XP_021329613.1	37.383	214	134	0	153	366	968	1181
## 1639	NP_001348394.1	XP_021329613.1	37.895	190	118	0	153	342	996	1185
## 1640	NP_001348394.1	XP_021331233.1	44.393	214	119	0	153	366	211	424
## 1641	NP_001348394.1	XP_021331233.1	42.523	214	123	0	153	366	15	228
## 1642	NP_001348394.1	XP_021331233.1	41.892	222	129	0	145	366	63	284
## 1643	NP_001348394.1	XP_021331233.1	41.121	214	126	0	153	366	155	368
## 1644	NP_001348394.1	XP_021331233.1	43.458	214	121	0	153	366	127	340
## 1645	NP_001348394.1	XP_021331233.1	42.056	214	124	0	153	366	99	312
## 1646	NP_001348394.1	XP_021331233.1	42.056	214	124	0	153	366	43	256
## 1647	NP_001348394.1	XP_021331233.1	43.814	194	109	0	174	367	8	201
## 1648	NP_001348394.1	XP_021331233.1	38.281	256	142	2	99	346	185	432
## 1649	NP_001348394.1	XP_021331233.1	44.118	170	95	0	197	366	3	172
## 1650	NP_001348394.1	XP_021331233.1	44.755	143	79	0	224	366	2	144
## 1651	NP_001348394.1	XP_021327225.1	42.523	214	123	0	153	366	183	396
## 1652	NP_001348394.1	XP_021327225.1	44.393	214	119	0	153	366	211	424
## 1653	NP_001348394.1	XP_021327225.1	43.458	214	121	0	153	366	267	480
## 1654	NP_001348394.1	XP_021327225.1	42.523	214	123	0	153	366	15	228
## 1655	NP_001348394.1	XP_021327225.1	43.458	214	121	0	153	366	43	256
## 1656	NP_001348394.1	XP_021327225.1	41.892	222	129	0	145	366	63	284
## 1657	NP_001348394.1	XP_021327225.1	40.271	221	132	0	146	366	288	508
## 1658	NP_001348394.1	XP_021327225.1	43.458	214	121	0	153	366	435	648
## 1659	NP_001348394.1	XP_021327225.1	40.991	222	131	0	145	366	231	452
## 1660	NP_001348394.1	XP_021327225.1	42.056	214	124	0	153	366	99	312
## 1661	NP_001348394.1	XP_021327225.1	42.991	214	122	0	153	366	155	368
## 1662	NP_001348394.1	XP_021327225.1	41.629	221	129	0	146	366	456	676

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## 1663 NP_001348394.1 XP_021327225.1 40.654 214 127 0 153 366 351 564
## 1664 NP_001348394.1 XP_021327225.1 40.541 222 132 0 145 366 399 620
## 1665 NP_001348394.1 XP_021327225.1 45.078 193 106 0 174 366 8 200
## 1666 NP_001348394.1 XP_021327225.1 39.367 221 134 0 146 366 120 340
## 1667 NP_001348394.1 XP_021327225.1 41.121 214 126 0 153 366 323 536
## 1668 NP_001348394.1 XP_021327225.1 42.941 170 97 0 197 366 3 172
## 1669 NP_001348394.1 XP_021327225.1 42.775 173 99 0 140 312 506 678
## 1670 NP_001348394.1 XP_021327225.1 46.154 143 77 0 224 366 2 144
## 1671 NP_001348394.1 XP_017211057.1 41.700 247 140 2 126 368 56 302
## 1672 NP_001348394.1 XP_017211057.1 38.813 219 134 0 148 366 194 412
## 1673 NP_001348394.1 XP_017211057.1 40.639 219 130 0 148 366 138 356
## 1674 NP_001348394.1 XP_017211057.1 40.594 202 120 0 153 354 227 428
## 1675 NP_001348394.1 XP_017211057.1 38.326 227 140 0 140 366 102 328
## 1676 NP_001348394.1 XP_017211057.1 42.222 180 104 0 174 353 192 371
## 1677 NP_001348394.1 XP_017211057.1 38.095 168 104 0 146 313 276 443
## 1678 NP_001348394.1 XP_017211166.1 40.991 222 131 0 145 366 63 284
## 1679 NP_001348394.1 XP_017211166.1 42.326 215 124 0 153 367 127 341
## 1680 NP_001348394.1 XP_017211166.1 41.969 193 112 0 174 366 120 312
## 1681 NP_001348394.1 XP_017211166.1 36.929 241 152 0 98 338 100 340
## 1682 NP_001348394.1 XP_017211166.1 41.718 163 95 0 153 315 183 345
## 1683 NP_001348394.1 XP_017211166.1 41.007 139 82 0 228 366 62 200
## 1684 NP_001348394.1 XP_021331195.1 42.991 214 122 0 153 366 1221 1434
## 1685 NP_001348394.1 XP_021331195.1 44.860 214 118 0 153 366 661 874
## 1686 NP_001348394.1 XP_021331195.1 43.304 224 127 0 148 371 1300 1523
## 1687 NP_001348394.1 XP_021331195.1 37.319 276 157 2 99 366 999 1266
## 1688 NP_001348394.1 XP_021331195.1 44.393 214 119 0 153 366 99 312
## 1689 NP_001348394.1 XP_021331195.1 43.925 214 120 0 153 366 71 284
## 1690 NP_001348394.1 XP_021331195.1 35.948 306 175 3 69 366 554 846
## 1691 NP_001348394.1 XP_021331195.1 42.991 214 122 0 153 366 1249 1462
## 1692 NP_001348394.1 XP_021331195.1 42.523 214 123 0 153 366 1165 1378
## 1693 NP_001348394.1 XP_021331195.1 36.957 276 158 2 99 366 691 958
## 1694 NP_001348394.1 XP_021331195.1 42.009 219 127 0 148 366 992 1210
## 1695 NP_001348394.1 XP_021331195.1 37.681 276 156 2 99 366 663 930
## 1696 NP_001348394.1 XP_021331195.1 42.523 214 123 0 153 366 267 480
## 1697 NP_001348394.1 XP_021331195.1 33.639 327 180 3 69 366 780 1098
## 1698 NP_001348394.1 XP_021331195.1 36.594 276 159 2 99 366 1139 1406
## 1699 NP_001348394.1 XP_021331195.1 41.589 214 125 0 153 366 1081 1294
## 1700 NP_001348394.1 XP_021331195.1 41.589 214 125 0 153 366 1277 1490
## 1701 NP_001348394.1 XP_021331195.1 42.523 214 123 0 153 366 127 340
## 1702 NP_001348394.1 XP_021331195.1 34.694 294 185 1 73 366 840 1126
## 1703 NP_001348394.1 XP_021331195.1 40.654 214 127 0 153 366 407 620
## 1704 NP_001348394.1 XP_021331195.1 41.121 214 126 0 153 366 379 592
## 1705 NP_001348394.1 XP_021331195.1 40.465 215 128 0 153 367 1109 1323
## 1706 NP_001348394.1 XP_021331195.1 40.000 215 129 0 153 367 941 1155
## 1707 NP_001348394.1 XP_021331195.1 40.183 219 131 0 148 366 1132 1350
## 1708 NP_001348394.1 XP_021331195.1 43.299 194 110 0 174 367 822 1015
## 1709 NP_001348394.1 XP_021331195.1 43.284 201 114 0 153 353 211 411
## 1710 NP_001348394.1 XP_021331195.1 39.720 214 129 0 153 366 155 368
## 1711 NP_001348394.1 XP_021331195.1 37.705 244 122 1 153 366 463 706
## 1712 NP_001348394.1 XP_021331195.1 43.979 191 107 0 176 366 66 256
## 1713 NP_001348394.1 XP_021331195.1 39.648 227 137 0 140 366 170 396
## 1714 NP_001348394.1 XP_021331195.1 39.381 226 137 0 141 366 339 564
## 1715 NP_001348394.1 XP_021331195.1 41.589 214 125 0 153 366 239 452
## 1716 NP_001348394.1 XP_021331195.1 35.252 278 164 2 99 368 269 538

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## 1717 NP_001348394.1 XP_021331195.1 39.252 214 130 0 153 366 969 1182
## 1718 NP_001348394.1 XP_021331195.1 34.167 240 134 1 153 368 1389 1628
## 1719 NP_001348394.1 XP_021331195.1 31.058 293 178 1 99 367 1363 1655
## 1720 NP_001348394.1 XP_021331195.1 33.951 162 103 1 153 314 1501 1658
## 1721 NP_001348394.1 XP_021331195.1 29.592 196 118 2 99 286 1475 1658
## 1722 NP_001348394.1 XP_021330521.1 43.925 214 120 0 153 366 140 353
## 1723 NP_001348394.1 XP_021330521.1 42.991 214 122 0 153 366 56 269
## 1724 NP_001348394.1 XP_021330521.1 42.523 214 123 0 153 366 168 381
## 1725 NP_001348394.1 XP_021330521.1 41.589 214 125 0 153 366 112 325
## 1726 NP_001348394.1 XP_021330521.1 42.326 215 124 0 153 367 84 298
## 1727 NP_001348394.1 XP_021330521.1 38.914 221 135 0 146 366 189 409
## 1728 NP_001348394.1 XP_021330521.1 41.379 203 119 0 164 366 39 241
## 1729 NP_001348394.1 XP_021330521.1 38.889 216 126 4 99 311 198 410
## 1730 NP_001348394.1 XP_021330521.1 41.346 104 61 0 153 256 308 411
## 1731 NP_001348394.1 XP_021330520.1 43.925 214 120 0 153 366 140 353
## 1732 NP_001348394.1 XP_021330520.1 42.991 214 122 0 153 366 56 269
## 1733 NP_001348394.1 XP_021330520.1 42.523 214 123 0 153 366 168 381
## 1734 NP_001348394.1 XP_021330520.1 41.589 214 125 0 153 366 112 325
## 1735 NP_001348394.1 XP_021330520.1 42.326 215 124 0 153 367 84 298
## 1736 NP_001348394.1 XP_021330520.1 38.914 221 135 0 146 366 189 409
## 1737 NP_001348394.1 XP_021330520.1 41.379 203 119 0 164 366 39 241
## 1738 NP_001348394.1 XP_021330520.1 38.889 216 126 4 99 311 198 410
## 1739 NP_001348394.1 XP_021330520.1 41.346 104 61 0 153 256 308 411
## 1740 NP_001348394.1 XP_021330518.1 43.925 214 120 0 153 366 140 353
## 1741 NP_001348394.1 XP_021330518.1 42.991 214 122 0 153 366 56 269
## 1742 NP_001348394.1 XP_021330518.1 42.523 214 123 0 153 366 168 381
## 1743 NP_001348394.1 XP_021330518.1 41.589 214 125 0 153 366 112 325
## 1744 NP_001348394.1 XP_021330518.1 42.326 215 124 0 153 367 84 298
## 1745 NP_001348394.1 XP_021330518.1 38.914 221 135 0 146 366 189 409
## 1746 NP_001348394.1 XP_021330518.1 41.379 203 119 0 164 366 39 241
## 1747 NP_001348394.1 XP_021330518.1 38.889 216 126 4 99 311 198 410
## 1748 NP_001348394.1 XP_021330518.1 41.346 104 61 0 153 256 308 411
## 1749 NP_001348394.1 XP_021327017.1 43.925 214 120 0 153 366 140 353
## 1750 NP_001348394.1 XP_021327017.1 42.991 214 122 0 153 366 56 269
## 1751 NP_001348394.1 XP_021327017.1 42.523 214 123 0 153 366 168 381
## 1752 NP_001348394.1 XP_021327017.1 41.589 214 125 0 153 366 112 325
## 1753 NP_001348394.1 XP_021327017.1 42.326 215 124 0 153 367 84 298
## 1754 NP_001348394.1 XP_021327017.1 38.914 221 135 0 146 366 189 409
## 1755 NP_001348394.1 XP_021327017.1 41.379 203 119 0 164 366 39 241
## 1756 NP_001348394.1 XP_021327017.1 41.398 186 106 3 129 311 225 410
## 1757 NP_001348394.1 XP_021327017.1 41.346 104 61 0 153 256 308 411
## 1758 NP_001348394.1 XP_021327016.1 43.925 214 120 0 153 366 140 353
## 1759 NP_001348394.1 XP_021327016.1 42.991 214 122 0 153 366 56 269
## 1760 NP_001348394.1 XP_021327016.1 42.523 214 123 0 153 366 168 381
## 1761 NP_001348394.1 XP_021327016.1 41.589 214 125 0 153 366 112 325
## 1762 NP_001348394.1 XP_021327016.1 42.326 215 124 0 153 367 84 298
## 1763 NP_001348394.1 XP_021327016.1 38.914 221 135 0 146 366 189 409
## 1764 NP_001348394.1 XP_021327016.1 41.379 203 119 0 164 366 39 241
## 1765 NP_001348394.1 XP_021327016.1 41.398 186 106 3 129 311 225 410
## 1766 NP_001348394.1 XP_021327016.1 41.346 104 61 0 153 256 308 411
## 1767 NP_001348394.1 XP_021327015.1 43.925 214 120 0 153 366 140 353
## 1768 NP_001348394.1 XP_021327015.1 42.991 214 122 0 153 366 56 269
## 1769 NP_001348394.1 XP_021327015.1 42.523 214 123 0 153 366 168 381
## 1770 NP_001348394.1 XP_021327015.1 41.589 214 125 0 153 366 112 325

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## 1771 NP_001348394.1 XP_021327015.1 42.326 215 124 0 153 367 84 298
## 1772 NP_001348394.1 XP_021327015.1 38.914 221 135 0 146 366 189 409
## 1773 NP_001348394.1 XP_021327015.1 41.379 203 119 0 164 366 39 241
## 1774 NP_001348394.1 XP_021327015.1 41.398 186 106 3 129 311 225 410
## 1775 NP_001348394.1 XP_021327015.1 41.346 104 61 0 153 256 308 411
## 1776 NP_001348394.1 XP_021327014.1 43.925 214 120 0 153 366 140 353
## 1777 NP_001348394.1 XP_021327014.1 42.991 214 122 0 153 366 56 269
## 1778 NP_001348394.1 XP_021327014.1 42.523 214 123 0 153 366 168 381
## 1779 NP_001348394.1 XP_021327014.1 41.589 214 125 0 153 366 112 325
## 1780 NP_001348394.1 XP_021327014.1 42.326 215 124 0 153 367 84 298
## 1781 NP_001348394.1 XP_021327014.1 38.914 221 135 0 146 366 189 409
## 1782 NP_001348394.1 XP_021327014.1 41.379 203 119 0 164 366 39 241
## 1783 NP_001348394.1 XP_021327014.1 41.398 186 106 3 129 311 225 410
## 1784 NP_001348394.1 XP_021327014.1 41.346 104 61 0 153 256 308 411
## 1785 NP_001348394.1 XP_021327013.1 43.925 214 120 0 153 366 140 353
## 1786 NP_001348394.1 XP_021327013.1 42.991 214 122 0 153 366 56 269
## 1787 NP_001348394.1 XP_021327013.1 42.523 214 123 0 153 366 168 381
## 1788 NP_001348394.1 XP_021327013.1 41.589 214 125 0 153 366 112 325
## 1789 NP_001348394.1 XP_021327013.1 42.326 215 124 0 153 367 84 298
## 1790 NP_001348394.1 XP_021327013.1 38.914 221 135 0 146 366 189 409
## 1791 NP_001348394.1 XP_021327013.1 41.379 203 119 0 164 366 39 241
## 1792 NP_001348394.1 XP_021327013.1 41.398 186 106 3 129 311 225 410
## 1793 NP_001348394.1 XP_021327013.1 41.346 104 61 0 153 256 308 411
## 1794 NP_001348394.1 XP_021330522.1 43.925 214 120 0 153 366 140 353
## 1795 NP_001348394.1 XP_021330522.1 42.991 214 122 0 153 366 56 269
## 1796 NP_001348394.1 XP_021330522.1 42.523 214 123 0 153 366 168 381
## 1797 NP_001348394.1 XP_021330522.1 41.589 214 125 0 153 366 112 325
## 1798 NP_001348394.1 XP_021330522.1 42.326 215 124 0 153 367 84 298
## 1799 NP_001348394.1 XP_021330522.1 38.914 221 135 0 146 366 189 409
## 1800 NP_001348394.1 XP_021330522.1 41.379 203 119 0 164 366 39 241
## 1801 NP_001348394.1 XP_021330522.1 41.398 186 106 3 129 311 225 410
## 1802 NP_001348394.1 XP_021330522.1 41.346 104 61 0 153 256 308 411
## 1803 NP_001348394.1 XP_021330519.1 43.925 214 120 0 153 366 140 353
## 1804 NP_001348394.1 XP_021330519.1 42.991 214 122 0 153 366 56 269
## 1805 NP_001348394.1 XP_021330519.1 42.523 214 123 0 153 366 168 381
## 1806 NP_001348394.1 XP_021330519.1 41.589 214 125 0 153 366 112 325
## 1807 NP_001348394.1 XP_021330519.1 42.326 215 124 0 153 367 84 298
## 1808 NP_001348394.1 XP_021330519.1 38.914 221 135 0 146 366 189 409
## 1809 NP_001348394.1 XP_021330519.1 41.379 203 119 0 164 366 39 241
## 1810 NP_001348394.1 XP_021330519.1 41.398 186 106 3 129 311 225 410
## 1811 NP_001348394.1 XP_021330519.1 41.346 104 61 0 153 256 308 411
## 1812 NP_001348394.1 XP_021330517.1 43.925 214 120 0 153 366 140 353
## 1813 NP_001348394.1 XP_021330517.1 42.991 214 122 0 153 366 56 269
## 1814 NP_001348394.1 XP_021330517.1 42.523 214 123 0 153 366 168 381
## 1815 NP_001348394.1 XP_021330517.1 41.589 214 125 0 153 366 112 325
## 1816 NP_001348394.1 XP_021330517.1 42.326 215 124 0 153 367 84 298
## 1817 NP_001348394.1 XP_021330517.1 38.914 221 135 0 146 366 189 409
## 1818 NP_001348394.1 XP_021330517.1 41.379 203 119 0 164 366 39 241
## 1819 NP_001348394.1 XP_021330517.1 41.398 186 106 3 129 311 225 410
## 1820 NP_001348394.1 XP_021330517.1 41.346 104 61 0 153 256 308 411
## 1821 NP_001348394.1 XP_021330516.1 43.925 214 120 0 153 366 140 353
## 1822 NP_001348394.1 XP_021330516.1 42.991 214 122 0 153 366 56 269
## 1823 NP_001348394.1 XP_021330516.1 42.523 214 123 0 153 366 168 381
## 1824 NP_001348394.1 XP_021330516.1 41.589 214 125 0 153 366 112 325

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## 1825 NP_001348394.1 XP_021330516.1 42.326 215 124 0 153 367 84 298
## 1826 NP_001348394.1 XP_021330516.1 38.914 221 135 0 146 366 189 409
## 1827 NP_001348394.1 XP_021330516.1 41.379 203 119 0 164 366 39 241
## 1828 NP_001348394.1 XP_021330516.1 41.398 186 106 3 129 311 225 410
## 1829 NP_001348394.1 XP_021330516.1 41.346 104 61 0 153 256 308 411
## 1830 NP_001348394.1 XP_021330515.1 43.925 214 120 0 153 366 140 353
## 1831 NP_001348394.1 XP_021330515.1 42.991 214 122 0 153 366 56 269
## 1832 NP_001348394.1 XP_021330515.1 42.523 214 123 0 153 366 168 381
## 1833 NP_001348394.1 XP_021330515.1 41.589 214 125 0 153 366 112 325
## 1834 NP_001348394.1 XP_021330515.1 42.326 215 124 0 153 367 84 298
## 1835 NP_001348394.1 XP_021330515.1 38.914 221 135 0 146 366 189 409
## 1836 NP_001348394.1 XP_021330515.1 41.379 203 119 0 164 366 39 241
## 1837 NP_001348394.1 XP_021330515.1 41.398 186 106 3 129 311 225 410
## 1838 NP_001348394.1 XP_021330515.1 41.346 104 61 0 153 256 308 411
## 1839 NP_001348394.1 XP_021330514.1 43.925 214 120 0 153 366 140 353
## 1840 NP_001348394.1 XP_021330514.1 42.991 214 122 0 153 366 56 269
## 1841 NP_001348394.1 XP_021330514.1 42.523 214 123 0 153 366 168 381
## 1842 NP_001348394.1 XP_021330514.1 41.589 214 125 0 153 366 112 325
## 1843 NP_001348394.1 XP_021330514.1 42.326 215 124 0 153 367 84 298
## 1844 NP_001348394.1 XP_021330514.1 38.914 221 135 0 146 366 189 409
## 1845 NP_001348394.1 XP_021330514.1 41.379 203 119 0 164 366 39 241
## 1846 NP_001348394.1 XP_021330514.1 41.398 186 106 3 129 311 225 410
## 1847 NP_001348394.1 XP_021330514.1 41.346 104 61 0 153 256 308 411
## 1848 NP_001348394.1 XP_021329720.1 42.991 214 122 0 153 366 187 400
## 1849 NP_001348394.1 XP_021329720.1 37.200 250 149 1 118 367 216 457
## 1850 NP_001348394.1 XP_021329720.1 42.130 216 125 0 153 368 271 486
## 1851 NP_001348394.1 XP_021329720.1 41.589 214 125 0 153 366 159 372
## 1852 NP_001348394.1 XP_021329720.1 41.589 214 125 0 153 366 215 428
## 1853 NP_001348394.1 XP_021329720.1 41.589 214 125 0 153 366 131 344
## 1854 NP_001348394.1 XP_021329720.1 42.056 214 124 0 153 366 47 260
## 1855 NP_001348394.1 XP_021329720.1 43.979 191 107 0 176 366 42 232
## 1856 NP_001348394.1 XP_021329720.1 41.121 214 126 0 153 366 75 288
## 1857 NP_001348394.1 XP_021329720.1 39.720 214 129 0 153 366 103 316
## 1858 NP_001348394.1 XP_021329720.1 40.654 214 127 0 153 366 299 512
## 1859 NP_001348394.1 XP_021329720.1 40.376 213 127 0 153 365 327 539
## 1860 NP_001348394.1 XP_017210823.1 46.632 193 103 0 176 368 82 274
## 1861 NP_001348394.1 XP_017210823.1 45.026 191 105 0 176 366 110 300
## 1862 NP_001348394.1 XP_017210823.1 35.531 273 168 2 99 367 89 357
## 1863 NP_001348394.1 XP_017210823.1 35.329 167 108 0 148 314 194 360
## 1864 NP_001348394.1 XP_017211225.1 42.523 214 123 0 153 366 71 284
## 1865 NP_001348394.1 XP_017211225.1 42.727 220 120 1 153 366 155 374
## 1866 NP_001348394.1 XP_017211225.1 43.455 191 108 0 176 366 66 256
## 1867 NP_001348394.1 XP_017211225.1 40.909 220 124 1 153 366 99 318
## 1868 NP_001348394.1 XP_017211225.1 40.609 197 111 1 153 343 183 379
## 1869 NP_001348394.1 XP_021330715.1 48.718 195 100 0 174 368 91 285
## 1870 NP_001348394.1 XP_021330715.1 44.053 227 126 1 141 366 281 507
## 1871 NP_001348394.1 XP_021330715.1 44.860 214 118 0 153 366 742 955
## 1872 NP_001348394.1 XP_021330715.1 43.925 214 120 0 153 366 350 563
## 1873 NP_001348394.1 XP_021330715.1 39.852 271 157 2 99 366 828 1095
## 1874 NP_001348394.1 XP_021330715.1 43.458 214 121 0 153 366 658 871
## 1875 NP_001348394.1 XP_021330715.1 41.256 223 131 0 146 368 1015 1237
## 1876 NP_001348394.1 XP_021330715.1 42.326 215 124 0 153 367 686 900
## 1877 NP_001348394.1 XP_021330715.1 37.638 271 162 3 99 366 996 1262
## 1878 NP_001348394.1 XP_021330715.1 36.232 276 160 2 99 366 912 1179

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## 1879	NP_001348394.1	XP_021330715.1	41.850	227	131	1	141	366	253	479
## 1880	NP_001348394.1	XP_021330715.1	44.103	195	109	0	174	368	63	257
## 1881	NP_001348394.1	XP_021330715.1	41.121	214	126	0	153	366	378	591
## 1882	NP_001348394.1	XP_021330715.1	41.121	214	126	0	153	366	994	1207
## 1883	NP_001348394.1	XP_021330715.1	36.929	241	139	1	139	366	603	843
## 1884	NP_001348394.1	XP_021330715.1	42.056	214	124	0	153	366	98	311
## 1885	NP_001348394.1	XP_021330715.1	41.589	214	125	0	153	366	406	619
## 1886	NP_001348394.1	XP_021330715.1	40.654	214	127	0	153	366	770	983
## 1887	NP_001348394.1	XP_021330715.1	44.041	193	108	0	174	366	35	227
## 1888	NP_001348394.1	XP_021330715.1	41.589	214	125	0	153	366	798	1011
## 1889	NP_001348394.1	XP_021330715.1	42.523	214	123	0	153	366	210	423
## 1890	NP_001348394.1	XP_021330715.1	36.940	268	169	0	99	366	184	451
## 1891	NP_001348394.1	XP_021330715.1	40.187	214	128	0	153	366	826	1039
## 1892	NP_001348394.1	XP_021330715.1	35.870	276	161	2	99	366	100	367
## 1893	NP_001348394.1	XP_021330715.1	42.564	195	108	2	174	366	7	199
## 1894	NP_001348394.1	XP_021330715.1	40.000	215	129	0	153	367	490	704
## 1895	NP_001348394.1	XP_021330715.1	40.183	219	131	0	148	366	429	647
## 1896	NP_001348394.1	XP_021330715.1	36.194	268	171	0	99	366	520	787
## 1897	NP_001348394.1	XP_021330715.1	35.357	280	165	3	95	366	488	759
## 1898	NP_001348394.1	XP_021330715.1	43.005	193	110	0	174	366	735	927
## 1899	NP_001348394.1	XP_021330715.1	39.720	214	129	0	153	366	602	815
## 1900	NP_001348394.1	XP_021330715.1	34.983	303	154	3	99	366	1024	1318
## 1901	NP_001348394.1	XP_021330715.1	38.494	239	120	1	153	364	1106	1344
## 1902	NP_001348394.1	XP_021330715.1	40.654	214	127	0	153	366	462	675
## 1903	NP_001348394.1	XP_021330715.1	43.605	172	93	2	197	366	2	171
## 1904	NP_001348394.1	XP_021330715.1	36.321	212	108	1	153	337	1134	1345
## 1905	NP_001348394.1	XP_021330715.1	41.045	134	78	1	153	286	1218	1350
## 1906	NP_001348394.1	XP_021330715.1	45.977	87	47	0	280	366	1	87
## 1907	NP_001348394.1	XP_021331422.1	42.991	214	122	0	153	366	43	256
## 1908	NP_001348394.1	XP_021331422.1	37.500	280	159	3	95	366	153	424
## 1909	NP_001348394.1	XP_021331422.1	46.114	193	104	0	174	366	36	228
## 1910	NP_001348394.1	XP_021331422.1	37.681	276	156	3	99	366	73	340
## 1911	NP_001348394.1	XP_021331422.1	42.523	214	123	0	153	366	71	284
## 1912	NP_001348394.1	XP_021331422.1	37.132	272	163	2	99	366	45	312
## 1913	NP_001348394.1	XP_021331422.1	41.969	193	112	0	174	366	8	200
## 1914	NP_001348394.1	XP_021331422.1	45.294	170	93	0	197	366	3	172
## 1915	NP_001348394.1	XP_021331422.1	43.125	160	91	0	153	312	267	426
## 1916	NP_001348394.1	XP_021331422.1	45.455	143	78	0	224	366	2	144
## 1917	NP_001348394.1	XP_021331422.1	26.549	113	73	2	95	202	321	428
## 1918	NP_001348394.1	XP_021331159.1	42.056	214	124	0	153	366	71	284
## 1919	NP_001348394.1	XP_021331159.1	42.056	214	124	0	153	366	99	312
## 1920	NP_001348394.1	XP_021331159.1	43.925	214	120	0	153	366	127	340
## 1921	NP_001348394.1	XP_021331159.1	43.455	191	108	0	176	366	66	256
## 1922	NP_001348394.1	XP_021331159.1	42.408	191	110	0	153	343	183	373
## 1923	NP_001348394.1	XP_009300324.1	42.991	214	122	0	153	366	170	383
## 1924	NP_001348394.1	XP_009300324.1	37.200	250	149	1	118	367	199	440
## 1925	NP_001348394.1	XP_009300324.1	42.130	216	125	0	153	368	254	469
## 1926	NP_001348394.1	XP_009300324.1	41.589	214	125	0	153	366	142	355
## 1927	NP_001348394.1	XP_009300324.1	41.589	214	125	0	153	366	198	411
## 1928	NP_001348394.1	XP_009300324.1	41.589	214	125	0	153	366	114	327
## 1929	NP_001348394.1	XP_009300324.1	42.056	214	124	0	153	366	30	243
## 1930	NP_001348394.1	XP_009300324.1	43.979	191	107	0	176	366	25	215
## 1931	NP_001348394.1	XP_009300324.1	41.121	214	126	0	153	366	58	271
## 1932	NP_001348394.1	XP_009300324.1	39.720	214	129	0	153	366	86	299

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## 1933 NP_001348394.1 XP_009300324.1 40.654 214 127 0 153 366 282 495
## 1934 NP_001348394.1 XP_009300324.1 40.376 213 127 0 153 365 310 522
## 1935 NP_001348394.1 XP_009298780.3 41.667 216 126 0 153 368 7 222
## 1936 NP_001348394.1 XP_009298780.3 42.991 214 122 0 153 366 119 332
## 1937 NP_001348394.1 XP_009298780.3 42.202 218 126 0 153 370 147 364
## 1938 NP_001348394.1 XP_009298780.3 43.925 214 120 0 153 366 35 248
## 1939 NP_001348394.1 XP_009298780.3 42.056 214 124 0 153 366 175 388
## 1940 NP_001348394.1 XP_009298780.3 36.232 276 160 2 99 366 37 304
## 1941 NP_001348394.1 XP_009298780.3 43.750 192 108 0 175 366 1 192
## 1942 NP_001348394.1 XP_009298780.3 41.969 193 112 0 144 336 222 414
## 1943 NP_001348394.1 XP_009298780.3 40.094 212 127 0 153 364 203 414
## 1944 NP_001348394.1 XP_017211215.2 44.186 215 120 0 152 366 408 622
## 1945 NP_001348394.1 XP_017211215.2 39.493 276 151 2 99 366 579 846
## 1946 NP_001348394.1 XP_017211215.2 42.991 214 122 0 153 366 689 902
## 1947 NP_001348394.1 XP_017211215.2 43.925 214 120 0 153 366 297 510
## 1948 NP_001348394.1 XP_017211215.2 43.439 221 123 1 148 366 38 258
## 1949 NP_001348394.1 XP_017211215.2 42.991 214 122 0 153 366 269 482
## 1950 NP_001348394.1 XP_017211215.2 42.991 214 122 0 153 366 353 566
## 1951 NP_001348394.1 XP_017211215.2 37.319 276 157 2 99 366 411 678
## 1952 NP_001348394.1 XP_017211215.2 40.930 215 127 0 152 366 744 958
## 1953 NP_001348394.1 XP_017211215.2 41.121 214 126 0 153 366 801 1014
## 1954 NP_001348394.1 XP_017211215.2 42.523 214 123 0 153 366 549 762
## 1955 NP_001348394.1 XP_017211215.2 42.991 214 122 0 153 366 15 228
## 1956 NP_001348394.1 XP_017211215.2 44.340 212 118 0 153 364 241 452
## 1957 NP_001348394.1 XP_017211215.2 42.991 214 122 0 153 366 325 538
## 1958 NP_001348394.1 XP_017211215.2 35.870 276 161 2 99 366 439 706
## 1959 NP_001348394.1 XP_017211215.2 42.130 216 123 1 153 366 211 426
## 1960 NP_001348394.1 XP_017211215.2 41.121 214 126 0 153 366 381 594
## 1961 NP_001348394.1 XP_017211215.2 44.041 193 108 0 174 366 8 200
## 1962 NP_001348394.1 XP_017211215.2 40.654 214 127 0 153 366 521 734
## 1963 NP_001348394.1 XP_017211215.2 36.431 269 171 0 99 367 803 1071
## 1964 NP_001348394.1 XP_017211215.2 36.594 276 159 2 99 366 719 986
## 1965 NP_001348394.1 XP_017211215.2 45.882 170 92 0 197 366 3 172
## 1966 NP_001348394.1 XP_017211215.2 43.529 170 96 0 174 343 906 1075
## 1967 NP_001348394.1 XP_017211215.2 45.455 143 78 0 224 366 2 144
## 1968 NP_001348394.1 XP_017211215.2 29.630 216 124 1 99 286 859 1074
## 1969 NP_001348394.1 XP_021327003.1 42.731 227 130 0 140 366 935 1161
## 1970 NP_001348394.1 XP_021327003.1 42.991 214 122 0 153 366 500 713
## 1971 NP_001348394.1 XP_021327003.1 38.768 276 153 3 99 366 250 517
## 1972 NP_001348394.1 XP_021327003.1 36.700 297 160 3 99 367 782 1078
## 1973 NP_001348394.1 XP_021327003.1 42.991 214 122 0 153 366 1088 1301
## 1974 NP_001348394.1 XP_021327003.1 44.393 214 119 0 153 366 528 741
## 1975 NP_001348394.1 XP_021327003.1 42.081 221 128 0 146 366 997 1217
## 1976 NP_001348394.1 XP_021327003.1 38.406 276 154 2 99 366 306 573
## 1977 NP_001348394.1 XP_021327003.1 45.327 214 117 0 153 366 1116 1329
## 1978 NP_001348394.1 XP_021327003.1 43.458 214 121 0 153 366 724 937
## 1979 NP_001348394.1 XP_021327003.1 42.991 214 122 0 153 366 780 993
## 1980 NP_001348394.1 XP_021327003.1 42.523 214 123 0 153 366 696 909
## 1981 NP_001348394.1 XP_021327003.1 43.458 214 121 0 153 366 1060 1273
## 1982 NP_001348394.1 XP_021327003.1 45.078 193 106 0 174 366 241 433
## 1983 NP_001348394.1 XP_021327003.1 35.473 296 163 3 99 366 334 629
## 1984 NP_001348394.1 XP_021327003.1 42.991 214 122 0 153 366 640 853
## 1985 NP_001348394.1 XP_021327003.1 41.589 214 125 0 153 366 472 685
## 1986 NP_001348394.1 XP_021327003.1 41.121 214 126 0 153 366 584 797

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## 1987 NP_001348394.1 XP_021327003.1 41.589 214 125 0 153 366 556 769
## 1988 NP_001348394.1 XP_021327003.1 43.925 214 120 0 153 366 80 293
## 1989 NP_001348394.1 XP_021327003.1 40.654 214 127 0 153 366 668 881
## 1990 NP_001348394.1 XP_021327003.1 41.589 214 125 0 153 366 444 657
## 1991 NP_001348394.1 XP_021327003.1 40.465 215 128 0 153 367 136 350
## 1992 NP_001348394.1 XP_021327003.1 37.687 268 167 0 99 366 1118 1385
## 1993 NP_001348394.1 XP_021327003.1 41.589 214 125 0 153 366 192 405
## 1994 NP_001348394.1 XP_021327003.1 34.471 293 179 3 77 366 683 965
## 1995 NP_001348394.1 XP_021327003.1 41.121 214 126 0 153 366 248 461
## 1996 NP_001348394.1 XP_021327003.1 40.654 214 127 0 153 366 164 377
## 1997 NP_001348394.1 XP_021327003.1 37.349 249 148 1 118 366 81 321
## 1998 NP_001348394.1 XP_021327003.1 45.550 191 104 0 176 366 75 265
## 1999 NP_001348394.1 XP_021327003.1 41.753 194 113 0 153 346 1228 1421
## 2000 NP_001348394.1 XP_021327003.1 42.754 138 79 0 229 366 72 209
## 2001 NP_001348394.1 XP_021330542.1 42.731 227 130 0 140 366 935 1161
## 2002 NP_001348394.1 XP_021330542.1 42.991 214 122 0 153 366 500 713
## 2003 NP_001348394.1 XP_021330542.1 38.768 276 153 3 99 366 250 517
## 2004 NP_001348394.1 XP_021330542.1 36.700 297 160 3 99 367 782 1078
## 2005 NP_001348394.1 XP_021330542.1 42.991 214 122 0 153 366 1088 1301
## 2006 NP_001348394.1 XP_021330542.1 44.393 214 119 0 153 366 528 741
## 2007 NP_001348394.1 XP_021330542.1 42.081 221 128 0 146 366 997 1217
## 2008 NP_001348394.1 XP_021330542.1 38.406 276 154 2 99 366 306 573
## 2009 NP_001348394.1 XP_021330542.1 45.327 214 117 0 153 366 1116 1329
## 2010 NP_001348394.1 XP_021330542.1 43.458 214 121 0 153 366 724 937
## 2011 NP_001348394.1 XP_021330542.1 42.991 214 122 0 153 366 780 993
## 2012 NP_001348394.1 XP_021330542.1 42.523 214 123 0 153 366 696 909
## 2013 NP_001348394.1 XP_021330542.1 43.458 214 121 0 153 366 1060 1273
## 2014 NP_001348394.1 XP_021330542.1 45.078 193 106 0 174 366 241 433
## 2015 NP_001348394.1 XP_021330542.1 35.473 296 163 3 99 366 334 629
## 2016 NP_001348394.1 XP_021330542.1 42.991 214 122 0 153 366 640 853
## 2017 NP_001348394.1 XP_021330542.1 41.589 214 125 0 153 366 472 685
## 2018 NP_001348394.1 XP_021330542.1 41.121 214 126 0 153 366 584 797
## 2019 NP_001348394.1 XP_021330542.1 41.589 214 125 0 153 366 556 769
## 2020 NP_001348394.1 XP_021330542.1 43.925 214 120 0 153 366 80 293
## 2021 NP_001348394.1 XP_021330542.1 40.654 214 127 0 153 366 668 881
## 2022 NP_001348394.1 XP_021330542.1 41.589 214 125 0 153 366 444 657
## 2023 NP_001348394.1 XP_021330542.1 40.465 215 128 0 153 367 136 350
## 2024 NP_001348394.1 XP_021330542.1 37.687 268 167 0 99 366 1118 1385
## 2025 NP_001348394.1 XP_021330542.1 41.589 214 125 0 153 366 192 405
## 2026 NP_001348394.1 XP_021330542.1 34.471 293 179 3 77 366 683 965
## 2027 NP_001348394.1 XP_021330542.1 41.121 214 126 0 153 366 248 461
## 2028 NP_001348394.1 XP_021330542.1 40.654 214 127 0 153 366 164 377
## 2029 NP_001348394.1 XP_021330542.1 37.349 249 148 1 118 366 81 321
## 2030 NP_001348394.1 XP_021330542.1 45.550 191 104 0 176 366 75 265
## 2031 NP_001348394.1 XP_021330542.1 41.753 194 113 0 153 346 1228 1421
## 2032 NP_001348394.1 XP_021330542.1 42.754 138 79 0 229 366 72 209
## 2033 NP_001348394.1 NP_001307132.1 41.589 214 125 0 153 366 99 312
## 2034 NP_001348394.1 NP_001307132.1 43.979 191 107 0 176 366 66 256
## 2035 NP_001348394.1 NP_001307132.1 39.662 237 142 1 130 366 49 284
## 2036 NP_001348394.1 NP_001307132.1 43.158 190 108 0 153 342 127 316
## 2037 NP_001348394.1 NP_001307132.1 36.697 218 138 0 99 316 101 318
## 2038 NP_001348394.1 NP_001307132.1 45.679 81 44 0 288 368 66 146
## 2039 NP_001348394.1 XP_021331474.1 42.056 214 124 0 153 366 124 337
## 2040 NP_001348394.1 XP_021331474.1 37.751 249 151 1 122 366 5 253

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## 2041 NP_001348394.1 XP_021331474.1 40.541 222 132 0 145 366 172 393
## 2042 NP_001348394.1 XP_021331474.1 41.589 214 125 0 153 366 152 365
## 2043 NP_001348394.1 XP_021331474.1 40.187 214 128 0 153 366 96 309
## 2044 NP_001348394.1 XP_021331474.1 43.523 193 109 0 174 366 89 281
## 2045 NP_001348394.1 XP_021331474.1 43.125 160 91 0 153 312 236 395
## 2046 NP_001348394.1 XP_021331474.1 28.571 112 64 3 99 202 294 397
## 2047 NP_001348394.1 XP_021331043.1 44.503 191 106 0 176 366 34 224
## 2048 NP_001348394.1 XP_021331043.1 38.494 239 145 1 115 353 3 239
## 2049 NP_001348394.1 XP_021331043.1 46.377 69 37 0 174 242 172 240
## 2050 NP_001348394.1 XP_021330856.1 38.431 255 128 2 140 366 64 317
## 2051 NP_001348394.1 XP_021330856.1 43.796 137 77 0 232 368 71 207
## 2052 NP_001348394.1 XP_021331371.1 43.523 193 109 0 174 366 4 196
## 2053 NP_001348394.1 XP_021331371.1 41.204 216 127 0 153 368 11 226
## 2054 NP_001348394.1 XP_021331371.1 38.596 228 139 1 145 371 31 258
## 2055 NP_001348394.1 XP_021331371.1 41.071 168 99 0 199 366 1 168
## 2056 NP_001348394.1 XP_021331127.1 38.433 268 165 0 99 366 17 284
## 2057 NP_001348394.1 XP_021331127.1 38.148 270 167 0 99 368 269 538
## 2058 NP_001348394.1 XP_021331127.1 36.177 293 174 3 77 366 282 564
## 2059 NP_001348394.1 XP_021331127.1 44.560 193 107 0 174 366 8 200
## 2060 NP_001348394.1 XP_021331127.1 42.130 216 125 0 153 368 15 230
## 2061 NP_001348394.1 XP_021331127.1 40.187 214 128 0 153 366 155 368
## 2062 NP_001348394.1 XP_021331127.1 39.720 214 129 0 153 366 211 424
## 2063 NP_001348394.1 XP_021331127.1 41.121 214 126 0 153 366 127 340
## 2064 NP_001348394.1 XP_021331127.1 38.174 241 146 1 129 366 212 452
## 2065 NP_001348394.1 XP_021331127.1 43.367 196 111 0 153 348 379 574
## 2066 NP_001348394.1 XP_021331127.1 41.121 214 126 0 153 366 99 312
## 2067 NP_001348394.1 XP_021331127.1 45.882 170 92 0 197 366 3 172
## 2068 NP_001348394.1 XP_021331127.1 45.455 143 78 0 224 366 2 144
## 2069 NP_001348394.1 XP_021331218.1 42.035 226 131 0 141 366 108 333
## 2070 NP_001348394.1 XP_021331218.1 41.071 224 128 1 143 366 86 305
## 2071 NP_001348394.1 XP_021331218.1 41.589 214 125 0 153 366 176 389
## 2072 NP_001348394.1 XP_021331218.1 37.885 227 141 0 140 366 135 361
## 2073 NP_001348394.1 XP_021331255.1 43.523 193 109 0 174 366 8 200
## 2074 NP_001348394.1 XP_021331255.1 41.584 202 118 0 153 354 15 216
## 2075 NP_001348394.1 XP_021331255.1 42.353 170 98 0 197 366 3 172
## 2076 NP_001348394.1 XP_021331255.1 43.972 141 79 0 224 364 2 142
## 2077 NP_001348394.1 XP_021331255.1 42.609 115 66 0 252 366 2 116
## 2078 NP_001348394.1 XP_021331255.1 38.760 129 79 0 145 273 91 219
## 2079 NP_001348394.1 XP_017211059.1 41.150 226 133 0 141 366 59 284
## 2080 NP_001348394.1 XP_017211059.1 36.232 276 160 2 99 366 73 340
## 2081 NP_001348394.1 XP_017211059.1 42.593 216 124 0 153 368 99 314
## 2082 NP_001348394.1 XP_017211059.1 38.043 276 155 3 99 366 101 368
## 2083 NP_001348394.1 XP_017211059.1 42.056 214 124 0 153 366 183 396
## 2084 NP_001348394.1 XP_017211059.1 41.121 214 126 0 153 366 211 424
## 2085 NP_001348394.1 XP_021331204.1 43.925 214 120 0 153 366 99 312
## 2086 NP_001348394.1 XP_021331204.1 43.925 214 120 0 153 366 211 424
## 2087 NP_001348394.1 XP_021331204.1 38.406 276 154 2 99 366 213 480
## 2088 NP_001348394.1 XP_021331204.1 38.406 276 154 2 99 366 241 508
## 2089 NP_001348394.1 XP_021331204.1 42.523 214 123 0 153 366 183 396
## 2090 NP_001348394.1 XP_021331204.1 41.589 214 125 0 153 366 71 284
## 2091 NP_001348394.1 XP_021331204.1 40.088 227 136 0 140 366 142 368
## 2092 NP_001348394.1 XP_021331204.1 41.589 214 125 0 153 366 43 256
## 2093 NP_001348394.1 XP_021331204.1 43.005 193 110 0 174 366 8 200
## 2094 NP_001348394.1 XP_021331204.1 38.288 222 137 0 145 366 7 228

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## 2095	NP_001348394.1	XP_021331204.1	43.529	170	96	0	197	366	3	172
## 2096	NP_001348394.1	XP_021331204.1	43.455	191	108	0	153	343	323	513
## 2097	NP_001348394.1	XP_021331204.1	43.151	146	83	0	226	371	4	149
## 2098	NP_001348394.1	XP_021331204.1	43.678	87	49	0	280	366	2	88
## 2099	NP_001348394.1	XP_021331413.1	44.393	214	119	0	153	366	330	543
## 2100	NP_001348394.1	XP_021331413.1	44.860	214	118	0	153	366	246	459
## 2101	NP_001348394.1	XP_021331413.1	43.458	214	121	0	153	366	442	655
## 2102	NP_001348394.1	XP_021331413.1	36.610	295	170	5	77	366	205	487
## 2103	NP_001348394.1	XP_021331413.1	46.040	202	109	0	153	354	78	279
## 2104	NP_001348394.1	XP_021331413.1	43.458	214	121	0	153	366	134	347
## 2105	NP_001348394.1	XP_021331413.1	43.925	214	120	0	153	366	22	235
## 2106	NP_001348394.1	XP_021331413.1	45.361	194	106	0	173	366	14	207
## 2107	NP_001348394.1	XP_021331413.1	42.991	214	122	0	153	366	386	599
## 2108	NP_001348394.1	XP_021331413.1	43.925	214	120	0	153	366	302	515
## 2109	NP_001348394.1	XP_021331413.1	40.724	221	131	0	146	366	631	851
## 2110	NP_001348394.1	XP_021331413.1	41.589	214	125	0	153	366	582	795
## 2111	NP_001348394.1	XP_021331413.1	42.991	214	122	0	153	366	554	767
## 2112	NP_001348394.1	XP_021331413.1	35.314	303	179	3	69	366	449	739
## 2113	NP_001348394.1	XP_021331413.1	39.194	273	156	3	99	366	444	711
## 2114	NP_001348394.1	XP_021331413.1	42.991	214	122	0	153	366	50	263
## 2115	NP_001348394.1	XP_021331413.1	36.194	268	171	0	99	366	556	823
## 2116	NP_001348394.1	XP_021331413.1	41.589	214	125	0	153	366	414	627
## 2117	NP_001348394.1	XP_021331413.1	43.925	214	120	0	153	366	694	907
## 2118	NP_001348394.1	XP_021331413.1	41.589	214	125	0	153	366	190	403
## 2119	NP_001348394.1	XP_021331413.1	40.187	214	128	0	153	366	666	879
## 2120	NP_001348394.1	XP_021331413.1	41.573	178	104	0	189	366	2	179
## 2121	NP_001348394.1	XP_021331413.1	42.138	159	92	0	153	311	750	908
## 2122	NP_001348394.1	XP_021331413.1	43.902	123	69	0	244	366	1	123
## 2123	NP_001348394.1	XP_021327230.1	40.930	215	127	0	153	367	109	323
## 2124	NP_001348394.1	XP_021327230.1	38.494	239	142	1	128	366	61	294
## 2125	NP_001348394.1	XP_021327230.1	38.889	162	99	0	153	314	193	354
## 2126	NP_001348394.1	XP_017211312.1	40.930	215	127	0	153	367	109	323
## 2127	NP_001348394.1	XP_017211312.1	38.494	239	142	1	128	366	61	294
## 2128	NP_001348394.1	XP_017211312.1	38.889	162	99	0	153	314	193	354
## 2129	NP_001348394.1	XP_021331487.1	40.930	215	127	0	153	367	109	323
## 2130	NP_001348394.1	XP_021331487.1	38.494	239	142	1	128	366	61	294
## 2131	NP_001348394.1	XP_021331487.1	38.889	162	99	0	153	314	193	354
## 2132	NP_001348394.1	XP_021331486.1	40.930	215	127	0	153	367	109	323
## 2133	NP_001348394.1	XP_021331486.1	38.494	239	142	1	128	366	61	294
## 2134	NP_001348394.1	XP_021331486.1	38.889	162	99	0	153	314	193	354
## 2135	NP_001348394.1	XP_021331234.1	46.597	191	102	0	176	366	53	243
## 2136	NP_001348394.1	XP_021331234.1	41.250	240	140	1	130	369	36	274
## 2137	NP_001348394.1	XP_021331234.1	42.056	214	124	0	153	366	86	299
## 2138	NP_001348394.1	XP_021331234.1	44.444	180	100	0	174	353	163	342
## 2139	NP_001348394.1	XP_021331234.1	39.252	214	130	0	153	366	114	327
## 2140	NP_001348394.1	XP_021331234.1	37.443	219	137	0	148	366	165	383
## 2141	NP_001348394.1	XP_021331234.1	38.140	215	132	1	153	367	198	411
## 2142	NP_001348394.1	XP_021331234.1	37.037	162	101	1	153	314	254	414
## 2143	NP_001348394.1	XP_017211018.1	41.518	224	127	1	143	366	37	256
## 2144	NP_001348394.1	XP_017211018.1	41.150	226	133	0	141	366	59	284
## 2145	NP_001348394.1	XP_017211018.1	41.589	214	125	0	153	366	127	340
## 2146	NP_001348394.1	XP_017211018.1	37.885	227	141	0	140	366	86	312
## 2147	NP_001348394.1	XP_017211012.2	44.393	214	119	0	153	366	183	396
## 2148	NP_001348394.1	XP_017211012.2	41.553	219	128	0	148	366	542	760

## 2149	NP_001348394.1	XP_017211012.2	43.925	214	120	0	153	366	239	452
## 2150	NP_001348394.1	XP_017211012.2	43.056	216	123	0	153	368	435	650
## 2151	NP_001348394.1	XP_017211012.2	41.176	221	130	0	146	366	680	900
## 2152	NP_001348394.1	XP_017211012.2	42.342	222	128	0	145	366	483	704
## 2153	NP_001348394.1	XP_017211012.2	42.523	214	123	0	153	366	631	844
## 2154	NP_001348394.1	XP_017211012.2	38.406	276	154	2	99	366	157	424
## 2155	NP_001348394.1	XP_017211012.2	43.925	214	120	0	153	366	71	284
## 2156	NP_001348394.1	XP_017211012.2	41.121	214	126	0	153	366	379	592
## 2157	NP_001348394.1	XP_017211012.2	37.687	268	167	0	99	366	605	872
## 2158	NP_001348394.1	XP_017211012.2	42.056	214	124	0	153	366	463	676
## 2159	NP_001348394.1	XP_017211012.2	42.991	214	122	0	153	366	267	480
## 2160	NP_001348394.1	XP_017211012.2	35.333	300	154	3	99	366	661	952
## 2161	NP_001348394.1	XP_017211012.2	42.056	214	124	0	153	366	603	816
## 2162	NP_001348394.1	XP_017211012.2	36.727	275	164	3	99	368	937	1206
## 2163	NP_001348394.1	XP_017211012.2	40.654	214	127	0	153	366	575	788
## 2164	NP_001348394.1	XP_017211012.2	42.056	214	124	0	153	366	295	508
## 2165	NP_001348394.1	XP_017211012.2	41.589	214	125	0	153	366	323	536
## 2166	NP_001348394.1	XP_017211012.2	42.523	214	123	0	153	366	127	340
## 2167	NP_001348394.1	XP_017211012.2	41.121	214	126	0	153	366	351	564
## 2168	NP_001348394.1	XP_017211012.2	40.187	214	128	0	153	366	1047	1260
## 2169	NP_001348394.1	XP_017211012.2	40.654	214	127	0	153	366	99	312
## 2170	NP_001348394.1	XP_017211012.2	42.056	214	124	0	153	366	519	732
## 2171	NP_001348394.1	XP_017211012.2	43.284	201	114	0	153	353	1103	1303
## 2172	NP_001348394.1	XP_017211012.2	40.741	216	128	0	153	368	1075	1290
## 2173	NP_001348394.1	XP_017211012.2	40.102	197	118	0	174	370	1040	1236
## 2174	NP_001348394.1	XP_017211012.2	43.455	191	108	0	176	366	66	256
## 2175	NP_001348394.1	XP_017211012.2	39.076	238	121	1	153	366	855	1092
## 2176	NP_001348394.1	XP_017211012.2	34.783	253	149	2	99	343	1077	1321
## 2177	NP_001348394.1	XP_017211012.2	39.378	193	117	0	174	366	928	1120
## 2178	NP_001348394.1	XP_017211012.2	47.445	137	72	0	232	368	66	202
## 2179	NP_001348394.1	XP_017211183.1	40.529	227	134	1	140	366	59	284
## 2180	NP_001348394.1	XP_017211183.1	41.121	214	126	0	153	366	99	312
## 2181	NP_001348394.1	XP_017211183.1	43.299	194	110	0	153	346	127	320
## 2182	NP_001348394.1	NP_001314932.1	40.088	227	136	0	140	366	86	312
## 2183	NP_001348394.1	NP_001314932.1	44.503	191	106	0	176	366	66	256
## 2184	NP_001348394.1	NP_001314932.1	42.523	214	123	0	153	366	127	340
## 2185	NP_001348394.1	NP_001314932.1	41.361	191	112	0	153	343	155	345
## 2186	NP_001348394.1	NP_001314932.1	42.424	165	95	0	202	366	64	228
## 2187	NP_001348394.1	XP_021331217.1	43.458	214	121	0	153	366	309	522
## 2188	NP_001348394.1	XP_021331217.1	41.410	227	133	0	140	366	268	494
## 2189	NP_001348394.1	XP_021331217.1	42.991	214	122	0	153	366	225	438
## 2190	NP_001348394.1	XP_021331217.1	35.870	276	161	2	99	366	115	382
## 2191	NP_001348394.1	XP_021331217.1	43.925	214	120	0	153	366	337	550
## 2192	NP_001348394.1	XP_021331217.1	37.319	276	157	2	99	366	311	578
## 2193	NP_001348394.1	XP_021331217.1	38.554	249	149	2	127	371	27	275
## 2194	NP_001348394.1	XP_021331217.1	37.549	253	142	2	99	343	339	583
## 2195	NP_001348394.1	XP_021331217.1	41.667	192	112	0	175	366	107	298
## 2196	NP_001348394.1	XP_017211180.1	40.654	214	127	0	153	366	127	340
## 2197	NP_001348394.1	XP_017211180.1	43.455	191	108	0	176	366	66	256
## 2198	NP_001348394.1	XP_017211180.1	40.187	214	128	0	153	366	183	396
## 2199	NP_001348394.1	XP_017211180.1	41.121	214	126	0	153	366	211	424
## 2200	NP_001348394.1	XP_017211180.1	38.739	222	136	0	145	366	91	312
## 2201	NP_001348394.1	XP_017211180.1	39.252	214	130	0	153	366	155	368
## 2202	NP_001348394.1	XP_017211180.1	43.299	194	110	0	153	346	239	432

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## 2203 NP_001348394.1 XP_005157357.4 41.518 224 131 0 143 366 134 357
## 2204 NP_001348394.1 XP_005157357.4 40.179 224 134 0 143 366 78 301
## 2205 NP_001348394.1 XP_005157357.4 42.991 214 122 0 153 366 284 497
## 2206 NP_001348394.1 XP_005157357.4 42.056 214 124 0 153 366 228 441
## 2207 NP_001348394.1 XP_005157357.4 41.589 214 125 0 153 366 32 245
## 2208 NP_001348394.1 XP_005157357.4 42.523 214 123 0 153 366 340 553
## 2209 NP_001348394.1 XP_005157357.4 36.101 277 161 2 99 367 202 470
## 2210 NP_001348394.1 XP_005157357.4 41.784 213 124 0 154 366 201 413
## 2211 NP_001348394.1 XP_005157357.4 40.654 214 127 0 153 366 4 217
## 2212 NP_001348394.1 XP_005157357.4 40.654 214 127 0 153 366 368 581
## 2213 NP_001348394.1 XP_005157357.4 40.654 214 127 0 153 366 172 385
## 2214 NP_001348394.1 XP_005157357.4 42.857 189 108 0 178 366 1 189
## 2215 NP_001348394.1 XP_005157357.4 41.237 194 114 0 153 346 396 589
## 2216 NP_001348394.1 XP_005157357.4 42.336 137 79 0 234 370 1 137
## 2217 NP_001348394.1 XP_017211155.1 41.518 224 127 1 143 366 37 256
## 2218 NP_001348394.1 XP_017211155.1 41.150 226 133 0 141 366 59 284
## 2219 NP_001348394.1 XP_017211155.1 41.589 214 125 0 153 366 127 340
## 2220 NP_001348394.1 XP_017211155.1 37.885 227 141 0 140 366 86 312
## 2221 NP_001348394.1 XP_017211069.1 41.518 224 127 1 143 366 37 256
## 2222 NP_001348394.1 XP_017211069.1 41.150 226 133 0 141 366 59 284
## 2223 NP_001348394.1 XP_017211069.1 42.056 214 124 0 153 366 127 340
## 2224 NP_001348394.1 XP_017211069.1 37.885 227 141 0 140 366 86 312
## 2225 NP_001348394.1 XP_009298896.2 42.035 226 131 0 143 368 62 287
## 2226 NP_001348394.1 XP_009298896.2 41.589 214 125 0 153 366 100 313
## 2227 NP_001348394.1 XP_009298896.2 38.043 276 155 3 99 366 74 341
## 2228 NP_001348394.1 XP_009298896.2 42.056 214 124 0 153 366 156 369
## 2229 NP_001348394.1 XP_009298896.2 41.121 214 126 0 153 366 184 397
## 2230 NP_001348394.1 XP_009298896.2 43.478 115 65 0 252 366 59 173
## 2231 NP_001348394.1 XP_017211125.2 41.121 214 126 0 153 366 7 220
## 2232 NP_001348394.1 XP_017211125.2 42.453 212 122 0 153 364 91 302
## 2233 NP_001348394.1 XP_017211125.2 40.187 214 128 0 153 366 35 248
## 2234 NP_001348394.1 XP_017211125.2 42.487 193 111 0 174 366 84 276
## 2235 NP_001348394.1 XP_017211125.2 42.708 192 110 0 175 366 1 192
## 2236 NP_001348394.1 XP_017211125.2 35.065 77 49 1 153 228 231 307
## 2237 NP_001348394.1 NP_001314925.1 41.589 214 125 0 153 366 71 284
## 2238 NP_001348394.1 NP_001314925.1 44.503 191 106 0 176 366 66 256
## 2239 NP_001348394.1 NP_001314925.1 42.268 194 112 0 153 346 99 292
## 2240 NP_001348394.1 NP_001314925.1 46.763 139 74 0 229 367 63 201
## 2241 NP_001348394.1 NP_001314925.1 33.333 144 80 3 99 234 157 292
## 2242 NP_001348394.1 XP_021331108.1 43.925 214 120 0 153 366 744 957
## 2243 NP_001348394.1 XP_021331108.1 43.925 214 120 0 153 366 464 677
## 2244 NP_001348394.1 XP_021331108.1 44.393 214 119 0 153 366 688 901
## 2245 NP_001348394.1 XP_021331108.1 38.235 272 160 2 99 366 298 565
## 2246 NP_001348394.1 XP_021331108.1 43.243 222 125 1 146 366 120 341
## 2247 NP_001348394.1 XP_021331108.1 35.030 334 207 2 36 366 155 481
## 2248 NP_001348394.1 XP_021331108.1 42.523 214 123 0 153 366 408 621
## 2249 NP_001348394.1 XP_021331108.1 42.056 214 124 0 153 366 520 733
## 2250 NP_001348394.1 XP_021331108.1 39.544 263 143 2 99 353 578 832
## 2251 NP_001348394.1 XP_021331108.1 42.523 214 123 0 153 366 492 705
## 2252 NP_001348394.1 XP_021331108.1 42.523 214 123 0 153 366 604 817
## 2253 NP_001348394.1 XP_021331108.1 42.523 214 123 0 153 366 380 593
## 2254 NP_001348394.1 XP_021331108.1 40.930 215 126 1 153 366 15 229
## 2255 NP_001348394.1 XP_021331108.1 41.589 214 125 0 153 366 800 1013
## 2256 NP_001348394.1 XP_021331108.1 40.271 221 132 0 146 366 569 789

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## 2257 NP_001348394.1 XP_021331108.1 39.720 214 129 0 153 366 548 761
## 2258 NP_001348394.1 XP_021331108.1 40.654 214 127 0 153 366 660 873
## 2259 NP_001348394.1 XP_021331108.1 43.814 194 108 1 174 366 8 201
## 2260 NP_001348394.1 XP_021331108.1 36.905 252 143 2 99 342 774 1017
## 2261 NP_001348394.1 XP_021331108.1 42.941 170 97 0 197 366 3 172
## 2262 NP_001348394.1 XP_021331108.1 44.242 165 92 0 153 317 856 1020
## 2263 NP_001348394.1 XP_021331108.1 46.154 143 77 0 224 366 2 144
## 2264 NP_001348394.1 NP_001314964.1 45.550 191 104 0 176 366 66 256
## 2265 NP_001348394.1 NP_001314964.1 44.737 190 105 0 153 342 71 260
## 2266 NP_001348394.1 NP_001314964.1 42.945 163 93 0 153 315 99 261
## 2267 NP_001348394.1 XP_021331282.1 36.842 304 175 3 68 366 273 564
## 2268 NP_001348394.1 XP_021331282.1 42.523 214 123 0 153 366 99 312
## 2269 NP_001348394.1 XP_021331282.1 46.073 191 103 0 176 366 66 256
## 2270 NP_001348394.1 XP_021331282.1 41.121 214 126 0 153 366 407 620
## 2271 NP_001348394.1 XP_021331282.1 43.523 193 109 0 174 366 148 340
## 2272 NP_001348394.1 XP_021331282.1 40.654 214 127 0 153 366 155 368
## 2273 NP_001348394.1 XP_021331282.1 36.101 277 161 2 98 366 184 452
## 2274 NP_001348394.1 XP_021331282.1 43.005 193 110 0 174 366 400 592
## 2275 NP_001348394.1 XP_021331282.1 40.826 218 124 1 125 342 412 624
## 2276 NP_001348394.1 XP_021331282.1 41.709 199 116 0 153 351 183 381
## 2277 NP_001348394.1 XP_021331282.1 40.654 214 127 0 153 366 71 284
## 2278 NP_001348394.1 XP_021331282.1 43.478 138 78 0 229 366 63 200
## 2279 NP_001348394.1 XP_021331131.1 37.037 270 170 0 99 368 115 384
## 2280 NP_001348394.1 XP_021331131.1 40.323 248 144 2 123 366 23 270
## 2281 NP_001348394.1 XP_021331131.1 32.870 216 145 0 99 314 171 386
## 2282 NP_001348394.1 XP_021331370.1 43.523 193 109 0 174 366 5 197
## 2283 NP_001348394.1 XP_021331370.1 41.981 212 123 0 153 364 68 279
## 2284 NP_001348394.1 XP_021331370.1 39.720 214 129 0 153 366 12 225
## 2285 NP_001348394.1 XP_021331370.1 43.005 193 110 0 174 366 61 253
## 2286 NP_001348394.1 XP_021331370.1 43.195 169 96 0 198 366 1 169
## 2287 NP_001348394.1 XP_021331370.1 35.065 77 49 1 153 228 208 284
## 2288 NP_001348394.1 XP_021326585.1 40.367 218 122 1 162 371 40 257
## 2289 NP_001348394.1 XP_021326585.1 39.796 196 118 0 153 348 67 262
## 2290 NP_001348394.1 XP_021326773.1 42.991 214 122 0 153 366 255 468
## 2291 NP_001348394.1 XP_021326773.1 43.458 214 121 0 153 366 3 216
## 2292 NP_001348394.1 XP_021326773.1 43.925 214 120 0 153 366 31 244
## 2293 NP_001348394.1 XP_021326773.1 41.204 216 127 0 153 368 171 386
## 2294 NP_001348394.1 XP_021326773.1 42.056 214 124 0 153 366 59 272
## 2295 NP_001348394.1 XP_021326773.1 40.969 227 133 1 141 366 102 328
## 2296 NP_001348394.1 XP_021326773.1 35.870 276 161 2 99 366 145 412
## 2297 NP_001348394.1 XP_021326773.1 41.589 214 125 0 153 366 87 300
## 2298 NP_001348394.1 XP_021326773.1 40.187 214 128 0 153 366 227 440
## 2299 NP_001348394.1 XP_021326773.1 40.187 214 128 0 153 366 143 356
## 2300 NP_001348394.1 XP_021326773.1 43.085 188 107 0 181 368 3 190
## 2301 NP_001348394.1 XP_021326773.1 44.654 159 88 0 208 366 2 160
## 2302 NP_001348394.1 XP_021326773.1 42.857 161 92 0 153 313 311 471
## 2303 NP_001348394.1 XP_021331401.1 43.458 214 121 0 153 366 1245 1458
## 2304 NP_001348394.1 XP_021331401.1 43.925 214 120 0 153 366 603 816
## 2305 NP_001348394.1 XP_021331401.1 44.393 214 119 0 153 366 631 844
## 2306 NP_001348394.1 XP_021331401.1 43.458 214 121 0 153 366 295 508
## 2307 NP_001348394.1 XP_021331401.1 43.721 215 120 1 152 366 742 955
## 2308 NP_001348394.1 XP_021331401.1 42.991 214 122 0 153 366 435 648
## 2309 NP_001348394.1 XP_021331401.1 42.523 214 123 0 153 366 491 704
## 2310 NP_001348394.1 XP_021331401.1 38.768 276 153 2 99 366 521 788

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## 2311	NP_001348394.1	XP_021331401.1	42.523	214	123	0	153	366	127	340
## 2312	NP_001348394.1	XP_021331401.1	37.319	276	157	2	99	366	605	872
## 2313	NP_001348394.1	XP_021331401.1	42.523	214	123	0	153	366	155	368
## 2314	NP_001348394.1	XP_021331401.1	36.957	276	156	4	99	366	885	1150
## 2315	NP_001348394.1	XP_021331401.1	42.056	214	124	0	153	366	687	900
## 2316	NP_001348394.1	XP_021331401.1	37.319	276	157	2	99	366	1219	1486
## 2317	NP_001348394.1	XP_021331401.1	41.121	214	126	0	153	366	99	312
## 2318	NP_001348394.1	XP_021331401.1	43.979	191	107	0	176	366	66	256
## 2319	NP_001348394.1	XP_021331401.1	41.121	214	126	0	153	366	1217	1430
## 2320	NP_001348394.1	XP_021331401.1	41.121	214	126	0	153	366	407	620
## 2321	NP_001348394.1	XP_021331401.1	43.979	191	107	0	176	366	1212	1402
## 2322	NP_001348394.1	XP_021331401.1	40.708	226	134	0	141	366	59	284
## 2323	NP_001348394.1	XP_021331401.1	35.870	276	161	2	99	366	465	732
## 2324	NP_001348394.1	XP_021331401.1	41.589	214	125	0	153	366	379	592
## 2325	NP_001348394.1	XP_021331401.1	40.187	214	127	1	153	366	715	927
## 2326	NP_001348394.1	XP_021331401.1	35.880	301	155	4	99	366	1247	1542
## 2327	NP_001348394.1	XP_021331401.1	39.256	242	119	1	153	366	1357	1598
## 2328	NP_001348394.1	XP_021331401.1	37.052	251	130	1	146	368	1434	1684
## 2329	NP_001348394.1	XP_021331401.1	41.121	214	126	0	153	366	183	396
## 2330	NP_001348394.1	XP_021331401.1	37.109	256	145	2	99	346	1443	1690
## 2331	NP_001348394.1	XP_021331401.1	32.931	331	177	4	69	366	1252	1570
## 2332	NP_001348394.1	XP_021331401.1	34.459	296	166	1	99	366	1359	1654
## 2333	NP_001348394.1	XP_021331401.1	39.256	242	118	3	153	366	1106	1346
## 2334	NP_001348394.1	XP_021331401.1	38.785	214	131	0	153	366	1161	1374
## 2335	NP_001348394.1	XP_021331401.1	39.252	214	130	0	153	366	239	452
## 2336	NP_001348394.1	XP_021331401.1	39.252	214	130	0	153	366	351	564
## 2337	NP_001348394.1	XP_021331401.1	42.000	200	116	0	153	352	211	410
## 2338	NP_001348394.1	XP_021331401.1	38.785	214	131	0	153	366	267	480
## 2339	NP_001348394.1	XP_021331110.1	43.056	216	123	0	153	368	285	500
## 2340	NP_001348394.1	XP_021331110.1	43.925	214	120	0	153	366	481	694
## 2341	NP_001348394.1	XP_021331110.1	36.957	276	158	2	99	366	175	442
## 2342	NP_001348394.1	XP_021331110.1	37.410	278	158	2	99	368	595	864
## 2343	NP_001348394.1	XP_021331110.1	42.523	214	123	0	153	366	593	806
## 2344	NP_001348394.1	XP_021331110.1	40.187	214	128	0	153	366	537	750
## 2345	NP_001348394.1	XP_021331110.1	42.130	216	125	0	153	368	705	920
## 2346	NP_001348394.1	XP_021331110.1	42.056	214	124	0	153	366	117	330
## 2347	NP_001348394.1	XP_021331110.1	38.007	271	162	2	99	366	623	890
## 2348	NP_001348394.1	XP_021331110.1	42.056	214	124	0	154	367	62	275
## 2349	NP_001348394.1	XP_021331110.1	41.589	214	125	0	153	366	397	610
## 2350	NP_001348394.1	XP_021331110.1	40.625	224	133	0	143	366	499	722
## 2351	NP_001348394.1	XP_021331110.1	40.654	214	127	0	153	366	453	666
## 2352	NP_001348394.1	XP_021331110.1	40.654	214	127	0	153	366	565	778
## 2353	NP_001348394.1	XP_021331110.1	40.187	214	128	0	153	366	341	554
## 2354	NP_001348394.1	XP_021331110.1	40.187	214	128	0	153	366	145	358
## 2355	NP_001348394.1	XP_021331110.1	39.252	214	130	0	153	366	173	386
## 2356	NP_001348394.1	XP_021331110.1	41.121	214	126	0	153	366	425	638
## 2357	NP_001348394.1	XP_021331110.1	41.791	201	117	0	153	353	369	569
## 2358	NP_001348394.1	XP_021331110.1	37.729	273	160	3	99	366	679	946
## 2359	NP_001348394.1	XP_021331110.1	41.053	190	112	0	153	342	761	950
## 2360	NP_001348394.1	XP_021331110.1	24.088	137	104	0	95	231	815	951
## 2361	NP_001348394.1	XP_021327005.1	41.553	219	128	0	153	371	89	307
## 2362	NP_001348394.1	XP_021327005.1	44.615	195	108	0	172	366	52	246
## 2363	NP_001348394.1	XP_021327005.1	39.474	228	137	1	140	367	49	275
## 2364	NP_001348394.1	XP_021327005.1	43.655	197	111	0	172	368	368	564

## 2365	NP_001348394.1	XP_021327005.1	41.398	186	109	0	153	338	377	562
## 2366	NP_001348394.1	XP_021327005.1	36.667	240	124	1	99	338	91	302
## 2367	NP_001348394.1	XP_021327005.1	42.604	169	97	0	143	311	395	563
## 2368	NP_001348394.1	XP_021330544.1	41.553	219	128	0	153	371	89	307
## 2369	NP_001348394.1	XP_021330544.1	44.615	195	108	0	172	366	52	246
## 2370	NP_001348394.1	XP_021330544.1	39.474	228	137	1	140	367	49	275
## 2371	NP_001348394.1	XP_021330544.1	43.655	197	111	0	172	368	368	564
## 2372	NP_001348394.1	XP_021330544.1	41.398	186	109	0	153	338	377	562
## 2373	NP_001348394.1	XP_021330544.1	36.667	240	124	1	99	338	91	302
## 2374	NP_001348394.1	XP_021330544.1	42.604	169	97	0	143	311	395	563
## 2375	NP_001348394.1	XP_017209967.1	44.393	214	119	0	153	366	115	328
## 2376	NP_001348394.1	XP_017209967.1	40.271	221	132	0	148	368	166	386
## 2377	NP_001348394.1	XP_017209967.1	38.934	244	145	1	127	366	57	300
## 2378	NP_001348394.1	XP_017209967.1	42.857	196	112	0	173	368	79	274
## 2379	NP_001348394.1	XP_017209967.1	38.813	219	133	1	153	371	199	416
## 2380	NP_001348394.1	XP_017209967.1	33.488	215	143	0	99	313	201	415
## 2381	NP_001348394.1	XP_021331312.1	45.026	191	105	0	176	366	7	197
## 2382	NP_001348394.1	XP_021331312.1	40.529	227	135	0	140	366	27	253
## 2383	NP_001348394.1	XP_021331312.1	40.838	191	113	0	153	343	68	258
## 2384	NP_001348394.1	XP_021331312.1	43.030	165	94	0	202	366	5	169
## 2385	NP_001348394.1	XP_021331498.1	34.824	313	203	1	54	366	47	358
## 2386	NP_001348394.1	XP_021331498.1	41.176	221	130	0	148	368	252	472
## 2387	NP_001348394.1	XP_021331498.1	40.639	219	130	0	148	366	504	722
## 2388	NP_001348394.1	XP_021331498.1	42.523	214	123	0	153	366	621	834
## 2389	NP_001348394.1	XP_021331498.1	40.639	219	130	0	148	366	280	498
## 2390	NP_001348394.1	XP_021331498.1	43.458	214	121	0	153	366	733	946
## 2391	NP_001348394.1	XP_021331498.1	39.819	221	133	0	148	368	392	612
## 2392	NP_001348394.1	XP_021331498.1	40.278	216	129	0	153	368	341	556
## 2393	NP_001348394.1	XP_021331498.1	40.175	229	137	0	140	368	468	696
## 2394	NP_001348394.1	XP_021331498.1	42.986	221	125	1	134	353	629	849
## 2395	NP_001348394.1	XP_021331498.1	42.466	219	126	0	148	366	588	806
## 2396	NP_001348394.1	XP_021331498.1	39.352	216	131	0	153	368	313	528
## 2397	NP_001348394.1	XP_021331498.1	39.535	215	130	0	152	366	228	442
## 2398	NP_001348394.1	XP_021331498.1	39.720	214	129	0	153	366	201	414
## 2399	NP_001348394.1	XP_021331498.1	40.789	228	134	1	141	367	524	751
## 2400	NP_001348394.1	XP_021331498.1	40.930	215	120	1	153	360	761	975
## 2401	NP_001348394.1	XP_021331498.1	37.900	219	136	0	148	366	448	666
## 2402	NP_001348394.1	XP_021331498.1	41.589	214	125	0	153	366	425	638
## 2403	NP_001348394.1	XP_021331498.1	40.654	214	127	0	153	366	565	778
## 2404	NP_001348394.1	XP_021331498.1	40.183	219	131	0	148	366	672	890
## 2405	NP_001348394.1	XP_021331498.1	36.863	255	161	0	99	353	651	905
## 2406	NP_001348394.1	XP_021331498.1	40.299	201	120	0	153	353	789	989
## 2407	NP_001348394.1	XP_021331498.1	38.636	220	135	0	148	367	364	583
## 2408	NP_001348394.1	XP_021331498.1	40.278	216	128	1	151	366	815	1029
## 2409	NP_001348394.1	XP_021331498.1	44.242	165	91	1	153	317	873	1036
## 2410	NP_001348394.1	XP_021331498.1	36.879	141	88	1	148	288	896	1035
## 2411	NP_001348394.1	XP_021331498.1	38.462	52	32	0	317	368	85	136
## 2412	NP_001348394.1	NP_001314928.1	41.532	248	141	1	123	366	53	300
## 2413	NP_001348394.1	NP_001314928.1	41.121	214	126	0	153	366	143	356
## 2414	NP_001348394.1	NP_001314928.1	40.529	227	135	0	140	366	102	328
## 2415	NP_001348394.1	NP_001314928.1	38.182	220	136	0	148	367	166	385
## 2416	NP_001348394.1	NP_001314928.1	42.771	166	95	0	203	368	81	246
## 2417	NP_001348394.1	NP_001314928.1	34.259	216	142	0	99	314	173	388
## 2418	NP_001348394.1	XP_017210985.1	42.922	219	125	0	148	366	82	300

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## 2419 NP_001348394.1 XP_017210985.1 42.056 214 124 0 153 366 115 328
## 2420 NP_001348394.1 XP_017210985.1 42.051 195 113 0 174 368 164 358
## 2421 NP_001348394.1 XP_017210985.1 38.182 220 136 0 148 367 166 385
## 2422 NP_001348394.1 XP_017210985.1 40.385 208 124 0 159 366 65 272
## 2423 NP_001348394.1 XP_017210985.1 43.373 166 94 0 203 368 81 246
## 2424 NP_001348394.1 XP_017210985.1 32.407 216 146 0 99 314 173 388
## 2425 NP_001348394.1 XP_017210838.1 41.057 246 141 1 127 368 57 302
## 2426 NP_001348394.1 XP_017210838.1 39.367 221 134 0 148 368 194 414
## 2427 NP_001348394.1 XP_017210838.1 42.056 214 124 0 153 366 143 356
## 2428 NP_001348394.1 XP_017210838.1 38.767 227 139 0 140 366 102 328
## 2429 NP_001348394.1 XP_017210838.1 38.140 215 133 0 153 367 227 441
## 2430 NP_001348394.1 XP_017210838.1 39.320 206 125 0 148 353 166 371
## 2431 NP_001348394.1 XP_017210838.1 36.095 169 108 0 146 314 276 444
## 2432 NP_001348394.1 XP_017211108.2 39.706 272 156 3 99 366 113 380
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## 2434 NP_001348394.1 XP_017211108.2 38.115 244 147 1 127 366 53 296
## 2435 NP_001348394.1 XP_017211108.2 34.545 220 132 5 99 314 225 436
## 2436 NP_001348394.1 XP_021331434.1 37.545 277 157 2 99 367 62 330
## 2437 NP_001348394.1 XP_021331434.1 41.589 214 125 0 153 366 60 273
## 2438 NP_001348394.1 XP_021331434.1 42.056 214 124 0 153 366 32 245
## 2439 NP_001348394.1 XP_021331434.1 42.056 214 124 0 153 366 4 217
## 2440 NP_001348394.1 XP_021331434.1 45.503 189 103 0 178 366 1 189
## 2441 NP_001348394.1 XP_021331165.1 44.393 214 119 0 153 366 155 368
## 2442 NP_001348394.1 XP_021331165.1 43.458 214 121 0 153 366 211 424
## 2443 NP_001348394.1 XP_021331165.1 37.687 268 167 0 99 366 45 312
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## 2445 NP_001348394.1 XP_021331165.1 37.687 268 167 0 99 366 73 340
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## 2447 NP_001348394.1 XP_021331165.1 42.523 214 123 0 153 366 604 817
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## 2451 NP_001348394.1 XP_021331165.1 42.523 214 123 0 153 366 520 733
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## 2454 NP_001348394.1 XP_021331165.1 38.326 227 140 0 140 366 2 228
## 2455 NP_001348394.1 XP_021331165.1 35.145 276 163 2 99 366 213 480
## 2456 NP_001348394.1 XP_021331165.1 41.667 120 70 0 252 371 2 121
## 2457 NP_001348394.1 XP_017211184.1 42.786 201 115 0 153 353 71 271
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## 2459 NP_001348394.1 XP_017211184.1 38.739 222 136 0 145 366 7 228
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## 2463 NP_001348394.1 XP_021330826.1 39.640 222 133 1 145 366 47 267
## 2464 NP_001348394.1 XP_021330826.1 42.487 193 110 1 174 366 21 212
## 2465 NP_001348394.1 XP_021330826.1 37.037 54 33 1 313 366 20 72
## 2466 NP_001348394.1 XP_017211167.1 42.991 214 122 0 153 366 99 312
## 2467 NP_001348394.1 XP_017211167.1 46.073 191 103 0 176 366 66 256
## 2468 NP_001348394.1 XP_017211167.1 40.654 214 127 0 153 366 71 284
## 2469 NP_001348394.1 XP_017211167.1 41.117 197 116 0 148 344 122 318
## 2470 NP_001348394.1 XP_017211167.1 43.478 138 78 0 229 366 63 200
## 2471 NP_001348394.1 XP_021331047.1 37.729 273 164 2 95 366 209 476
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## 2476 NP_001348394.1 XP_021331047.1 40.933 193 114 0 174 366 36 228
## 2477 NP_001348394.1 XP_021331047.1 37.143 245 130 1 146 366 176 420
## 2478 NP_001348394.1 XP_021331047.1 44.706 170 94 0 197 366 3 172
## 2479 NP_001348394.1 XP_021331047.1 43.005 193 110 0 174 366 8 200
## 2480 NP_001348394.1 XP_021331047.1 41.718 163 91 1 153 311 431 593
## 2481 NP_001348394.1 XP_021331047.1 47.126 87 46 0 280 366 2 88
## 2482 NP_001348394.1 XP_021331047.1 41.667 60 35 0 309 368 3 62
## 2483 NP_001348394.1 NP_001103336.1 36.426 291 167 3 86 366 1 283
## 2484 NP_001348394.1 NP_001103336.1 38.785 214 131 0 153 366 126 339
## 2485 NP_001348394.1 NP_001103336.1 38.182 165 102 0 153 317 182 346
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## 2496 NP_001348394.1 XP_021330825.1 44.138 145 81 0 224 368 2 146
## 2497 NP_001348394.1 XP_021330825.1 26.549 113 73 2 95 202 489 596
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## 2500 NP_001348394.1 XP_017210945.1 38.318 214 132 0 153 366 99 312
## 2501 NP_001348394.1 XP_021331016.1 43.781 201 113 0 153 353 6 206
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## 2504 NP_001348394.1 XP_021331385.1 43.379 219 124 0 148 366 80 298
## 2505 NP_001348394.1 XP_021331385.1 40.359 223 133 0 148 370 136 358
## 2506 NP_001348394.1 XP_021331385.1 43.373 166 94 0 203 368 79 244
## 2507 NP_001348394.1 XP_021331385.1 32.407 216 146 0 99 314 171 386
## 2508 NP_001348394.1 XP_021331211.1 38.433 268 165 0 99 366 562 829
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## 2517 NP_001348394.1 XP_021331211.1 40.187 214 128 0 153 366 336 549
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## 2519 NP_001348394.1 XP_021331211.1 40.455 220 130 1 153 371 728 947
## 2520 NP_001348394.1 XP_021331211.1 41.121 214 126 0 153 366 168 381
## 2521 NP_001348394.1 XP_021331211.1 39.720 214 129 0 153 366 84 297
## 2522 NP_001348394.1 XP_021331211.1 40.278 216 129 0 153 368 28 243
## 2523 NP_001348394.1 XP_021331211.1 40.278 216 129 0 153 368 280 495
## 2524 NP_001348394.1 XP_021331211.1 40.654 214 127 0 153 366 644 857
## 2525 NP_001348394.1 XP_021331211.1 38.739 222 136 0 145 366 48 269
## 2526 NP_001348394.1 XP_021331211.1 41.121 214 126 0 153 366 476 689

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## 2530 NP_001348394.1 XP_021331211.1 39.252 214 130 0 153 366 224 437
## 2531 NP_001348394.1 XP_017211227.1 41.860 215 125 0 153 367 127 341
## 2532 NP_001348394.1 XP_017211227.1 41.589 214 125 0 153 366 99 312
## 2533 NP_001348394.1 XP_017211227.1 40.969 227 133 1 140 366 59 284
## 2534 NP_001348394.1 XP_017211227.1 42.945 163 93 0 153 315 183 345
## 2535 NP_001348394.1 NP_001107903.1 41.589 214 125 0 155 368 84 297
## 2536 NP_001348394.1 NP_001107903.1 41.667 192 112 0 175 366 160 351
## 2537 NP_001348394.1 NP_001107903.1 39.720 214 129 0 153 366 194 407
## 2538 NP_001348394.1 NP_001107903.1 38.318 214 132 0 153 366 110 323
## 2539 NP_001348394.1 NP_001107903.1 33.212 274 173 3 99 367 168 436
## 2540 NP_001348394.1 NP_001107903.1 35.802 162 104 0 153 314 278 439
## 2541 NP_001348394.1 XP_017209955.1 40.891 247 142 2 126 368 56 302
## 2542 NP_001348394.1 XP_017209955.1 38.914 221 135 0 148 368 194 414
## 2543 NP_001348394.1 XP_017209955.1 42.523 214 123 0 153 366 143 356
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## 2547 NP_001348394.1 XP_021331415.1 35.526 304 178 3 75 368 23 318
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## 2549 NP_001348394.1 XP_021331415.1 40.625 224 133 0 143 366 289 512
## 2550 NP_001348394.1 XP_021331415.1 43.458 214 121 0 153 366 383 596
## 2551 NP_001348394.1 XP_021331415.1 43.523 193 109 0 174 366 12 204
## 2552 NP_001348394.1 XP_021331415.1 39.720 214 129 0 153 366 159 372
## 2553 NP_001348394.1 XP_021331415.1 41.121 214 126 0 153 366 215 428
## 2554 NP_001348394.1 XP_021331415.1 40.566 212 126 0 153 364 523 734
## 2555 NP_001348394.1 XP_021331415.1 40.654 214 127 0 153 366 243 456
## 2556 NP_001348394.1 XP_021331415.1 40.278 216 129 0 153 368 131 346
## 2557 NP_001348394.1 XP_021331415.1 42.056 214 124 0 153 366 439 652
## 2558 NP_001348394.1 XP_021331415.1 42.056 214 124 0 153 366 271 484
## 2559 NP_001348394.1 XP_021331415.1 40.741 216 128 0 153 368 187 402
## 2560 NP_001348394.1 XP_021331415.1 39.252 214 130 0 153 366 495 708
## 2561 NP_001348394.1 XP_021331415.1 43.182 176 100 0 191 366 1 176
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## 2566 NP_001348394.1 XP_017211218.1 41.121 214 126 0 153 366 71 284
## 2567 NP_001348394.1 XP_017211218.1 41.361 191 112 0 148 338 122 312
## 2568 NP_001348394.1 XP_017211218.1 40.491 163 97 0 153 315 155 317
## 2569 NP_001348394.1 XP_017211015.1 45.641 195 106 0 172 366 62 256
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## 2571 NP_001348394.1 XP_017211015.1 41.121 214 126 0 153 366 71 284
## 2572 NP_001348394.1 XP_017211015.1 41.361 191 112 0 148 338 122 312
## 2573 NP_001348394.1 XP_017211015.1 40.491 163 97 0 153 315 155 317
## 2574 NP_001348394.1 XP_021331104.1 35.667 300 170 3 76 367 929 1213
## 2575 NP_001348394.1 XP_021331104.1 43.925 214 120 0 153 366 380 593
## 2576 NP_001348394.1 XP_021331104.1 39.068 279 160 2 95 368 1109 1382
## 2577 NP_001348394.1 XP_021331104.1 38.433 268 165 0 99 366 1001 1268
## 2578 NP_001348394.1 XP_021331104.1 41.589 214 125 0 153 366 352 565
## 2579 NP_001348394.1 XP_021331104.1 42.466 219 126 0 148 366 798 1016
## 2580 NP_001348394.1 XP_021331104.1 36.918 279 157 4 98 366 240 509

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## 2581 NP_001348394.1 XP_021331104.1 42.056 214 124 0 153 366 831 1044
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## 2584 NP_001348394.1 XP_021331104.1 38.214 280 157 2 95 366 633 904
## 2585 NP_001348394.1 XP_021331104.1 36.957 276 158 2 99 366 1085 1352
## 2586 NP_001348394.1 XP_021331104.1 38.182 275 164 2 95 366 857 1128
## 2587 NP_001348394.1 XP_021331104.1 36.594 276 159 2 99 366 1029 1296
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## 2590 NP_001348394.1 XP_021331104.1 36.630 273 163 3 99 366 917 1184
## 2591 NP_001348394.1 XP_021331104.1 42.326 215 123 1 153 366 127 341
## 2592 NP_001348394.1 XP_021331104.1 42.487 193 111 0 174 366 600 792
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## 2594 NP_001348394.1 XP_021331104.1 39.720 214 129 0 153 366 747 960
## 2595 NP_001348394.1 XP_021331104.1 40.146 137 82 0 153 289 1251 1387
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## 2614 NP_001348394.1 XP_021331302.1 41.589 214 125 0 153 366 175 388
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## 2626 NP_001348394.1 XP_017208296.1 41.121 214 126 0 153 366 93 306
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## 2630 NP_001348394.1 XP_017208296.1 41.040 173 102 0 194 366 50 222
## 2631 NP_001348394.1 XP_017208296.1 40.625 96 57 0 271 366 43 138
## 2632 NP_001348394.1 XP_021331475.1 42.056 214 124 0 155 368 1 214
## 2633 NP_001348394.1 XP_021331475.1 42.268 194 112 0 153 346 27 220
## 2634 NP_001348394.1 XP_021330441.1 41.589 214 125 0 153 366 69 282

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## 2635 NP_001348394.1 XP_021330441.1 44.271 192 107 0 175 366 35 226
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## 2638 NP_001348394.1 XP_021330441.1 42.021 188 109 0 179 366 11 198
## 2639 NP_001348394.1 XP_021330441.1 40.000 190 114 0 153 342 125 314
## 2640 NP_001348394.1 XP_021330441.1 42.331 163 94 0 153 315 153 315
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## 2681 NP_001348394.1 XP_021331331.1 42.056 214 124 0 153 366 239 452
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## 2687 NP_001348394.1 XP_021326998.1 41.589 214 125 0 153 366 173 386
## 2688 NP_001348394.1 XP_021326998.1 40.654 214 127 0 153 366 145 358

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## 2689 NP_001348394.1 XP_021326998.1 45.550 191 104 0 176 366 56 246
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## 2692 NP_001348394.1 XP_021326998.1 42.754 138 79 0 229 366 53 190
## 2693 NP_001348394.1 XP_021326998.1 34.409 186 94 1 99 284 231 388
## 2694 NP_001348394.1 XP_021326997.1 43.925 214 120 0 153 366 61 274
## 2695 NP_001348394.1 XP_021326997.1 40.465 215 128 0 153 367 117 331
## 2696 NP_001348394.1 XP_021326997.1 41.589 214 125 0 153 366 173 386
## 2697 NP_001348394.1 XP_021326997.1 40.654 214 127 0 153 366 145 358
## 2698 NP_001348394.1 XP_021326997.1 45.550 191 104 0 176 366 56 246
## 2699 NP_001348394.1 XP_021326997.1 41.589 214 125 0 153 366 89 302
## 2700 NP_001348394.1 XP_021326997.1 41.250 160 94 0 153 312 229 388
## 2701 NP_001348394.1 XP_021326997.1 42.754 138 79 0 229 366 53 190
## 2702 NP_001348394.1 XP_021326997.1 34.409 186 94 1 99 284 231 388
## 2703 NP_001348394.1 XP_021326996.1 43.925 214 120 0 153 366 61 274
## 2704 NP_001348394.1 XP_021326996.1 40.465 215 128 0 153 367 117 331
## 2705 NP_001348394.1 XP_021326996.1 41.589 214 125 0 153 366 173 386
## 2706 NP_001348394.1 XP_021326996.1 40.654 214 127 0 153 366 145 358
## 2707 NP_001348394.1 XP_021326996.1 45.550 191 104 0 176 366 56 246
## 2708 NP_001348394.1 XP_021326996.1 41.589 214 125 0 153 366 89 302
## 2709 NP_001348394.1 XP_021326996.1 41.250 160 94 0 153 312 229 388
## 2710 NP_001348394.1 XP_021326996.1 42.754 138 79 0 229 366 53 190
## 2711 NP_001348394.1 XP_021326996.1 34.409 186 94 1 99 284 231 388
## 2712 NP_001348394.1 XP_021326995.1 43.925 214 120 0 153 366 61 274
## 2713 NP_001348394.1 XP_021326995.1 40.465 215 128 0 153 367 117 331
## 2714 NP_001348394.1 XP_021326995.1 41.589 214 125 0 153 366 173 386
## 2715 NP_001348394.1 XP_021326995.1 40.654 214 127 0 153 366 145 358
## 2716 NP_001348394.1 XP_021326995.1 45.550 191 104 0 176 366 56 246
## 2717 NP_001348394.1 XP_021326995.1 41.589 214 125 0 153 366 89 302
## 2718 NP_001348394.1 XP_021326995.1 41.250 160 94 0 153 312 229 388
## 2719 NP_001348394.1 XP_021326995.1 42.754 138 79 0 229 366 53 190
## 2720 NP_001348394.1 XP_021326995.1 34.409 186 94 1 99 284 231 388
## 2721 NP_001348394.1 XP_021326994.1 43.925 214 120 0 153 366 61 274
## 2722 NP_001348394.1 XP_021326994.1 40.465 215 128 0 153 367 117 331
## 2723 NP_001348394.1 XP_021326994.1 41.589 214 125 0 153 366 173 386
## 2724 NP_001348394.1 XP_021326994.1 40.654 214 127 0 153 366 145 358
## 2725 NP_001348394.1 XP_021326994.1 45.550 191 104 0 176 366 56 246
## 2726 NP_001348394.1 XP_021326994.1 41.589 214 125 0 153 366 89 302
## 2727 NP_001348394.1 XP_021326994.1 41.250 160 94 0 153 312 229 388
## 2728 NP_001348394.1 XP_021326994.1 42.754 138 79 0 229 366 53 190
## 2729 NP_001348394.1 XP_021326994.1 34.409 186 94 1 99 284 231 388
## 2730 NP_001348394.1 XP_021326993.1 43.925 214 120 0 153 366 61 274
## 2731 NP_001348394.1 XP_021326993.1 40.465 215 128 0 153 367 117 331
## 2732 NP_001348394.1 XP_021326993.1 41.589 214 125 0 153 366 173 386
## 2733 NP_001348394.1 XP_021326993.1 40.654 214 127 0 153 366 145 358
## 2734 NP_001348394.1 XP_021326993.1 45.550 191 104 0 176 366 56 246
## 2735 NP_001348394.1 XP_021326993.1 41.589 214 125 0 153 366 89 302
## 2736 NP_001348394.1 XP_021326993.1 41.250 160 94 0 153 312 229 388
## 2737 NP_001348394.1 XP_021326993.1 42.754 138 79 0 229 366 53 190
## 2738 NP_001348394.1 XP_021326993.1 34.409 186 94 1 99 284 231 388
## 2739 NP_001348394.1 XP_021330536.1 43.925 214 120 0 153 366 61 274
## 2740 NP_001348394.1 XP_021330536.1 40.465 215 128 0 153 367 117 331
## 2741 NP_001348394.1 XP_021330536.1 41.589 214 125 0 153 366 173 386
## 2742 NP_001348394.1 XP_021330536.1 40.654 214 127 0 153 366 145 358

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## 2743 NP_001348394.1 XP_021330536.1 45.550 191 104 0 176 366 56 246
## 2744 NP_001348394.1 XP_021330536.1 41.589 214 125 0 153 366 89 302
## 2745 NP_001348394.1 XP_021330536.1 41.250 160 94 0 153 312 229 388
## 2746 NP_001348394.1 XP_021330536.1 42.754 138 79 0 229 366 53 190
## 2747 NP_001348394.1 XP_021330536.1 34.409 186 94 1 99 284 231 388
## 2748 NP_001348394.1 XP_021330534.1 43.925 214 120 0 153 366 61 274
## 2749 NP_001348394.1 XP_021330534.1 40.465 215 128 0 153 367 117 331
## 2750 NP_001348394.1 XP_021330534.1 41.589 214 125 0 153 366 173 386
## 2751 NP_001348394.1 XP_021330534.1 40.654 214 127 0 153 366 145 358
## 2752 NP_001348394.1 XP_021330534.1 45.550 191 104 0 176 366 56 246
## 2753 NP_001348394.1 XP_021330534.1 41.589 214 125 0 153 366 89 302
## 2754 NP_001348394.1 XP_021330534.1 41.250 160 94 0 153 312 229 388
## 2755 NP_001348394.1 XP_021330534.1 42.754 138 79 0 229 366 53 190
## 2756 NP_001348394.1 XP_021330534.1 34.409 186 94 1 99 284 231 388
## 2757 NP_001348394.1 XP_021330533.1 43.925 214 120 0 153 366 61 274
## 2758 NP_001348394.1 XP_021330533.1 40.465 215 128 0 153 367 117 331
## 2759 NP_001348394.1 XP_021330533.1 41.589 214 125 0 153 366 173 386
## 2760 NP_001348394.1 XP_021330533.1 40.654 214 127 0 153 366 145 358
## 2761 NP_001348394.1 XP_021330533.1 45.550 191 104 0 176 366 56 246
## 2762 NP_001348394.1 XP_021330533.1 41.589 214 125 0 153 366 89 302
## 2763 NP_001348394.1 XP_021330533.1 41.250 160 94 0 153 312 229 388
## 2764 NP_001348394.1 XP_021330533.1 42.754 138 79 0 229 366 53 190
## 2765 NP_001348394.1 XP_021330533.1 34.409 186 94 1 99 284 231 388
## 2766 NP_001348394.1 XP_021330532.1 43.925 214 120 0 153 366 61 274
## 2767 NP_001348394.1 XP_021330532.1 40.465 215 128 0 153 367 117 331
## 2768 NP_001348394.1 XP_021330532.1 41.589 214 125 0 153 366 173 386
## 2769 NP_001348394.1 XP_021330532.1 40.654 214 127 0 153 366 145 358
## 2770 NP_001348394.1 XP_021330532.1 45.550 191 104 0 176 366 56 246
## 2771 NP_001348394.1 XP_021330532.1 41.589 214 125 0 153 366 89 302
## 2772 NP_001348394.1 XP_021330532.1 41.250 160 94 0 153 312 229 388
## 2773 NP_001348394.1 XP_021330532.1 42.754 138 79 0 229 366 53 190
## 2774 NP_001348394.1 XP_021330532.1 34.409 186 94 1 99 284 231 388
## 2775 NP_001348394.1 XP_021330531.1 43.925 214 120 0 153 366 61 274
## 2776 NP_001348394.1 XP_021330531.1 40.465 215 128 0 153 367 117 331
## 2777 NP_001348394.1 XP_021330531.1 41.589 214 125 0 153 366 173 386
## 2778 NP_001348394.1 XP_021330531.1 40.654 214 127 0 153 366 145 358
## 2779 NP_001348394.1 XP_021330531.1 45.550 191 104 0 176 366 56 246
## 2780 NP_001348394.1 XP_021330531.1 41.589 214 125 0 153 366 89 302
## 2781 NP_001348394.1 XP_021330531.1 41.250 160 94 0 153 312 229 388
## 2782 NP_001348394.1 XP_021330531.1 42.754 138 79 0 229 366 53 190
## 2783 NP_001348394.1 XP_021330531.1 34.409 186 94 1 99 284 231 388
## 2784 NP_001348394.1 XP_021330530.1 43.925 214 120 0 153 366 61 274
## 2785 NP_001348394.1 XP_021330530.1 40.465 215 128 0 153 367 117 331
## 2786 NP_001348394.1 XP_021330530.1 41.589 214 125 0 153 366 173 386
## 2787 NP_001348394.1 XP_021330530.1 40.654 214 127 0 153 366 145 358
## 2788 NP_001348394.1 XP_021330530.1 45.550 191 104 0 176 366 56 246
## 2789 NP_001348394.1 XP_021330530.1 41.589 214 125 0 153 366 89 302
## 2790 NP_001348394.1 XP_021330530.1 41.250 160 94 0 153 312 229 388
## 2791 NP_001348394.1 XP_021330530.1 42.754 138 79 0 229 366 53 190
## 2792 NP_001348394.1 XP_021330530.1 34.409 186 94 1 99 284 231 388
## 2793 NP_001348394.1 XP_017210839.1 40.984 244 140 1 127 366 57 300
## 2794 NP_001348394.1 XP_017210839.1 44.279 201 112 0 153 353 143 343
## 2795 NP_001348394.1 XP_017210839.1 39.207 227 138 0 140 366 102 328
## 2796 NP_001348394.1 XP_017210839.1 38.182 220 136 0 148 367 194 413

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## 2797	NP_001348394.1	XP_017210839.1	37.104	221	139	0	148	368	166	386
## 2798	NP_001348394.1	NP_001314833.1	41.121	214	126	0	153	366	213	426
## 2799	NP_001348394.1	NP_001314833.1	41.860	215	125	0	152	366	240	454
## 2800	NP_001348394.1	NP_001314833.1	36.308	325	195	5	52	370	169	487
## 2801	NP_001348394.1	NP_001314833.1	39.496	238	141	1	129	366	164	398
## 2802	NP_001348394.1	NP_001314833.1	39.614	207	124	1	148	353	292	498
## 2803	NP_001348394.1	XP_021331376.1	41.964	224	130	0	143	366	453	676
## 2804	NP_001348394.1	XP_021331376.1	44.860	214	118	0	153	366	519	732
## 2805	NP_001348394.1	XP_021331376.1	42.601	223	128	0	146	368	120	342
## 2806	NP_001348394.1	XP_021331376.1	43.925	214	120	0	153	366	491	704
## 2807	NP_001348394.1	XP_021331376.1	47.668	193	101	0	174	366	8	200
## 2808	NP_001348394.1	XP_021331376.1	42.056	214	124	0	153	366	295	508
## 2809	NP_001348394.1	XP_021331376.1	41.981	212	123	0	153	364	659	870
## 2810	NP_001348394.1	XP_021331376.1	43.925	214	120	0	153	366	323	536
## 2811	NP_001348394.1	XP_021331376.1	40.807	223	132	0	146	368	36	258
## 2812	NP_001348394.1	XP_021331376.1	43.056	216	123	0	153	368	547	762
## 2813	NP_001348394.1	XP_021331376.1	42.791	215	123	0	152	366	602	816
## 2814	NP_001348394.1	XP_021331376.1	42.523	214	123	0	153	366	575	788
## 2815	NP_001348394.1	XP_021331376.1	38.168	262	160	2	108	368	110	370
## 2816	NP_001348394.1	XP_021331376.1	42.593	216	124	0	153	368	239	454
## 2817	NP_001348394.1	XP_021331376.1	41.121	214	126	0	153	366	351	564
## 2818	NP_001348394.1	XP_021331376.1	41.589	214	125	0	153	366	407	620
## 2819	NP_001348394.1	XP_021331376.1	34.211	304	183	4	69	366	132	424
## 2820	NP_001348394.1	XP_021331376.1	39.819	221	133	0	146	366	428	648
## 2821	NP_001348394.1	XP_021331376.1	41.256	223	131	0	146	368	8	230
## 2822	NP_001348394.1	XP_021331376.1	40.351	228	135	1	140	366	365	592
## 2823	NP_001348394.1	XP_021331376.1	40.789	228	134	1	140	366	253	480
## 2824	NP_001348394.1	XP_021331376.1	40.187	214	128	0	153	366	71	284
## 2825	NP_001348394.1	XP_021331376.1	40.187	214	128	0	153	366	631	844
## 2826	NP_001348394.1	XP_021331376.1	38.785	214	131	0	153	366	99	312
## 2827	NP_001348394.1	XP_021331376.1	45.882	170	92	0	197	366	3	172
## 2828	NP_001348394.1	XP_021331376.1	48.276	145	75	0	224	368	2	146
## 2829	NP_001348394.1	XP_021331376.1	40.127	157	94	0	153	309	715	871
## 2830	NP_001348394.1	XP_017210830.1	42.291	227	131	0	140	366	102	328
## 2831	NP_001348394.1	XP_017210830.1	39.819	221	133	0	148	368	166	386
## 2832	NP_001348394.1	XP_017210830.1	43.367	196	111	0	173	368	79	274
## 2833	NP_001348394.1	XP_017210830.1	33.488	215	143	0	99	313	201	415
## 2834	NP_001348394.1	XP_021331198.1	44.393	214	119	0	153	366	124	337
## 2835	NP_001348394.1	XP_021331198.1	43.925	214	120	0	153	366	96	309
## 2836	NP_001348394.1	XP_021331198.1	43.243	222	126	0	145	366	536	757
## 2837	NP_001348394.1	XP_021331198.1	42.991	214	122	0	153	366	572	785
## 2838	NP_001348394.1	XP_021331198.1	41.333	225	132	0	142	366	1	225
## 2839	NP_001348394.1	XP_021331198.1	42.523	214	123	0	153	366	68	281
## 2840	NP_001348394.1	XP_021331198.1	43.925	214	120	0	153	366	488	701
## 2841	NP_001348394.1	XP_021331198.1	42.523	214	123	0	153	366	628	841
## 2842	NP_001348394.1	XP_021331198.1	42.991	214	122	0	153	366	152	365
## 2843	NP_001348394.1	XP_021331198.1	42.056	214	124	0	153	366	432	645
## 2844	NP_001348394.1	XP_021331198.1	42.991	214	122	0	153	366	516	729
## 2845	NP_001348394.1	XP_021331198.1	42.523	214	123	0	153	366	880	1093
## 2846	NP_001348394.1	XP_021331198.1	44.560	193	107	0	174	366	873	1065
## 2847	NP_001348394.1	XP_021331198.1	40.529	227	135	0	140	366	27	253
## 2848	NP_001348394.1	XP_021331198.1	42.056	214	124	0	153	366	180	393
## 2849	NP_001348394.1	XP_021331198.1	42.056	214	124	0	153	366	768	981
## 2850	NP_001348394.1	XP_021331198.1	37.313	268	168	0	99	366	406	673

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## 2851 NP_001348394.1 XP_021331198.1 42.523 214 123 0 153 366 600 813
## 2852 NP_001348394.1 XP_021331198.1 42.056 214 124 0 153 366 264 477
## 2853 NP_001348394.1 XP_021331198.1 36.957 276 158 2 99 366 658 925
## 2854 NP_001348394.1 XP_021331198.1 41.121 214 126 0 153 366 404 617
## 2855 NP_001348394.1 XP_021331198.1 41.395 215 126 0 153 367 824 1038
## 2856 NP_001348394.1 XP_021331198.1 41.589 214 125 0 153 366 320 533
## 2857 NP_001348394.1 XP_021331198.1 36.232 276 160 2 99 366 182 449
## 2858 NP_001348394.1 XP_021331198.1 36.957 276 158 2 99 366 602 869
## 2859 NP_001348394.1 XP_021331198.1 41.395 215 126 0 153 367 208 422
## 2860 NP_001348394.1 XP_021331198.1 41.589 214 125 0 153 366 796 1009
## 2861 NP_001348394.1 XP_021331198.1 41.589 214 125 0 153 366 740 953
## 2862 NP_001348394.1 XP_021331198.1 40.933 193 114 0 174 366 397 589
## 2863 NP_001348394.1 XP_021331198.1 33.133 166 95 2 99 256 938 1095
## 2864 NP_001348394.1 XP_021326992.1 43.925 214 120 0 153 366 80 293
## 2865 NP_001348394.1 XP_021326992.1 40.465 215 128 0 153 367 136 350
## 2866 NP_001348394.1 XP_021326992.1 41.589 214 125 0 153 366 192 405
## 2867 NP_001348394.1 XP_021326992.1 40.654 214 127 0 153 366 164 377
## 2868 NP_001348394.1 XP_021326992.1 45.550 191 104 0 176 366 75 265
## 2869 NP_001348394.1 XP_021326992.1 41.589 214 125 0 153 366 108 321
## 2870 NP_001348394.1 XP_021326992.1 41.250 160 94 0 153 312 248 407
## 2871 NP_001348394.1 XP_021326992.1 42.754 138 79 0 229 366 72 209
## 2872 NP_001348394.1 XP_021326992.1 34.409 186 94 1 99 284 250 407
## 2873 NP_001348394.1 XP_021326991.1 43.925 214 120 0 153 366 80 293
## 2874 NP_001348394.1 XP_021326991.1 40.465 215 128 0 153 367 136 350
## 2875 NP_001348394.1 XP_021326991.1 41.589 214 125 0 153 366 192 405
## 2876 NP_001348394.1 XP_021326991.1 40.654 214 127 0 153 366 164 377
## 2877 NP_001348394.1 XP_021326991.1 45.550 191 104 0 176 366 75 265
## 2878 NP_001348394.1 XP_021326991.1 41.589 214 125 0 153 366 108 321
## 2879 NP_001348394.1 XP_021326991.1 41.250 160 94 0 153 312 248 407
## 2880 NP_001348394.1 XP_021326991.1 42.754 138 79 0 229 366 72 209
## 2881 NP_001348394.1 XP_021326991.1 34.409 186 94 1 99 284 250 407
## 2882 NP_001348394.1 XP_021326990.1 43.925 214 120 0 153 366 80 293
## 2883 NP_001348394.1 XP_021326990.1 40.465 215 128 0 153 367 136 350
## 2884 NP_001348394.1 XP_021326990.1 41.589 214 125 0 153 366 192 405
## 2885 NP_001348394.1 XP_021326990.1 40.654 214 127 0 153 366 164 377
## 2886 NP_001348394.1 XP_021326990.1 45.550 191 104 0 176 366 75 265
## 2887 NP_001348394.1 XP_021326990.1 41.589 214 125 0 153 366 108 321
## 2888 NP_001348394.1 XP_021326990.1 41.250 160 94 0 153 312 248 407
## 2889 NP_001348394.1 XP_021326990.1 42.754 138 79 0 229 366 72 209
## 2890 NP_001348394.1 XP_021326990.1 34.409 186 94 1 99 284 250 407
## 2891 NP_001348394.1 XP_021326989.1 43.925 214 120 0 153 366 80 293
## 2892 NP_001348394.1 XP_021326989.1 40.465 215 128 0 153 367 136 350
## 2893 NP_001348394.1 XP_021326989.1 41.589 214 125 0 153 366 192 405
## 2894 NP_001348394.1 XP_021326989.1 40.654 214 127 0 153 366 164 377
## 2895 NP_001348394.1 XP_021326989.1 45.550 191 104 0 176 366 75 265
## 2896 NP_001348394.1 XP_021326989.1 41.589 214 125 0 153 366 108 321
## 2897 NP_001348394.1 XP_021326989.1 41.250 160 94 0 153 312 248 407
## 2898 NP_001348394.1 XP_021326989.1 42.754 138 79 0 229 366 72 209
## 2899 NP_001348394.1 XP_021326989.1 34.409 186 94 1 99 284 250 407
## 2900 NP_001348394.1 XP_021326988.1 43.925 214 120 0 153 366 80 293
## 2901 NP_001348394.1 XP_021326988.1 40.465 215 128 0 153 367 136 350
## 2902 NP_001348394.1 XP_021326988.1 41.589 214 125 0 153 366 192 405
## 2903 NP_001348394.1 XP_021326988.1 40.654 214 127 0 153 366 164 377
## 2904 NP_001348394.1 XP_021326988.1 45.550 191 104 0 176 366 75 265

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## 2905	NP_001348394.1	XP_021326988.1	41.589	214	125	0	153	366	108	321
## 2906	NP_001348394.1	XP_021326988.1	41.250	160	94	0	153	312	248	407
## 2907	NP_001348394.1	XP_021326988.1	42.754	138	79	0	229	366	72	209
## 2908	NP_001348394.1	XP_021326988.1	34.409	186	94	1	99	284	250	407
## 2909	NP_001348394.1	XP_021326987.1	43.925	214	120	0	153	366	80	293
## 2910	NP_001348394.1	XP_021326987.1	40.465	215	128	0	153	367	136	350
## 2911	NP_001348394.1	XP_021326987.1	41.589	214	125	0	153	366	192	405
## 2912	NP_001348394.1	XP_021326987.1	40.654	214	127	0	153	366	164	377
## 2913	NP_001348394.1	XP_021326987.1	45.550	191	104	0	176	366	75	265
## 2914	NP_001348394.1	XP_021326987.1	41.589	214	125	0	153	366	108	321
## 2915	NP_001348394.1	XP_021326987.1	41.250	160	94	0	153	312	248	407
## 2916	NP_001348394.1	XP_021326987.1	42.754	138	79	0	229	366	72	209
## 2917	NP_001348394.1	XP_021326987.1	34.409	186	94	1	99	284	250	407
## 2918	NP_001348394.1	XP_021326986.1	43.925	214	120	0	153	366	80	293
## 2919	NP_001348394.1	XP_021326986.1	40.465	215	128	0	153	367	136	350
## 2920	NP_001348394.1	XP_021326986.1	41.589	214	125	0	153	366	192	405
## 2921	NP_001348394.1	XP_021326986.1	40.654	214	127	0	153	366	164	377
## 2922	NP_001348394.1	XP_021326986.1	45.550	191	104	0	176	366	75	265
## 2923	NP_001348394.1	XP_021326986.1	41.589	214	125	0	153	366	108	321
## 2924	NP_001348394.1	XP_021326986.1	41.250	160	94	0	153	312	248	407
## 2925	NP_001348394.1	XP_021326986.1	42.754	138	79	0	229	366	72	209
## 2926	NP_001348394.1	XP_021326986.1	34.409	186	94	1	99	284	250	407
## 2927	NP_001348394.1	XP_021330529.1	43.925	214	120	0	153	366	80	293
## 2928	NP_001348394.1	XP_021330529.1	40.465	215	128	0	153	367	136	350
## 2929	NP_001348394.1	XP_021330529.1	41.589	214	125	0	153	366	192	405
## 2930	NP_001348394.1	XP_021330529.1	40.654	214	127	0	153	366	164	377
## 2931	NP_001348394.1	XP_021330529.1	45.550	191	104	0	176	366	75	265
## 2932	NP_001348394.1	XP_021330529.1	41.589	214	125	0	153	366	108	321
## 2933	NP_001348394.1	XP_021330529.1	41.250	160	94	0	153	312	248	407
## 2934	NP_001348394.1	XP_021330529.1	42.754	138	79	0	229	366	72	209
## 2935	NP_001348394.1	XP_021330529.1	34.409	186	94	1	99	284	250	407
## 2936	NP_001348394.1	XP_021330528.1	43.925	214	120	0	153	366	80	293
## 2937	NP_001348394.1	XP_021330528.1	40.465	215	128	0	153	367	136	350
## 2938	NP_001348394.1	XP_021330528.1	41.589	214	125	0	153	366	192	405
## 2939	NP_001348394.1	XP_021330528.1	40.654	214	127	0	153	366	164	377
## 2940	NP_001348394.1	XP_021330528.1	45.550	191	104	0	176	366	75	265
## 2941	NP_001348394.1	XP_021330528.1	41.589	214	125	0	153	366	108	321
## 2942	NP_001348394.1	XP_021330528.1	41.250	160	94	0	153	312	248	407
## 2943	NP_001348394.1	XP_021330528.1	42.754	138	79	0	229	366	72	209
## 2944	NP_001348394.1	XP_021330528.1	34.409	186	94	1	99	284	250	407
## 2945	NP_001348394.1	XP_021330527.1	43.925	214	120	0	153	366	80	293
## 2946	NP_001348394.1	XP_021330527.1	40.465	215	128	0	153	367	136	350
## 2947	NP_001348394.1	XP_021330527.1	41.589	214	125	0	153	366	192	405
## 2948	NP_001348394.1	XP_021330527.1	40.654	214	127	0	153	366	164	377
## 2949	NP_001348394.1	XP_021330527.1	45.550	191	104	0	176	366	75	265
## 2950	NP_001348394.1	XP_021330527.1	41.589	214	125	0	153	366	108	321
## 2951	NP_001348394.1	XP_021330527.1	41.250	160	94	0	153	312	248	407
## 2952	NP_001348394.1	XP_021330527.1	42.754	138	79	0	229	366	72	209
## 2953	NP_001348394.1	XP_021330527.1	34.409	186	94	1	99	284	250	407
## 2954	NP_001348394.1	XP_021330526.1	43.925	214	120	0	153	366	80	293
## 2955	NP_001348394.1	XP_021330526.1	40.465	215	128	0	153	367	136	350
## 2956	NP_001348394.1	XP_021330526.1	41.589	214	125	0	153	366	192	405
## 2957	NP_001348394.1	XP_021330526.1	40.654	214	127	0	153	366	164	377
## 2958	NP_001348394.1	XP_021330526.1	45.550	191	104	0	176	366	75	265

## 2959	NP_001348394.1	XP_021330526.1	41.589	214	125	0	153	366	108	321
## 2960	NP_001348394.1	XP_021330526.1	41.250	160	94	0	153	312	248	407
## 2961	NP_001348394.1	XP_021330526.1	42.754	138	79	0	229	366	72	209
## 2962	NP_001348394.1	XP_021330526.1	34.409	186	94	1	99	284	250	407
## 2963	NP_001348394.1	XP_021330525.1	43.925	214	120	0	153	366	80	293
## 2964	NP_001348394.1	XP_021330525.1	40.465	215	128	0	153	367	136	350
## 2965	NP_001348394.1	XP_021330525.1	41.589	214	125	0	153	366	192	405
## 2966	NP_001348394.1	XP_021330525.1	40.654	214	127	0	153	366	164	377
## 2967	NP_001348394.1	XP_021330525.1	45.550	191	104	0	176	366	75	265
## 2968	NP_001348394.1	XP_021330525.1	41.589	214	125	0	153	366	108	321
## 2969	NP_001348394.1	XP_021330525.1	41.250	160	94	0	153	312	248	407
## 2970	NP_001348394.1	XP_021330525.1	42.754	138	79	0	229	366	72	209
## 2971	NP_001348394.1	XP_021330525.1	34.409	186	94	1	99	284	250	407
## 2972	NP_001348394.1	XP_021330524.1	43.925	214	120	0	153	366	80	293
## 2973	NP_001348394.1	XP_021330524.1	40.465	215	128	0	153	367	136	350
## 2974	NP_001348394.1	XP_021330524.1	41.589	214	125	0	153	366	192	405
## 2975	NP_001348394.1	XP_021330524.1	40.654	214	127	0	153	366	164	377
## 2976	NP_001348394.1	XP_021330524.1	45.550	191	104	0	176	366	75	265
## 2977	NP_001348394.1	XP_021330524.1	41.589	214	125	0	153	366	108	321
## 2978	NP_001348394.1	XP_021330524.1	41.250	160	94	0	153	312	248	407
## 2979	NP_001348394.1	XP_021330524.1	42.754	138	79	0	229	366	72	209
## 2980	NP_001348394.1	XP_021330524.1	34.409	186	94	1	99	284	250	407
## 2981	NP_001348394.1	XP_021330523.1	43.925	214	120	0	153	366	80	293
## 2982	NP_001348394.1	XP_021330523.1	40.465	215	128	0	153	367	136	350
## 2983	NP_001348394.1	XP_021330523.1	41.589	214	125	0	153	366	192	405
## 2984	NP_001348394.1	XP_021330523.1	40.654	214	127	0	153	366	164	377
## 2985	NP_001348394.1	XP_021330523.1	45.550	191	104	0	176	366	75	265
## 2986	NP_001348394.1	XP_021330523.1	41.589	214	125	0	153	366	108	321
## 2987	NP_001348394.1	XP_021330523.1	41.250	160	94	0	153	312	248	407
## 2988	NP_001348394.1	XP_021330523.1	42.754	138	79	0	229	366	72	209
## 2989	NP_001348394.1	XP_021330523.1	34.409	186	94	1	99	284	250	407
## 2990	NP_001348394.1	XP_021331372.1	41.818	220	127	1	153	371	30	249
## 2991	NP_001348394.1	XP_021331372.1	40.654	214	127	0	153	366	2	215
## 2992	NP_001348394.1	XP_021331372.1	43.396	159	90	0	208	366	1	159
## 2993	NP_001348394.1	XP_021331223.1	43.836	219	123	0	148	366	80	298
## 2994	NP_001348394.1	XP_021331223.1	43.458	214	121	0	153	366	337	550
## 2995	NP_001348394.1	XP_021331223.1	41.096	219	129	0	148	366	136	354
## 2996	NP_001348394.1	XP_021331223.1	45.274	201	110	0	153	353	365	565
## 2997	NP_001348394.1	XP_021331223.1	36.567	268	170	0	99	366	171	438
## 2998	NP_001348394.1	XP_021331223.1	34.653	303	183	4	69	366	230	522
## 2999	NP_001348394.1	XP_021331223.1	43.976	166	93	0	203	368	79	244
## 3000	NP_001348394.1	XP_021331223.1	47.328	131	69	0	174	304	442	572
## 3001	NP_001348394.1	XP_009299002.1	40.486	247	143	1	126	368	56	302
## 3002	NP_001348394.1	XP_009299002.1	39.269	219	133	0	148	366	194	412
## 3003	NP_001348394.1	XP_009299002.1	42.009	219	127	0	148	366	138	356
## 3004	NP_001348394.1	XP_009299002.1	41.089	202	119	0	153	354	227	428
## 3005	NP_001348394.1	XP_009299002.1	42.778	180	103	0	174	353	192	371
## 3006	NP_001348394.1	XP_009299002.1	40.187	214	128	0	153	366	115	328
## 3007	NP_001348394.1	XP_009299002.1	38.095	168	104	0	146	313	276	443
## 3008	NP_001348394.1	XP_021331106.1	44.393	214	119	0	153	366	575	788
## 3009	NP_001348394.1	XP_021331106.1	44.393	214	119	0	153	366	351	564
## 3010	NP_001348394.1	XP_021331106.1	43.458	214	121	0	153	366	295	508
## 3011	NP_001348394.1	XP_021331106.1	41.667	216	126	0	153	368	15	230
## 3012	NP_001348394.1	XP_021331106.1	44.041	193	108	0	174	366	8	200

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## 3013 NP_001348394.1 XP_021331106.1 35.294 306 175 3 69 366 358 648
## 3014 NP_001348394.1 XP_021331106.1 42.523 214 123 0 153 366 323 536
## 3015 NP_001348394.1 XP_021331106.1 41.667 216 126 0 153 368 43 258
## 3016 NP_001348394.1 XP_021331106.1 42.523 214 123 0 153 366 491 704
## 3017 NP_001348394.1 XP_021331106.1 42.523 214 123 0 153 366 463 676
## 3018 NP_001348394.1 XP_021331106.1 43.458 214 121 0 153 366 519 732
## 3019 NP_001348394.1 XP_021331106.1 38.914 221 135 0 146 366 64 284
## 3020 NP_001348394.1 XP_021331106.1 40.090 222 133 0 145 366 203 424
## 3021 NP_001348394.1 XP_021331106.1 40.969 227 133 1 141 366 254 480
## 3022 NP_001348394.1 XP_021331106.1 36.232 276 160 2 99 366 73 340
## 3023 NP_001348394.1 XP_021331106.1 42.056 214 124 0 153 366 603 816
## 3024 NP_001348394.1 XP_021331106.1 42.056 214 124 0 153 366 659 872
## 3025 NP_001348394.1 XP_021331106.1 43.182 220 119 1 153 366 855 1074
## 3026 NP_001348394.1 XP_021331106.1 36.330 267 154 2 95 353 181 439
## 3027 NP_001348394.1 XP_021331106.1 41.121 214 126 0 153 366 155 368
## 3028 NP_001348394.1 XP_021331106.1 39.720 214 129 0 153 366 183 396
## 3029 NP_001348394.1 XP_021331106.1 45.078 193 106 0 174 366 910 1102
## 3030 NP_001348394.1 XP_021331106.1 42.523 214 123 0 153 366 917 1130
## 3031 NP_001348394.1 XP_021331106.1 44.706 170 94 0 197 366 3 172
## 3032 NP_001348394.1 XP_021331106.1 43.684 190 107 0 153 342 945 1134
## 3033 NP_001348394.1 XP_021331106.1 36.559 279 161 3 99 366 633 906
## 3034 NP_001348394.1 XP_021331106.1 46.154 143 77 0 224 366 2 144
## 3035 NP_001348394.1 XP_021331106.1 35.294 51 33 0 153 203 1085 1135
## 3036 NP_001348394.1 XP_021330576.1 42.922 219 125 0 148 366 1474 1692
## 3037 NP_001348394.1 XP_021330576.1 44.860 214 118 0 153 366 1283 1496
## 3038 NP_001348394.1 XP_021330576.1 42.991 214 122 0 153 366 387 600
## 3039 NP_001348394.1 XP_021330576.1 38.060 268 166 0 99 366 1453 1720
## 3040 NP_001348394.1 XP_021330576.1 37.795 254 148 1 113 366 301 544
## 3041 NP_001348394.1 XP_021330576.1 42.523 214 123 0 153 366 527 740
## 3042 NP_001348394.1 XP_021330576.1 37.319 276 157 2 99 366 1341 1608
## 3043 NP_001348394.1 XP_021330576.1 36.940 268 169 0 99 366 977 1244
## 3044 NP_001348394.1 XP_021330576.1 40.496 242 116 1 153 366 555 796
## 3045 NP_001348394.1 XP_021330576.1 44.560 193 107 0 174 366 772 964
## 3046 NP_001348394.1 XP_021330576.1 40.909 220 129 1 147 366 270 488
## 3047 NP_001348394.1 XP_021330576.1 35.216 301 168 4 76 366 1185 1468
## 3048 NP_001348394.1 XP_021330576.1 44.560 193 107 0 174 366 1444 1636
## 3049 NP_001348394.1 XP_021330576.1 37.313 268 168 0 99 366 669 936
## 3050 NP_001348394.1 XP_021330576.1 42.523 214 123 0 153 366 611 824
## 3051 NP_001348394.1 XP_021330576.1 42.466 219 126 0 148 366 1166 1384
## 3052 NP_001348394.1 XP_021330576.1 42.056 214 124 0 153 366 443 656
## 3053 NP_001348394.1 XP_021330576.1 42.991 214 122 0 153 366 1311 1524
## 3054 NP_001348394.1 XP_021330576.1 38.431 255 157 0 99 353 1033 1287
## 3055 NP_001348394.1 XP_021330576.1 42.289 201 116 0 153 353 499 699
## 3056 NP_001348394.1 XP_021330576.1 37.313 268 168 0 99 366 725 992
## 3057 NP_001348394.1 XP_021330576.1 42.523 214 123 0 153 366 1563 1776
## 3058 NP_001348394.1 XP_021330576.1 39.207 227 138 0 140 366 39 265
## 3059 NP_001348394.1 XP_021330576.1 42.056 214 124 0 153 366 1143 1356
## 3060 NP_001348394.1 XP_021330576.1 41.589 214 125 0 153 366 667 880
## 3061 NP_001348394.1 XP_021330576.1 40.654 214 127 0 153 366 471 684
## 3062 NP_001348394.1 XP_021330576.1 41.589 214 125 0 153 366 919 1132
## 3063 NP_001348394.1 XP_021330576.1 42.056 214 124 0 153 366 1339 1552
## 3064 NP_001348394.1 XP_021330576.1 43.284 201 114 0 153 353 807 1007
## 3065 NP_001348394.1 XP_021330576.1 41.121 214 126 0 153 366 1535 1748
## 3066 NP_001348394.1 XP_021330576.1 36.957 276 158 2 99 366 1145 1412

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## 3067 NP_001348394.1 XP_021330576.1 41.121 214 126 0 153 366 1115 1328
## 3068 NP_001348394.1 XP_021330576.1 40.930 215 127 0 153 367 975 1189
## 3069 NP_001348394.1 XP_021330576.1 35.507 276 162 2 99 366 837 1104
## 3070 NP_001348394.1 XP_021330576.1 36.404 228 145 0 140 367 67 294
## 3071 NP_001348394.1 XP_021330576.1 39.815 216 126 2 153 366 639 852
## 3072 NP_001348394.1 XP_021330576.1 33.443 305 172 7 74 366 875 1160
## 3073 NP_001348394.1 XP_021330576.1 38.318 214 131 1 153 366 108 320
## 3074 NP_001348394.1 XP_021330576.1 40.838 191 113 0 153 343 1591 1781
## 3075 NP_001348394.1 XP_021330576.1 43.571 140 79 0 232 371 47 186
## 3076 NP_001348394.1 XP_017210610.1 40.654 214 127 0 153 366 68 281
## 3077 NP_001348394.1 XP_017210610.1 40.969 227 133 1 140 366 28 253
## 3078 NP_001348394.1 XP_017210610.1 40.654 214 127 0 153 366 124 337
## 3079 NP_001348394.1 XP_017210610.1 39.252 214 130 0 153 366 96 309
## 3080 NP_001348394.1 XP_017210610.1 43.125 160 91 0 153 312 180 339
## 3081 NP_001348394.1 XP_021331133.1 41.589 214 125 0 153 366 99 312
## 3082 NP_001348394.1 XP_021331133.1 41.315 213 125 0 154 366 72 284
## 3083 NP_001348394.1 XP_021331133.1 39.720 214 129 0 153 366 127 340
## 3084 NP_001348394.1 XP_021331133.1 44.503 191 106 0 176 366 66 256
## 3085 NP_001348394.1 XP_021331133.1 40.796 201 119 0 153 353 155 355
## 3086 NP_001348394.1 XP_021331133.1 42.754 138 79 0 229 366 63 200
## 3087 NP_001348394.1 XP_021331133.1 37.162 148 93 0 153 300 211 358
## 3088 NP_001348394.1 XP_021331133.1 35.632 87 56 0 280 366 58 144
## 3089 NP_001348394.1 XP_017210035.1 39.592 245 144 1 126 366 56 300
## 3090 NP_001348394.1 XP_017210035.1 38.914 221 135 0 148 368 138 358
## 3091 NP_001348394.1 XP_017210035.1 42.056 214 124 0 153 366 115 328
## 3092 NP_001348394.1 XP_017210035.1 38.182 220 136 0 148 367 166 385
## 3093 NP_001348394.1 XP_017210035.1 43.373 166 94 0 203 368 81 246
## 3094 NP_001348394.1 XP_017210035.1 33.333 216 144 0 99 314 173 388
## 3095 NP_001348394.1 XP_021331014.1 42.056 214 124 0 153 366 203 416
## 3096 NP_001348394.1 XP_021331014.1 42.009 219 127 0 148 366 254 472
## 3097 NP_001348394.1 XP_021331014.1 37.743 257 160 0 110 366 76 332
## 3098 NP_001348394.1 XP_021331014.1 36.331 278 160 3 99 368 233 501
## 3099 NP_001348394.1 XP_021331014.1 37.313 268 168 0 99 366 121 388
## 3100 NP_001348394.1 XP_021331014.1 37.313 268 168 0 99 366 177 444
## 3101 NP_001348394.1 XP_021331014.1 40.789 228 134 1 140 367 51 277
## 3102 NP_001348394.1 XP_021331014.1 37.891 256 142 3 99 346 261 507
## 3103 NP_001348394.1 XP_021331014.1 44.848 165 91 0 204 368 58 222
## 3104 NP_001348394.1 XP_021331122.1 41.589 214 125 0 153 366 342 555
## 3105 NP_001348394.1 XP_021331122.1 43.256 215 121 1 153 366 313 527
## 3106 NP_001348394.1 XP_021331122.1 41.518 224 130 1 131 353 94 317
## 3107 NP_001348394.1 XP_021331122.1 42.523 214 123 0 153 366 61 274
## 3108 NP_001348394.1 XP_021331122.1 41.121 214 126 0 153 366 89 302
## 3109 NP_001348394.1 XP_021331122.1 42.932 191 109 0 176 366 56 246
## 3110 NP_001348394.1 XP_021331122.1 42.051 195 113 0 148 342 365 559
## 3111 NP_001348394.1 XP_021331122.1 44.928 138 76 0 229 366 53 190
## 3112 NP_001348394.1 XP_021331025.1 40.654 214 127 0 153 366 45 258
## 3113 NP_001348394.1 XP_021331025.1 39.252 214 130 0 153 366 73 286
## 3114 NP_001348394.1 XP_021331025.1 39.171 217 132 0 150 366 14 230
## 3115 NP_001348394.1 XP_021331025.1 38.249 217 131 1 153 366 129 345
## 3116 NP_001348394.1 XP_021331025.1 38.318 214 132 0 153 366 101 314
## 3117 NP_001348394.1 XP_021331025.1 41.243 177 101 1 153 326 185 361
## 3118 NP_001348394.1 XP_021329631.1 45.361 194 106 0 174 367 53 246
## 3119 NP_001348394.1 XP_021329631.1 41.589 214 125 0 153 366 60 273
## 3120 NP_001348394.1 XP_021329631.1 44.118 170 95 0 197 366 48 217

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## 3121	NP_001348394.1	XP_021329631.1	40.952	210	124	0	153	362	116	325
## 3122	NP_001348394.1	XP_021331041.1	41.121	214	126	0	153	366	155	368
## 3123	NP_001348394.1	XP_021331041.1	35.315	286	170	2	81	366	70	340
## 3124	NP_001348394.1	XP_021331041.1	40.187	214	128	0	153	366	183	396
## 3125	NP_001348394.1	XP_021331041.1	41.294	201	118	0	153	353	211	411
## 3126	NP_001348394.1	XP_021331041.1	41.436	181	106	0	145	325	231	411
## 3127	NP_001348394.1	NP_001104669.1	42.523	214	123	0	153	366	142	355
## 3128	NP_001348394.1	NP_001104669.1	38.710	248	148	2	123	366	52	299
## 3129	NP_001348394.1	NP_001104669.1	41.451	193	113	0	174	366	135	327
## 3130	NP_001348394.1	NP_001104669.1	41.237	194	114	0	176	369	81	274
## 3131	NP_001348394.1	NP_001104669.1	37.674	215	134	0	153	367	198	412
## 3132	NP_001348394.1	NP_001104669.1	33.036	224	134	3	99	314	200	415
## 3133	NP_001348394.1	XP_017210573.1	42.523	214	123	0	153	366	142	355
## 3134	NP_001348394.1	XP_017210573.1	38.710	248	148	2	123	366	52	299
## 3135	NP_001348394.1	XP_017210573.1	41.451	193	113	0	174	366	135	327
## 3136	NP_001348394.1	XP_017210573.1	41.237	194	114	0	176	369	81	274
## 3137	NP_001348394.1	XP_017210573.1	37.674	215	134	0	153	367	198	412
## 3138	NP_001348394.1	XP_017210573.1	33.036	224	134	3	99	314	200	415
## 3139	NP_001348394.1	XP_017210986.1	43.269	208	118	0	159	366	65	272
## 3140	NP_001348394.1	XP_017210986.1	40.000	220	132	0	148	367	138	357
## 3141	NP_001348394.1	XP_017210986.1	41.553	219	128	0	148	366	82	300
## 3142	NP_001348394.1	XP_017210986.1	40.513	195	116	0	174	368	136	330
## 3143	NP_001348394.1	XP_017210986.1	46.715	137	73	0	232	368	82	218
## 3144	NP_001348394.1	XP_017210986.1	37.037	162	102	0	153	314	199	360
## 3145	NP_001348394.1	XP_021326715.1	41.589	214	125	0	153	366	142	355
## 3146	NP_001348394.1	XP_021326715.1	42.326	215	124	0	153	367	198	412
## 3147	NP_001348394.1	XP_021326715.1	42.056	214	124	0	153	366	170	383
## 3148	NP_001348394.1	XP_021326715.1	41.121	214	126	0	153	366	114	327
## 3149	NP_001348394.1	XP_021326715.1	39.823	226	136	0	141	366	46	271
## 3150	NP_001348394.1	XP_021326715.1	42.056	214	124	0	153	366	86	299
## 3151	NP_001348394.1	XP_021327374.1	42.130	216	125	0	153	368	450	665
## 3152	NP_001348394.1	XP_021327374.1	39.648	227	137	0	140	366	297	523
## 3153	NP_001348394.1	XP_021327374.1	42.523	214	123	0	153	366	394	607
## 3154	NP_001348394.1	XP_021327374.1	40.654	214	127	0	153	366	114	327
## 3155	NP_001348394.1	XP_021327374.1	42.523	214	123	0	153	366	366	579
## 3156	NP_001348394.1	XP_021327374.1	40.187	214	128	0	153	366	282	495
## 3157	NP_001348394.1	XP_021327374.1	40.187	214	128	0	153	366	58	271
## 3158	NP_001348394.1	XP_021327374.1	34.409	279	167	2	96	366	169	439
## 3159	NP_001348394.1	XP_021327374.1	40.187	214	128	0	153	366	338	551
## 3160	NP_001348394.1	XP_021327374.1	40.187	214	128	0	153	366	30	243
## 3161	NP_001348394.1	XP_021327374.1	38.785	214	131	0	153	366	506	719
## 3162	NP_001348394.1	XP_021327374.1	42.408	191	110	0	176	366	25	215
## 3163	NP_001348394.1	XP_021327374.1	38.647	207	127	0	162	368	543	749
## 3164	NP_001348394.1	XP_021327374.1	36.220	127	81	0	242	368	7	133
## 3165	NP_001348394.1	XP_021327374.1	36.486	74	43	1	299	368	4	77
## 3166	NP_001348394.1	XP_021327374.1	30.682	88	61	0	140	227	661	748
## 3167	NP_001348394.1	XP_021331130.1	42.922	219	125	0	148	366	82	300
## 3168	NP_001348394.1	XP_021331130.1	40.271	221	132	0	148	368	138	358
## 3169	NP_001348394.1	XP_021331130.1	41.121	214	126	0	153	366	115	328
## 3170	NP_001348394.1	XP_021331130.1	40.865	208	123	0	159	366	65	272
## 3171	NP_001348394.1	XP_021331130.1	38.605	215	132	0	153	367	171	385
## 3172	NP_001348394.1	XP_021331130.1	43.976	166	93	0	203	368	81	246
## 3173	NP_001348394.1	XP_021331130.1	32.407	216	146	0	99	314	173	388
## 3174	NP_001348394.1	XP_021327368.1	43.979	191	107	0	176	366	19	209

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## 3175 NP_001348394.1 XP_021327368.1 40.741 216 128 0 153 368 24 239
## 3176 NP_001348394.1 XP_021327368.1 42.056 214 124 0 153 366 108 321
## 3177 NP_001348394.1 XP_021327368.1 40.187 214 128 0 153 366 52 265
## 3178 NP_001348394.1 XP_021327368.1 32.967 91 61 0 140 230 235 325
## 3179 NP_001348394.1 XP_021332373.1 43.979 191 107 0 176 366 19 209
## 3180 NP_001348394.1 XP_021332373.1 40.741 216 128 0 153 368 24 239
## 3181 NP_001348394.1 XP_021332373.1 42.056 214 124 0 153 366 108 321
## 3182 NP_001348394.1 XP_021332373.1 40.187 214 128 0 153 366 52 265
## 3183 NP_001348394.1 XP_021332373.1 32.967 91 61 0 140 230 235 325
## 3184 NP_001348394.1 XP_021331304.1 39.207 227 138 0 140 366 2 228
## 3185 NP_001348394.1 XP_021331304.1 40.187 214 128 0 153 366 71 284
## 3186 NP_001348394.1 XP_021331304.1 42.523 214 123 0 153 366 127 340
## 3187 NP_001348394.1 XP_021331304.1 39.419 241 133 1 139 366 128 368
## 3188 NP_001348394.1 XP_021331304.1 41.589 214 125 0 153 366 183 396
## 3189 NP_001348394.1 XP_021331304.1 41.589 214 125 0 153 366 99 312
## 3190 NP_001348394.1 XP_021331304.1 41.451 193 113 0 174 366 64 256
## 3191 NP_001348394.1 XP_021331304.1 36.771 223 125 2 99 313 185 399
## 3192 NP_001348394.1 XP_021329615.1 42.523 214 123 0 153 366 56 269
## 3193 NP_001348394.1 XP_021329615.1 38.938 226 138 0 146 371 189 414
## 3194 NP_001348394.1 XP_021329615.1 41.667 216 126 0 153 368 168 383
## 3195 NP_001348394.1 XP_021329615.1 42.056 214 124 0 153 366 140 353
## 3196 NP_001348394.1 XP_021329615.1 42.326 215 124 0 153 367 84 298
## 3197 NP_001348394.1 XP_021329615.1 40.654 214 127 0 153 366 112 325
## 3198 NP_001348394.1 XP_021329615.1 42.932 191 109 0 176 366 51 241
## 3199 NP_001348394.1 XP_021330824.1 40.724 221 131 0 148 368 152 372
## 3200 NP_001348394.1 XP_021330824.1 41.453 234 136 1 134 366 81 314
## 3201 NP_001348394.1 XP_021330824.1 41.553 219 128 0 148 366 68 286
## 3202 NP_001348394.1 XP_021330824.1 45.000 180 99 0 174 353 150 329
## 3203 NP_001348394.1 XP_021330824.1 41.327 196 115 0 173 368 65 260
## 3204 NP_001348394.1 XP_021330824.1 33.171 205 137 0 110 314 198 402
## 3205 NP_001348394.1 NP_001025341.1 42.396 217 124 1 153 369 195 410
## 3206 NP_001348394.1 NP_001025341.1 35.656 244 156 1 123 366 53 295
## 3207 NP_001348394.1 NP_001025341.1 40.206 194 116 0 174 367 76 269
## 3208 NP_001348394.1 NP_001025341.1 39.645 169 100 2 153 320 251 418
## 3209 NP_001348394.1 NP_001025341.1 29.630 108 75 1 148 254 329 436
## 3210 NP_001348394.1 XP_021331384.1 40.359 223 133 0 148 370 164 386
## 3211 NP_001348394.1 XP_021331384.1 43.458 214 121 0 153 366 113 326
## 3212 NP_001348394.1 XP_021331384.1 41.096 219 129 0 148 366 80 298
## 3213 NP_001348394.1 XP_021331384.1 43.005 193 110 0 174 366 162 354
## 3214 NP_001348394.1 XP_021331384.1 41.327 196 115 0 173 368 77 272
## 3215 NP_001348394.1 XP_021331384.1 32.407 216 146 0 99 314 199 414
## 3216 NP_001348394.1 XP_021330462.1 38.554 249 145 1 118 366 124 364
## 3217 NP_001348394.1 XP_021330462.1 42.056 214 124 0 153 366 123 336
## 3218 NP_001348394.1 XP_021330462.1 40.654 214 127 0 153 366 179 392
## 3219 NP_001348394.1 XP_021330462.1 42.289 201 116 0 153 353 207 407
## 3220 NP_001348394.1 XP_021330462.1 40.654 214 127 0 153 366 95 308
## 3221 NP_001348394.1 XP_021330462.1 39.207 227 137 1 141 366 222 448
## 3222 NP_001348394.1 XP_021330462.1 43.005 193 110 0 174 366 88 280
## 3223 NP_001348394.1 XP_021330462.1 39.252 214 130 0 153 366 263 476
## 3224 NP_001348394.1 XP_021330462.1 42.045 176 102 0 191 366 77 252
## 3225 NP_001348394.1 XP_021330462.1 36.916 214 135 0 153 366 291 504
## 3226 NP_001348394.1 XP_021330462.1 41.935 155 90 0 214 368 72 226
## 3227 NP_001348394.1 XP_021330462.1 35.000 240 156 0 99 338 293 532
## 3228 NP_001348394.1 XP_021330461.1 38.554 249 145 1 118 366 124 364

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## 3229 NP_001348394.1 XP_021330461.1 42.056 214 124 0 153 366 123 336
## 3230 NP_001348394.1 XP_021330461.1 40.654 214 127 0 153 366 179 392
## 3231 NP_001348394.1 XP_021330461.1 42.289 201 116 0 153 353 207 407
## 3232 NP_001348394.1 XP_021330461.1 40.654 214 127 0 153 366 95 308
## 3233 NP_001348394.1 XP_021330461.1 39.207 227 137 1 141 366 222 448
## 3234 NP_001348394.1 XP_021330461.1 43.005 193 110 0 174 366 88 280
## 3235 NP_001348394.1 XP_021330461.1 39.252 214 130 0 153 366 263 476
## 3236 NP_001348394.1 XP_021330461.1 42.045 176 102 0 191 366 77 252
## 3237 NP_001348394.1 XP_021330461.1 36.916 214 135 0 153 366 291 504
## 3238 NP_001348394.1 XP_021330461.1 41.935 155 90 0 214 368 72 226
## 3239 NP_001348394.1 XP_021330461.1 35.000 240 156 0 99 338 293 532
## 3240 NP_001348394.1 XP_021330460.1 38.554 249 145 1 118 366 124 364
## 3241 NP_001348394.1 XP_021330460.1 42.056 214 124 0 153 366 123 336
## 3242 NP_001348394.1 XP_021330460.1 40.654 214 127 0 153 366 179 392
## 3243 NP_001348394.1 XP_021330460.1 42.289 201 116 0 153 353 207 407
## 3244 NP_001348394.1 XP_021330460.1 40.654 214 127 0 153 366 95 308
## 3245 NP_001348394.1 XP_021330460.1 39.207 227 137 1 141 366 222 448
## 3246 NP_001348394.1 XP_021330460.1 43.005 193 110 0 174 366 88 280
## 3247 NP_001348394.1 XP_021330460.1 39.252 214 130 0 153 366 263 476
## 3248 NP_001348394.1 XP_021330460.1 42.045 176 102 0 191 366 77 252
## 3249 NP_001348394.1 XP_021330460.1 36.916 214 135 0 153 366 291 504
## 3250 NP_001348394.1 XP_021330460.1 41.935 155 90 0 214 368 72 226
## 3251 NP_001348394.1 XP_021330460.1 35.000 240 156 0 99 338 293 532
## 3252 NP_001348394.1 XP_009301951.2 39.720 214 129 0 153 366 129 342
## 3253 NP_001348394.1 XP_009301951.2 39.175 194 118 0 174 367 206 399
## 3254 NP_001348394.1 XP_009301951.2 33.846 260 170 2 107 366 29 286
## 3255 NP_001348394.1 XP_009301951.2 35.510 245 158 0 126 370 74 318
## 3256 NP_001348394.1 XP_009301951.2 40.415 193 115 0 153 345 213 405
## 3257 NP_001348394.1 XP_009301951.2 32.727 55 37 0 151 205 351 405
## 3258 NP_001348394.1 XP_021331158.1 40.991 222 131 0 145 366 34 255
## 3259 NP_001348394.1 XP_021331158.1 43.925 214 120 0 153 366 70 283
## 3260 NP_001348394.1 XP_021331158.1 43.056 216 123 0 153 368 238 453
## 3261 NP_001348394.1 XP_021331158.1 41.589 214 125 0 153 366 98 311
## 3262 NP_001348394.1 XP_021331158.1 44.509 173 96 0 174 346 315 487
## 3263 NP_001348394.1 XP_021331158.1 42.487 193 110 1 174 366 8 199
## 3264 NP_001348394.1 XP_021331158.1 34.333 300 161 3 99 366 100 395
## 3265 NP_001348394.1 XP_021331158.1 33.129 326 167 5 77 366 113 423
## 3266 NP_001348394.1 XP_021331158.1 42.353 170 97 1 197 366 3 171
## 3267 NP_001348394.1 XP_021331158.1 42.373 59 33 1 308 366 2 59
## 3268 NP_001348394.1 XP_021330457.1 43.523 193 109 0 174 366 8 200
## 3269 NP_001348394.1 XP_021330457.1 41.121 214 126 0 153 366 43 256
## 3270 NP_001348394.1 XP_021330457.1 41.294 201 118 0 153 353 15 215
## 3271 NP_001348394.1 XP_021330457.1 44.118 170 95 0 197 366 3 172
## 3272 NP_001348394.1 XP_021330457.1 35.950 242 127 1 153 366 99 340
## 3273 NP_001348394.1 XP_021330457.1 36.916 214 135 0 153 366 155 368
## 3274 NP_001348394.1 XP_021330457.1 37.383 214 134 0 153 366 71 284
## 3275 NP_001348394.1 XP_021330457.1 40.741 162 96 0 153 314 211 372
## 3276 NP_001348394.1 XP_021330457.1 45.977 87 47 0 280 366 2 88
## 3277 NP_001348394.1 XP_021330457.1 31.250 192 124 3 99 286 185 372
## 3278 NP_001348394.1 XP_021330456.1 43.523 193 109 0 174 366 8 200
## 3279 NP_001348394.1 XP_021330456.1 41.121 214 126 0 153 366 43 256
## 3280 NP_001348394.1 XP_021330456.1 41.294 201 118 0 153 353 15 215
## 3281 NP_001348394.1 XP_021330456.1 44.118 170 95 0 197 366 3 172
## 3282 NP_001348394.1 XP_021330456.1 35.950 242 127 1 153 366 99 340

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## 3283	NP_001348394.1	XP_021330456.1	36.916	214	135	0	153	366	155	368
## 3284	NP_001348394.1	XP_021330456.1	37.383	214	134	0	153	366	71	284
## 3285	NP_001348394.1	XP_021330456.1	40.741	162	96	0	153	314	211	372
## 3286	NP_001348394.1	XP_021330456.1	45.977	87	47	0	280	366	2	88
## 3287	NP_001348394.1	XP_021330456.1	31.250	192	124	3	99	286	185	372
## 3288	NP_001348394.1	XP_021331396.1	42.932	191	108	1	182	371	1	191
## 3289	NP_001348394.1	XP_021331396.1	43.023	172	98	0	154	325	1	172
## 3290	NP_001348394.1	XP_021331396.1	39.610	154	93	0	153	306	28	181
## 3291	NP_001348394.1	XP_021331169.1	40.625	224	133	0	143	366	5	228
## 3292	NP_001348394.1	XP_021331169.1	39.732	224	135	0	143	366	173	396
## 3293	NP_001348394.1	XP_021331169.1	43.925	214	120	0	153	366	295	508
## 3294	NP_001348394.1	XP_021331169.1	42.523	214	123	0	153	366	71	284
## 3295	NP_001348394.1	XP_021331169.1	42.991	214	122	0	153	366	379	592
## 3296	NP_001348394.1	XP_021331169.1	41.121	214	126	0	153	366	127	340
## 3297	NP_001348394.1	XP_021331169.1	46.512	172	92	0	197	368	3	174
## 3298	NP_001348394.1	XP_021331169.1	41.204	216	127	0	153	368	99	314
## 3299	NP_001348394.1	XP_021331169.1	40.187	214	128	0	153	366	435	648
## 3300	NP_001348394.1	XP_021331169.1	43.005	193	110	0	174	366	428	620
## 3301	NP_001348394.1	XP_021331169.1	43.523	193	109	0	174	366	288	480
## 3302	NP_001348394.1	XP_021331169.1	42.523	214	123	0	153	366	351	564
## 3303	NP_001348394.1	XP_021331169.1	40.187	214	128	0	153	366	155	368
## 3304	NP_001348394.1	XP_021331169.1	40.179	224	134	0	143	366	313	536
## 3305	NP_001348394.1	XP_021331169.1	37.313	268	168	0	99	366	185	452
## 3306	NP_001348394.1	XP_021331169.1	42.786	201	115	0	153	353	463	663
## 3307	NP_001348394.1	XP_021331169.1	41.209	182	107	0	153	334	491	672
## 3308	NP_001348394.1	XP_021331169.1	40.491	163	97	0	153	315	519	681
## 3309	NP_001348394.1	XP_021331169.1	42.529	87	50	0	280	366	2	88
## 3310	NP_001348394.1	XP_021331032.1	41.860	215	125	0	153	367	69	283
## 3311	NP_001348394.1	XP_021331032.1	41.589	214	125	0	153	366	181	394
## 3312	NP_001348394.1	XP_021331032.1	43.458	214	121	0	153	366	293	506
## 3313	NP_001348394.1	XP_021331032.1	43.519	216	122	0	153	368	237	452
## 3314	NP_001348394.1	XP_021331032.1	41.981	212	123	0	153	364	377	588
## 3315	NP_001348394.1	XP_021331032.1	41.121	214	126	0	153	366	97	310
## 3316	NP_001348394.1	XP_021331032.1	37.692	260	146	2	99	350	155	406
## 3317	NP_001348394.1	XP_021331032.1	41.121	214	126	0	153	366	125	338
## 3318	NP_001348394.1	XP_021331032.1	43.455	191	108	0	176	366	64	254
## 3319	NP_001348394.1	XP_021331032.1	41.589	214	125	0	153	366	265	478
## 3320	NP_001348394.1	XP_021331032.1	39.720	214	129	0	153	366	349	562
## 3321	NP_001348394.1	XP_021331032.1	40.930	215	127	0	152	366	320	534
## 3322	NP_001348394.1	XP_021331032.1	41.038	212	106	2	174	366	426	637
## 3323	NP_001348394.1	XP_021331032.1	41.038	212	100	2	153	342	433	641
## 3324	NP_001348394.1	XP_017211076.1	39.184	245	145	1	126	366	56	300
## 3325	NP_001348394.1	XP_017211076.1	38.839	224	137	0	145	368	135	358
## 3326	NP_001348394.1	XP_017211076.1	40.969	227	134	0	140	366	102	328
## 3327	NP_001348394.1	XP_017211076.1	37.727	220	137	0	148	367	166	385
## 3328	NP_001348394.1	XP_017211076.1	43.976	166	93	0	203	368	81	246
## 3329	NP_001348394.1	XP_017211076.1	32.870	216	145	0	99	314	173	388
## 3330	NP_001348394.1	XP_021331400.1	42.991	214	122	0	153	366	100	313
## 3331	NP_001348394.1	XP_021331400.1	43.925	214	120	0	153	366	604	817
## 3332	NP_001348394.1	XP_021331400.1	42.991	214	122	0	153	366	268	481
## 3333	NP_001348394.1	XP_021331400.1	40.969	227	134	0	140	366	1185	1411
## 3334	NP_001348394.1	XP_021331400.1	37.681	276	156	3	99	366	606	873
## 3335	NP_001348394.1	XP_021331400.1	38.043	276	155	2	99	366	634	901
## 3336	NP_001348394.1	XP_021331400.1	40.789	228	134	1	140	366	142	369

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## 3337 NP_001348394.1 XP_021331400.1 43.256 215 122 0 153 367 1282 1496
## 3338 NP_001348394.1 XP_021331400.1 37.024 289 171 4 85 367 843 1126
## 3339 NP_001348394.1 XP_021331400.1 38.043 276 155 2 99 366 1256 1523
## 3340 NP_001348394.1 XP_021331400.1 37.319 276 157 3 99 366 186 453
## 3341 NP_001348394.1 XP_021331400.1 43.458 214 121 0 153 366 940 1153
## 3342 NP_001348394.1 XP_021331400.1 36.957 276 158 2 99 366 1200 1467
## 3343 NP_001348394.1 XP_021331400.1 41.704 223 125 2 149 366 63 285
## 3344 NP_001348394.1 XP_021331400.1 41.121 214 126 0 153 366 520 733
## 3345 NP_001348394.1 XP_021331400.1 36.957 276 158 2 99 366 746 1013
## 3346 NP_001348394.1 XP_021331400.1 37.687 268 167 0 99 366 242 509
## 3347 NP_001348394.1 XP_021331400.1 41.589 214 125 0 153 366 576 789
## 3348 NP_001348394.1 XP_021331400.1 40.654 214 127 0 153 366 184 397
## 3349 NP_001348394.1 XP_021331400.1 36.786 280 161 2 95 366 1280 1551
## 3350 NP_001348394.1 XP_021331400.1 40.541 222 132 0 145 366 736 957
## 3351 NP_001348394.1 XP_021331400.1 41.121 214 126 0 153 366 352 565
## 3352 NP_001348394.1 XP_021331400.1 41.121 214 126 0 153 366 828 1041
## 3353 NP_001348394.1 XP_021331400.1 36.170 282 158 3 99 366 942 1215
## 3354 NP_001348394.1 XP_021331400.1 41.121 214 126 0 153 366 1394 1607
## 3355 NP_001348394.1 XP_021331400.1 37.091 275 161 4 98 366 493 761
## 3356 NP_001348394.1 XP_021331400.1 39.720 214 129 0 153 366 464 677
## 3357 NP_001348394.1 XP_021331400.1 35.889 287 162 3 99 371 914 1192
## 3358 NP_001348394.1 XP_021331400.1 38.785 214 131 0 153 366 1534 1747
## 3359 NP_001348394.1 XP_021331400.1 35.507 276 162 2 99 366 1424 1691
## 3360 NP_001348394.1 XP_021331400.1 36.594 276 159 2 99 366 1312 1579
## 3361 NP_001348394.1 XP_021331400.1 36.232 276 160 2 99 366 1368 1635
## 3362 NP_001348394.1 XP_021331400.1 40.654 214 127 0 153 366 436 649
## 3363 NP_001348394.1 XP_021331400.1 39.252 214 130 0 153 366 492 705
## 3364 NP_001348394.1 XP_021331400.1 34.926 272 177 0 95 366 350 621
## 3365 NP_001348394.1 XP_021331400.1 40.252 159 95 0 153 311 1590 1748
## 3366 NP_001348394.1 XP_021331400.1 41.463 82 47 1 288 368 66 147
## 3367 NP_001348394.1 XP_009296573.2 42.991 214 122 0 153 366 247 460
## 3368 NP_001348394.1 XP_009296573.2 41.121 214 126 0 153 366 107 320
## 3369 NP_001348394.1 XP_009296573.2 42.056 214 124 0 153 366 79 292
## 3370 NP_001348394.1 XP_009296573.2 40.654 214 127 0 153 366 163 376
## 3371 NP_001348394.1 XP_009296573.2 42.487 193 111 0 174 366 16 208
## 3372 NP_001348394.1 XP_009296573.2 39.252 214 130 0 153 366 23 236
## 3373 NP_001348394.1 XP_009296573.2 41.121 214 126 0 153 366 191 404
## 3374 NP_001348394.1 XP_009296573.2 37.963 216 134 0 153 368 51 266
## 3375 NP_001348394.1 XP_009296573.2 40.187 214 128 0 153 366 219 432
## 3376 NP_001348394.1 XP_009296573.2 44.186 172 96 0 195 366 9 180
## 3377 NP_001348394.1 XP_009296573.2 38.318 214 132 0 153 366 135 348
## 3378 NP_001348394.1 XP_009296573.2 35.000 160 104 0 153 312 331 490
## 3379 NP_001348394.1 XP_021331067.1 41.589 214 125 0 153 366 131 344
## 3380 NP_001348394.1 XP_021331067.1 42.487 193 111 0 174 366 180 372
## 3381 NP_001348394.1 XP_021331067.1 40.789 228 134 1 140 367 63 289
## 3382 NP_001348394.1 XP_021331067.1 37.860 243 151 0 99 341 133 375
## 3383 NP_001348394.1 XP_021331067.1 41.451 193 109 2 176 366 126 316
## 3384 NP_001348394.1 NP_001314792.1 40.187 214 128 0 153 366 99 312
## 3385 NP_001348394.1 NP_001314792.1 38.326 227 139 1 140 366 59 284
## 3386 NP_001348394.1 NP_001314792.1 40.513 195 116 0 153 347 127 321
## 3387 NP_001348394.1 NP_001314792.1 38.272 81 50 0 288 368 66 146
## 3388 NP_001348394.1 XP_021331225.1 43.256 215 122 0 153 367 284 498
## 3389 NP_001348394.1 XP_021331225.1 42.523 214 123 0 153 366 256 469
## 3390 NP_001348394.1 XP_021331225.1 42.056 214 124 0 153 366 144 357

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## 3391 NP_001348394.1 XP_021331225.1 41.589 214 125 0 153 366 228 441
## 3392 NP_001348394.1 XP_021331225.1 38.367 245 147 1 126 366 1 245
## 3393 NP_001348394.1 XP_021331225.1 41.121 214 126 0 153 366 200 413
## 3394 NP_001348394.1 XP_021331225.1 41.121 214 126 0 153 366 88 301
## 3395 NP_001348394.1 XP_021331225.1 42.056 214 124 0 153 366 172 385
## 3396 NP_001348394.1 XP_021331225.1 39.252 214 130 0 153 366 60 273
## 3397 NP_001348394.1 XP_021331225.1 41.121 214 126 0 153 366 116 329
## 3398 NP_001348394.1 XP_021331389.1 41.423 239 137 2 130 366 46 283
## 3399 NP_001348394.1 XP_021331389.1 43.256 215 122 0 153 367 126 340
## 3400 NP_001348394.1 XP_021331389.1 42.056 214 124 0 153 366 98 311
## 3401 NP_001348394.1 XP_021331389.1 41.718 163 95 0 153 315 182 344
## 3402 NP_001348394.1 NP_001108366.1 42.925 212 121 0 155 366 61 272
## 3403 NP_001348394.1 NP_001108366.1 41.121 214 126 0 140 353 74 287
## 3404 NP_001348394.1 NP_001108366.1 39.535 215 130 0 153 367 115 329
## 3405 NP_001348394.1 NP_001108366.1 39.070 215 130 1 153 367 143 356
## 3406 NP_001348394.1 NP_001108366.1 36.420 162 102 1 153 314 199 359
## 3407 NP_001348394.1 XP_009294134.1 42.056 214 124 0 153 366 157 370
## 3408 NP_001348394.1 XP_009294134.1 38.426 216 133 0 153 368 241 456
## 3409 NP_001348394.1 XP_009294134.1 42.632 190 109 0 178 367 154 343
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## 3411 NP_001348394.1 XP_009294134.1 40.838 191 113 0 176 366 96 286
## 3412 NP_001348394.1 XP_021331309.1 40.187 214 128 0 153 366 76 289
## 3413 NP_001348394.1 XP_021331309.1 41.969 193 112 0 174 366 125 317
## 3414 NP_001348394.1 XP_021331309.1 37.209 215 135 0 153 367 132 346
## 3415 NP_001348394.1 XP_021331309.1 37.654 162 101 0 153 314 188 349
## 3416 NP_001348394.1 XP_021331105.1 43.056 216 121 1 153 366 1044 1259
## 3417 NP_001348394.1 XP_021331105.1 43.439 221 125 0 146 366 588 808
## 3418 NP_001348394.1 XP_021331105.1 42.991 214 122 0 153 366 371 584
## 3419 NP_001348394.1 XP_021331105.1 42.056 214 124 0 153 366 287 500
## 3420 NP_001348394.1 XP_021331105.1 47.150 193 102 0 174 366 925 1117
## 3421 NP_001348394.1 XP_021331105.1 43.056 216 123 0 153 368 932 1147
## 3422 NP_001348394.1 XP_021331105.1 42.466 219 126 0 148 366 983 1201
## 3423 NP_001348394.1 XP_021331105.1 43.458 214 121 0 153 366 483 696
## 3424 NP_001348394.1 XP_021331105.1 42.523 214 123 0 153 366 960 1173
## 3425 NP_001348394.1 XP_021331105.1 42.991 214 122 0 153 366 259 472
## 3426 NP_001348394.1 XP_021331105.1 41.256 223 131 0 144 366 222 444
## 3427 NP_001348394.1 XP_021331105.1 41.256 223 131 0 144 366 839 1061
## 3428 NP_001348394.1 XP_021331105.1 39.130 276 165 2 94 366 814 1089
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## 3432 NP_001348394.1 XP_021331105.1 41.589 214 125 0 153 366 427 640
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## 3439 NP_001348394.1 XP_021331105.1 41.667 192 110 1 153 342 1100 1291
## 3440 NP_001348394.1 XP_021331105.1 43.636 165 91 1 153 315 1128 1292
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## 3453 NP_001348394.1 XP_021329614.1 40.654 214 127 0 153 366 112 325
## 3454 NP_001348394.1 XP_021329614.1 42.932 191 109 0 176 366 51 241
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## 3461 NP_001348394.1 XP_017211129.1 35.185 270 175 0 99 368 173 442
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## 3466 NP_001348394.1 XP_017210690.1 45.000 180 99 0 174 353 137 316
## 3467 NP_001348394.1 XP_017210690.1 40.000 210 126 0 159 368 38 247
## 3468 NP_001348394.1 XP_017210690.1 34.944 269 175 0 99 367 118 386
## 3469 NP_001348394.1 XP_017210690.1 32.407 216 146 0 99 314 174 389
## 3470 NP_001348394.1 XP_017211885.2 42.130 216 125 0 153 368 422 637
## 3471 NP_001348394.1 XP_017211885.2 40.654 214 127 0 153 366 114 327
## 3472 NP_001348394.1 XP_017211885.2 42.523 214 123 0 153 366 338 551
## 3473 NP_001348394.1 XP_017211885.2 39.207 227 138 0 140 366 269 495
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## 3476 NP_001348394.1 XP_017211885.2 40.654 214 127 0 153 366 198 411
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## 3493 NP_001348394.1 XP_009299290.1 39.918 243 146 0 126 368 65 307
## 3494 NP_001348394.1 XP_009294092.1 41.063 207 120 1 162 366 19 225
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## 3496 NP_001348394.1 XP_009294092.1 44.286 140 78 0 174 313 117 256
## 3497 NP_001348394.1 XP_009294092.1 35.338 133 86 0 153 285 124 256
## 3498 NP_001348394.1 XP_021329621.1 42.991 214 122 0 153 366 80 293

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## 3501 NP_001348394.1 XP_021329621.1 39.720 214 129 0 153 366 164 377
## 3502 NP_001348394.1 XP_021329621.1 41.121 214 126 0 153 366 108 321
## 3503 NP_001348394.1 XP_021329621.1 44.503 191 106 0 176 366 75 265
## 3504 NP_001348394.1 XP_021329621.1 40.000 160 96 0 153 312 248 407
## 3505 NP_001348394.1 XP_021329621.1 34.946 186 93 1 99 284 250 407
## 3506 NP_001348394.1 XP_021329620.1 42.991 214 122 0 153 366 80 293
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## 3510 NP_001348394.1 XP_021329620.1 41.121 214 126 0 153 366 108 321
## 3511 NP_001348394.1 XP_021329620.1 44.503 191 106 0 176 366 75 265
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## 3513 NP_001348394.1 XP_021329620.1 34.946 186 93 1 99 284 250 407
## 3514 NP_001348394.1 XP_021329619.1 42.991 214 122 0 153 366 80 293
## 3515 NP_001348394.1 XP_021329619.1 40.465 215 128 0 153 367 136 350
## 3516 NP_001348394.1 XP_021329619.1 41.589 214 125 0 153 366 192 405
## 3517 NP_001348394.1 XP_021329619.1 39.720 214 129 0 153 366 164 377
## 3518 NP_001348394.1 XP_021329619.1 41.121 214 126 0 153 366 108 321
## 3519 NP_001348394.1 XP_021329619.1 44.503 191 106 0 176 366 75 265
## 3520 NP_001348394.1 XP_021329619.1 40.000 160 96 0 153 312 248 407
## 3521 NP_001348394.1 XP_021329619.1 34.946 186 93 1 99 284 250 407
## 3522 NP_001348394.1 XP_021329618.1 42.991 214 122 0 153 366 80 293
## 3523 NP_001348394.1 XP_021329618.1 40.465 215 128 0 153 367 136 350
## 3524 NP_001348394.1 XP_021329618.1 41.589 214 125 0 153 366 192 405
## 3525 NP_001348394.1 XP_021329618.1 39.720 214 129 0 153 366 164 377
## 3526 NP_001348394.1 XP_021329618.1 41.121 214 126 0 153 366 108 321
## 3527 NP_001348394.1 XP_021329618.1 44.503 191 106 0 176 366 75 265
## 3528 NP_001348394.1 XP_021329618.1 40.000 160 96 0 153 312 248 407
## 3529 NP_001348394.1 XP_021329618.1 34.946 186 93 1 99 284 250 407
## 3530 NP_001348394.1 XP_021329617.1 42.991 214 122 0 153 366 80 293
## 3531 NP_001348394.1 XP_021329617.1 40.465 215 128 0 153 367 136 350
## 3532 NP_001348394.1 XP_021329617.1 41.589 214 125 0 153 366 192 405
## 3533 NP_001348394.1 XP_021329617.1 39.720 214 129 0 153 366 164 377
## 3534 NP_001348394.1 XP_021329617.1 41.121 214 126 0 153 366 108 321
## 3535 NP_001348394.1 XP_021329617.1 44.503 191 106 0 176 366 75 265
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## 3552 NP_001348394.1 XP_003198463.4 39.720 214 129 0 153 366 134 347

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## 3555 NP_001348394.1 XP_003198463.4 37.674 215 133 1 153 367 162 375
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## 3580 NP_001348394.1 XP_001923745.2 42.056 214 124 0 153 366 323 536
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## 3607 NP_001348394.1 XP_021331156.1 41.121 214 125 1 153 366 1170 1382
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## 3658 NP_001348394.1 XP_021331440.1 41.121 214 126 0 153 366 99 312
## 3659 NP_001348394.1 XP_021331440.1 40.654 214 127 0 153 366 71 284
## 3660 NP_001348394.1 XP_021331440.1 41.121 214 126 0 153 366 43 256

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## 3661	NP_001348394.1	XP_021331440.1	41.121	214	126	0	153	366	127	340
## 3662	NP_001348394.1	XP_021331440.1	40.278	216	129	0	153	368	15	230
## 3663	NP_001348394.1	XP_021331440.1	42.487	193	111	0	174	366	8	200
## 3664	NP_001348394.1	XP_021331440.1	41.538	195	114	0	144	338	230	424
## 3665	NP_001348394.1	XP_021331440.1	42.941	170	97	0	197	366	3	172
## 3666	NP_001348394.1	XP_021331440.1	44.755	143	79	0	224	366	2	144
## 3667	NP_001348394.1	XP_021331440.1	40.146	137	82	0	153	289	295	431
## 3668	NP_001348394.1	XP_021330961.1	44.041	193	108	0	174	366	8	200
## 3669	NP_001348394.1	XP_021330961.1	44.118	170	95	0	197	366	3	172
## 3670	NP_001348394.1	XP_021330961.1	48.438	128	66	0	224	351	2	129
## 3671	NP_001348394.1	XP_021330961.1	40.361	166	99	0	148	313	38	203
## 3672	NP_001348394.1	XP_021331029.1	41.121	214	126	0	153	366	119	332
## 3673	NP_001348394.1	XP_021331029.1	42.487	193	111	0	174	366	168	360
## 3674	NP_001348394.1	XP_021331029.1	40.789	228	134	1	140	367	51	277
## 3675	NP_001348394.1	XP_021331029.1	37.860	243	151	0	99	341	121	363
## 3676	NP_001348394.1	XP_021331029.1	41.451	193	109	2	176	366	114	304
## 3677	NP_001348394.1	XP_017211168.1	41.395	215	125	1	153	366	99	313
## 3678	NP_001348394.1	XP_017211168.1	44.792	192	105	1	176	366	66	257
## 3679	NP_001348394.1	XP_017211168.1	39.286	196	118	1	148	342	122	317
## 3680	NP_001348394.1	XP_017211168.1	43.293	164	93	0	153	316	156	319
## 3681	NP_001348394.1	XP_021323881.1	44.393	214	119	0	153	366	561	774
## 3682	NP_001348394.1	XP_021323881.1	42.593	216	124	0	151	366	643	858
## 3683	NP_001348394.1	XP_021323881.1	42.991	214	122	0	153	366	126	339
## 3684	NP_001348394.1	XP_021323881.1	45.596	193	105	0	174	366	610	802
## 3685	NP_001348394.1	XP_021323881.1	42.991	214	122	0	153	366	729	942
## 3686	NP_001348394.1	XP_021323881.1	41.589	214	125	0	153	366	238	451
## 3687	NP_001348394.1	XP_021323881.1	41.121	214	126	0	153	366	617	830
## 3688	NP_001348394.1	XP_021323881.1	45.078	193	106	0	174	366	119	311
## 3689	NP_001348394.1	XP_021323881.1	36.940	268	169	0	99	366	703	970
## 3690	NP_001348394.1	XP_021323881.1	36.965	257	162	0	110	366	223	479
## 3691	NP_001348394.1	XP_021323881.1	42.056	214	124	0	153	366	70	283
## 3692	NP_001348394.1	XP_021323881.1	44.560	193	107	0	174	366	554	746
## 3693	NP_001348394.1	XP_021323881.1	38.075	239	146	1	130	366	129	367
## 3694	NP_001348394.1	XP_021323881.1	41.546	207	119	1	160	366	514	718
## 3695	NP_001348394.1	XP_021323881.1	38.605	215	132	0	153	367	182	396
## 3696	NP_001348394.1	XP_021323881.1	40.465	215	128	0	153	367	673	887
## 3697	NP_001348394.1	XP_021323881.1	42.424	198	114	0	169	366	30	227
## 3698	NP_001348394.1	XP_021323881.1	41.121	214	126	0	153	366	785	998
## 3699	NP_001348394.1	XP_021323881.1	39.367	221	134	0	146	366	35	255
## 3700	NP_001348394.1	XP_021323881.1	40.654	214	127	0	153	366	701	914
## 3701	NP_001348394.1	XP_021323881.1	42.105	190	110	0	153	342	813	1002
## 3702	NP_001348394.1	XP_021323881.1	38.318	214	132	0	153	366	210	423
## 3703	NP_001348394.1	XP_021323881.1	40.000	190	114	0	153	342	294	483
## 3704	NP_001348394.1	XP_021323881.1	31.008	258	135	1	153	367	322	579
## 3705	NP_001348394.1	XP_021323881.1	32.353	170	107	1	118	287	842	1003
## 3706	NP_001348394.1	XP_017211131.1	40.000	245	143	1	126	366	56	300
## 3707	NP_001348394.1	XP_017211131.1	39.815	216	130	0	153	368	171	386
## 3708	NP_001348394.1	XP_017211131.1	41.121	214	126	0	153	366	115	328
## 3709	NP_001348394.1	XP_017211131.1	37.220	223	140	0	148	370	138	360
## 3710	NP_001348394.1	XP_017211131.1	44.970	169	93	0	203	371	81	249
## 3711	NP_001348394.1	XP_017211131.1	32.870	216	145	0	99	314	173	388
## 3712	NP_001348394.1	XP_017211131.1	33.333	51	34	0	153	203	339	389
## 3713	NP_001348394.1	XP_009299025.2	39.207	227	138	0	140	366	69	295
## 3714	NP_001348394.1	XP_009299025.2	36.404	228	145	0	140	367	97	324

## 3715	NP_001348394.1	XP_009299025.2	38.140	215	132	1	153	367	138	351
## 3716	NP_001348394.1	XP_009299025.2	44.203	138	77	0	232	369	77	214
## 3717	NP_001348394.1	XP_009299025.2	37.037	162	101	1	153	314	194	354
## 3718	NP_001348394.1	XP_017208867.1	42.056	214	124	0	153	366	123	336
## 3719	NP_001348394.1	XP_017208867.1	40.654	214	127	0	153	366	67	280
## 3720	NP_001348394.1	XP_017208867.1	42.632	190	109	0	153	342	151	340
## 3721	NP_001348394.1	XP_017208867.1	36.321	212	126	1	164	366	41	252
## 3722	NP_001348394.1	XP_017208867.1	34.862	109	71	0	153	261	235	343
## 3723	NP_001348394.1	XP_021326763.1	39.535	215	130	0	153	367	104	318
## 3724	NP_001348394.1	XP_021326763.1	40.179	224	134	0	143	366	66	289
## 3725	NP_001348394.1	XP_021326763.1	36.744	215	135	1	153	367	132	345
## 3726	NP_001348394.1	XP_021326763.1	40.588	170	101	0	197	366	64	233
## 3727	NP_001348394.1	XP_021326763.1	33.929	168	84	1	174	314	181	348
## 3728	NP_001348394.1	XP_021326763.1	39.286	84	47	1	288	371	47	126
## 3729	NP_001348394.1	XP_017211093.2	36.694	248	153	1	123	366	52	299
## 3730	NP_001348394.1	XP_017211093.2	38.318	214	132	0	153	366	142	355
## 3731	NP_001348394.1	XP_017211093.2	37.755	196	122	0	175	370	192	387
## 3732	NP_001348394.1	XP_017211093.2	44.910	167	92	0	203	369	80	246
## 3733	NP_001348394.1	XP_017211093.2	37.037	162	102	0	153	314	226	387
## 3734	NP_001348394.1	XP_005174450.1	42.202	218	125	1	153	369	80	297
## 3735	NP_001348394.1	XP_005174450.1	43.979	191	107	0	176	366	75	265
## 3736	NP_001348394.1	XP_005174450.1	45.833	168	91	0	199	366	70	237
## 3737	NP_001348394.1	XP_005174450.1	33.566	143	95	0	110	252	149	291
## 3738	NP_001348394.1	XP_017207864.1	41.629	221	129	0	146	366	61	281
## 3739	NP_001348394.1	XP_017207864.1	42.991	214	122	0	153	366	236	449
## 3740	NP_001348394.1	XP_017207864.1	31.953	338	218	3	34	366	35	365
## 3741	NP_001348394.1	XP_017207864.1	40.969	227	130	2	142	366	1	225
## 3742	NP_001348394.1	XP_017207864.1	40.930	215	127	0	153	367	180	394
## 3743	NP_001348394.1	XP_017207864.1	35.448	268	170	1	99	366	210	474
## 3744	NP_001348394.1	XP_017207864.1	38.785	214	131	0	153	366	208	421
## 3745	NP_001348394.1	XP_017207864.1	40.881	159	91	1	153	311	320	475
## 3746	NP_001348394.1	XP_021332374.1	42.130	216	125	0	153	368	450	665
## 3747	NP_001348394.1	XP_021332374.1	42.056	214	124	0	153	366	114	327
## 3748	NP_001348394.1	XP_021332374.1	42.991	214	122	0	153	366	366	579
## 3749	NP_001348394.1	XP_021332374.1	40.187	214	128	0	153	366	646	859
## 3750	NP_001348394.1	XP_021332374.1	40.187	214	128	0	153	366	282	495
## 3751	NP_001348394.1	XP_021332374.1	42.056	214	124	0	153	366	394	607
## 3752	NP_001348394.1	XP_021332374.1	40.187	214	128	0	153	366	58	271
## 3753	NP_001348394.1	XP_021332374.1	40.654	214	127	0	153	366	506	719
## 3754	NP_001348394.1	XP_021332374.1	40.654	214	127	0	153	366	226	439
## 3755	NP_001348394.1	XP_021332374.1	40.187	214	128	0	153	366	338	551
## 3756	NP_001348394.1	XP_021332374.1	40.654	214	127	0	153	366	590	803
## 3757	NP_001348394.1	XP_021332374.1	40.187	214	128	0	153	366	30	243
## 3758	NP_001348394.1	XP_021332374.1	37.143	245	148	2	123	366	508	747
## 3759	NP_001348394.1	XP_021332374.1	35.271	258	167	0	96	353	505	762
## 3760	NP_001348394.1	XP_021332374.1	39.252	214	130	0	153	366	198	411
## 3761	NP_001348394.1	XP_021332374.1	41.885	191	111	0	176	366	25	215
## 3762	NP_001348394.1	XP_021332374.1	34.657	277	170	4	97	368	675	945
## 3763	NP_001348394.1	XP_021332374.1	39.286	112	68	0	242	353	7	118
## 3764	NP_001348394.1	XP_021331499.1	45.078	193	106	0	176	368	68	260
## 3765	NP_001348394.1	XP_021331499.1	35.565	239	149	1	126	364	51	284
## 3766	NP_001348394.1	XP_021331499.1	31.081	74	51	0	152	225	212	285
## 3767	NP_001348394.1	XP_021330710.1	41.410	227	132	1	140	366	59	284
## 3768	NP_001348394.1	XP_021330710.1	40.930	215	127	0	153	367	127	341

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## 3769 NP_001348394.1 XP_021330710.1 41.451 193 113 0 174 366 120 312
## 3770 NP_001348394.1 XP_021330710.1 41.104 163 96 0 153 315 183 345
## 3771 NP_001348394.1 NP_001104625.1 41.410 227 132 1 140 366 59 284
## 3772 NP_001348394.1 NP_001104625.1 40.930 215 127 0 153 367 127 341
## 3773 NP_001348394.1 NP_001104625.1 41.451 193 113 0 174 366 120 312
## 3774 NP_001348394.1 NP_001104625.1 40.491 163 97 0 153 315 183 345
## 3775 NP_001348394.1 XP_017211088.1 40.408 245 142 2 126 366 56 300
## 3776 NP_001348394.1 XP_017211088.1 38.889 216 132 0 153 368 143 358
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## 3779 NP_001348394.1 XP_017211088.1 32.407 216 146 0 99 314 173 388
## 3780 NP_001348394.1 XP_017208864.1 35.000 280 166 2 99 370 67 338
## 3781 NP_001348394.1 XP_017208864.1 39.252 214 130 0 153 366 65 278
## 3782 NP_001348394.1 XP_017208864.1 35.023 217 141 0 152 368 148 364
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## 3784 NP_001348394.1 XP_017208864.1 36.979 192 121 0 153 344 177 368
## 3785 NP_001348394.1 XP_017211286.1 40.969 227 133 1 140 366 59 284
## 3786 NP_001348394.1 XP_017211286.1 42.786 201 115 0 153 353 127 327
## 3787 NP_001348394.1 XP_017211286.1 42.945 163 93 0 153 315 183 345
## 3788 NP_001348394.1 XP_017211286.1 38.372 86 49 2 148 231 262 345
## 3789 NP_001348394.1 XP_017210515.1 41.410 227 132 1 140 366 59 284
## 3790 NP_001348394.1 XP_017210515.1 40.930 215 127 0 153 367 127 341
## 3791 NP_001348394.1 XP_017210515.1 41.451 193 113 0 174 366 120 312
## 3792 NP_001348394.1 XP_017210515.1 41.104 163 96 0 153 315 183 345
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## 3796 NP_001348394.1 XP_021330572.1 38.605 215 131 1 153 367 136 349
## 3797 NP_001348394.1 XP_021330572.1 33.333 189 99 1 153 314 164 352
## 3798 NP_001348394.1 XP_005161613.2 42.487 193 111 0 174 366 65 257
## 3799 NP_001348394.1 XP_005161613.2 39.487 195 118 0 148 342 95 289
## 3800 NP_001348394.1 XP_005161613.2 38.068 176 109 0 191 366 54 229
## 3801 NP_001348394.1 XP_005161613.2 32.836 67 45 0 301 367 52 118
## 3802 NP_001348394.1 XP_005161613.2 33.333 51 34 0 153 203 240 290
## 3803 NP_001348394.1 XP_017210344.1 42.523 214 123 0 153 366 79 292
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## 3805 NP_001348394.1 XP_017210344.1 39.815 216 130 0 153 368 23 238
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## 3810 NP_001348394.1 XP_017210344.1 44.767 172 95 0 195 366 9 180
## 3811 NP_001348394.1 XP_017210344.1 37.850 214 133 0 153 366 107 320
## 3812 NP_001348394.1 XP_017210344.1 30.263 76 53 0 153 228 359 434
## 3813 NP_001348394.1 XP_021330442.1 37.657 239 143 1 128 366 4 236
## 3814 NP_001348394.1 XP_021330442.1 40.826 218 129 0 153 370 51 268
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## 3817 NP_001348394.1 XP_001336870.2 42.056 214 124 0 153 366 110 323
## 3818 NP_001348394.1 XP_001336870.2 40.654 214 127 0 153 366 82 295
## 3819 NP_001348394.1 XP_001336870.2 40.654 214 127 0 153 366 26 239
## 3820 NP_001348394.1 XP_001336870.2 38.889 216 132 0 153 368 138 353
## 3821 NP_001348394.1 XP_001336870.2 40.187 214 128 0 153 366 166 379
## 3822 NP_001348394.1 XP_001336870.2 45.665 173 94 0 194 366 11 183

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## 3823 NP_001348394.1 XP_001336870.2 37.674 215 134 0 153 367 222 436
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## 3826 NP_001348394.1 XP_021331497.1 41.589 214 125 0 153 366 161 374
## 3827 NP_001348394.1 XP_021331497.1 43.925 214 119 1 153 366 189 401
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## 3831 NP_001348394.1 XP_021331497.1 40.588 170 100 1 148 317 240 408
## 3832 NP_001348394.1 XP_021331333.1 42.991 214 122 0 153 366 580 793
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## 3843 NP_001348394.1 XP_021331333.1 41.589 214 125 0 153 366 552 765
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## 3852 NP_001348394.1 XP_021331333.1 41.589 214 125 0 153 366 664 877
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## 3867 NP_001348394.1 NP_001108377.1 33.884 242 132 1 153 366 147 388
## 3868 NP_001348394.1 NP_001108377.1 35.047 214 139 0 153 366 203 416
## 3869 NP_001348394.1 NP_001108377.1 35.256 156 97 1 123 278 289 440
## 3870 NP_001348394.1 NP_001108377.1 36.634 101 64 0 152 252 342 442
## 3871 NP_001348394.1 XP_005174571.3 40.171 234 139 1 134 366 60 293
## 3872 NP_001348394.1 XP_005174571.3 39.070 215 131 0 153 367 108 322
## 3873 NP_001348394.1 XP_005174571.3 36.744 215 135 1 153 367 136 349
## 3874 NP_001348394.1 XP_005174571.3 36.916 214 129 2 159 366 24 237
## 3875 NP_001348394.1 XP_005174571.3 33.929 168 84 1 174 314 185 352
## 3876 NP_001348394.1 XP_005174571.3 41.667 84 49 0 288 371 47 130

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## 3877 NP_001348394.1 XP_003200032.2 40.654 214 127 0 153 366 81 294
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## 3879 NP_001348394.1 XP_003200032.2 36.087 230 140 2 141 366 12 238
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## 3888 NP_001348394.1 XP_017211163.1 40.183 219 131 0 148 366 51 269
## 3889 NP_001348394.1 XP_017211163.1 42.056 214 124 0 140 353 71 284
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## 3891 NP_001348394.1 XP_017211163.1 37.037 162 102 0 153 314 196 357
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## 3893 NP_001348394.1 XP_005159403.1 42.929 198 112 1 170 366 255 452
## 3894 NP_001348394.1 XP_005159403.1 35.659 258 164 1 111 368 227 482
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## 3896 NP_001348394.1 XP_005159403.1 37.037 108 68 0 152 259 378 485
## 3897 NP_001348394.1 NP_001107958.1 37.354 257 153 1 110 366 47 295
## 3898 NP_001348394.1 NP_001107958.1 37.037 216 136 0 153 368 110 325
## 3899 NP_001348394.1 NP_001107958.1 38.140 215 133 0 153 367 138 352
## 3900 NP_001348394.1 NP_001107958.1 37.037 162 102 0 153 314 194 355
## 3901 NP_001348394.1 NP_001373790.1 42.523 214 123 0 153 366 95 308
## 3902 NP_001348394.1 NP_001373790.1 37.850 214 133 0 153 366 67 280
## 3903 NP_001348394.1 NP_001373790.1 38.579 197 121 0 152 348 122 318
## 3904 NP_001348394.1 NP_001373790.1 38.690 168 103 0 199 366 57 224
## 3905 NP_001348394.1 NP_001373790.1 39.216 153 91 1 216 368 48 198
## 3906 NP_001348394.1 XP_021331357.1 41.395 215 126 0 153 367 106 320
## 3907 NP_001348394.1 XP_021331357.1 38.017 242 148 1 127 366 50 291
## 3908 NP_001348394.1 XP_021331357.1 38.140 215 132 1 153 367 134 347
## 3909 NP_001348394.1 XP_021331357.1 33.862 189 98 1 153 314 162 350
## 3910 NP_001348394.1 XP_021331357.1 44.048 84 47 0 288 371 73 156
## 3911 NP_001348394.1 NP_999959.1 42.929 198 112 1 170 366 255 452
## 3912 NP_001348394.1 NP_999959.1 35.659 258 164 1 111 368 227 482
## 3913 NP_001348394.1 NP_999959.1 40.491 163 97 0 153 315 323 485
## 3914 NP_001348394.1 NP_999959.1 37.037 108 68 0 152 259 378 485
## 3915 NP_001348394.1 XP_021331432.1 38.462 247 149 1 123 366 11 257
## 3916 NP_001348394.1 XP_021331432.1 39.247 186 113 0 153 338 100 285
## 3917 NP_001348394.1 XP_021331432.1 39.157 166 101 0 148 313 123 288
## 3918 NP_001348394.1 XP_021331056.1 39.269 219 133 0 153 371 39 257
## 3919 NP_001348394.1 XP_021331056.1 40.933 193 114 0 174 366 32 224
## 3920 NP_001348394.1 XP_021331056.1 45.087 173 95 0 194 366 24 196
## 3921 NP_001348394.1 XP_021331056.1 37.226 137 86 0 153 289 123 259
## 3922 NP_001348394.1 XP_021331056.1 44.211 95 53 0 272 366 18 112
## 3923 NP_001348394.1 XP_005161564.2 37.354 257 153 1 110 366 47 295
## 3924 NP_001348394.1 XP_005161564.2 37.500 216 135 0 153 368 110 325
## 3925 NP_001348394.1 XP_005161564.2 38.172 186 115 0 153 338 166 351
## 3926 NP_001348394.1 XP_005161564.2 35.802 162 104 0 153 314 194 355
## 3927 NP_001348394.1 XP_021331235.1 40.654 214 127 0 140 353 69 282
## 3928 NP_001348394.1 XP_021331235.1 36.404 228 145 0 140 367 97 324
## 3929 NP_001348394.1 XP_021331235.1 38.140 215 132 1 153 367 138 351
## 3930 NP_001348394.1 XP_021331235.1 44.203 138 77 0 232 369 77 214

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## 3931 NP_001348394.1 XP_021331235.1 37.037 162 101 1 153 314 194 354
## 3932 NP_001348394.1 XP_017211118.1 40.654 214 127 0 140 353 69 282
## 3933 NP_001348394.1 XP_017211118.1 36.404 228 145 0 140 367 97 324
## 3934 NP_001348394.1 XP_017211118.1 38.140 215 132 1 153 367 138 351
## 3935 NP_001348394.1 XP_017211118.1 44.203 138 77 0 232 369 77 214
## 3936 NP_001348394.1 XP_017211118.1 37.037 162 101 1 153 314 194 354
## 3937 NP_001348394.1 NP_001116099.1 44.503 191 106 0 176 366 65 255
## 3938 NP_001348394.1 NP_001116099.1 40.654 214 127 0 153 366 70 283
## 3939 NP_001348394.1 NP_001116099.1 39.252 214 130 0 153 366 98 311
## 3940 NP_001348394.1 NP_001116099.1 42.268 194 112 0 153 346 126 319
## 3941 NP_001348394.1 XP_009299238.1 38.710 248 148 1 123 366 48 295
## 3942 NP_001348394.1 XP_009299238.1 37.963 216 134 0 153 368 110 325
## 3943 NP_001348394.1 XP_009299238.1 38.605 215 132 0 153 367 138 352
## 3944 NP_001348394.1 XP_009299238.1 36.420 162 103 0 153 314 194 355
## 3945 NP_001348394.1 XP_009294085.1 36.201 279 164 2 99 366 7 282
## 3946 NP_001348394.1 XP_009294085.1 39.252 214 130 0 153 366 125 338
## 3947 NP_001348394.1 XP_009294085.1 40.933 193 114 0 174 366 174 366
## 3948 NP_001348394.1 XP_009294085.1 41.718 163 95 0 153 315 209 371
## 3949 NP_001348394.1 XP_009294085.1 38.503 187 115 0 153 339 181 367
## 3950 NP_001348394.1 XP_009289662.1 39.269 219 133 0 148 366 105 323
## 3951 NP_001348394.1 XP_009289662.1 39.252 214 130 0 153 366 54 267
## 3952 NP_001348394.1 XP_009289662.1 40.625 192 114 0 175 366 48 239
## 3953 NP_001348394.1 XP_009289662.1 38.415 164 101 0 148 311 161 324
## 3954 NP_001348394.1 XP_009289662.1 30.159 189 124 2 99 283 140 324
## 3955 NP_001348394.1 XP_009289662.1 35.526 76 49 0 153 228 250 325
## 3956 NP_001348394.1 XP_009299001.2 41.395 215 126 0 153 367 66 280
## 3957 NP_001348394.1 XP_009299001.2 37.190 242 150 1 127 366 10 251
## 3958 NP_001348394.1 XP_009299001.2 37.674 215 133 1 153 367 94 307
## 3959 NP_001348394.1 XP_009299001.2 33.862 189 98 1 153 314 122 310
## 3960 NP_001348394.1 XP_009299001.2 45.238 84 46 0 288 371 33 116
## 3961 NP_001348394.1 XP_009299001.2 35.294 51 32 1 153 203 262 311
## 3962 NP_001348394.1 XP_017210850.1 41.885 191 111 0 174 364 39 229
## 3963 NP_001348394.1 XP_017210850.1 42.487 193 111 0 174 366 11 203
## 3964 NP_001348394.1 XP_017210850.1 43.931 173 97 0 194 366 3 175
## 3965 NP_001348394.1 XP_017210850.1 42.935 184 105 0 153 336 46 229
## 3966 NP_001348394.1 XP_017210850.1 43.836 146 82 0 221 366 2 147
## 3967 NP_001348394.1 XP_017210930.1 37.705 244 144 1 110 353 47 282
## 3968 NP_001348394.1 XP_017210930.1 36.771 223 141 0 144 366 101 323
## 3969 NP_001348394.1 XP_017210930.1 38.140 215 132 1 153 367 138 351
## 3970 NP_001348394.1 XP_017210930.1 42.754 138 79 0 232 369 77 214
## 3971 NP_001348394.1 XP_017210930.1 37.654 162 100 1 153 314 194 354
## 3972 NP_001348394.1 XP_021324960.1 42.130 216 125 0 153 368 91 306
## 3973 NP_001348394.1 XP_021324960.1 40.187 214 128 0 153 366 343 556
## 3974 NP_001348394.1 XP_021324960.1 40.465 215 128 0 153 367 119 333
## 3975 NP_001348394.1 XP_021324960.1 41.709 199 115 1 168 366 51 248
## 3976 NP_001348394.1 XP_021324960.1 37.551 245 149 1 123 367 289 529
## 3977 NP_001348394.1 XP_021324960.1 38.318 214 132 0 153 366 63 276
## 3978 NP_001348394.1 XP_021324960.1 39.524 210 127 0 153 362 455 664
## 3979 NP_001348394.1 XP_021324960.1 42.786 201 115 0 153 353 287 487
## 3980 NP_001348394.1 XP_021324960.1 38.532 218 134 0 153 370 399 616
## 3981 NP_001348394.1 XP_021324960.1 37.788 217 135 0 153 369 231 447
## 3982 NP_001348394.1 XP_021324960.1 35.981 214 137 0 153 366 427 640
## 3983 NP_001348394.1 XP_021324960.1 35.648 216 139 0 153 368 203 418
## 3984 NP_001348394.1 XP_021324960.1 33.645 214 142 0 153 366 259 472

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## 3985	NP_001348394.1	NP_001352876.1	42.991	214	122	0	153	366	88	301
## 3986	NP_001348394.1	NP_001352876.1	40.654	214	127	0	153	366	116	329
## 3987	NP_001348394.1	NP_001352876.1	40.278	216	129	0	153	368	144	359
## 3988	NP_001348394.1	NP_001352876.1	39.252	214	130	0	153	366	60	273
## 3989	NP_001348394.1	NP_001352876.1	40.314	191	114	0	176	366	55	245
## 3990	NP_001348394.1	NP_001352876.1	34.737	190	124	0	153	342	200	389
## 3991	NP_001348394.1	NP_001352876.1	42.029	138	80	0	229	366	52	189
## 3992	NP_001348394.1	NP_001352876.1	36.747	166	103	2	153	317	228	392
## 3993	NP_001348394.1	NP_001352876.1	36.782	87	55	0	280	366	47	133
## 3994	NP_001348394.1	XP_005170442.1	41.121	214	126	0	153	366	144	357
## 3995	NP_001348394.1	XP_005170442.1	40.000	215	129	0	152	366	87	301
## 3996	NP_001348394.1	XP_005170442.1	40.278	216	129	0	153	368	172	387
## 3997	NP_001348394.1	XP_005170442.1	41.837	196	114	0	172	367	79	274
## 3998	NP_001348394.1	XP_005170442.1	38.750	160	98	0	152	311	227	386
## 3999	NP_001348394.1	XP_021331388.1	37.975	237	143	1	121	353	46	282
## 4000	NP_001348394.1	XP_021331388.1	36.564	227	144	0	140	366	97	323
## 4001	NP_001348394.1	XP_021331388.1	38.605	215	131	1	153	367	138	351
## 4002	NP_001348394.1	XP_021331388.1	43.537	147	80	1	226	369	68	214
## 4003	NP_001348394.1	XP_021331388.1	37.654	162	100	1	153	314	194	354
## 4004	NP_001348394.1	XP_017211249.1	37.975	237	143	1	121	353	46	282
## 4005	NP_001348394.1	XP_017211249.1	36.564	227	144	0	140	366	97	323
## 4006	NP_001348394.1	XP_017211249.1	38.605	215	131	1	153	367	138	351
## 4007	NP_001348394.1	XP_017211249.1	43.537	147	80	1	226	369	68	214
## 4008	NP_001348394.1	XP_017211249.1	37.654	162	100	1	153	314	194	354
## 4009	NP_001348394.1	XP_017210837.1	40.081	247	145	3	123	366	50	296
## 4010	NP_001348394.1	XP_017210837.1	41.121	214	126	0	153	366	167	380
## 4011	NP_001348394.1	XP_017210837.1	39.720	214	129	0	153	366	139	352
## 4012	NP_001348394.1	XP_017210837.1	39.583	192	116	0	175	366	133	324
## 4013	NP_001348394.1	XP_017210837.1	34.672	274	171	3	99	368	141	410
## 4014	NP_001348394.1	XP_017210837.1	38.860	193	118	0	175	367	245	437
## 4015	NP_001348394.1	XP_017210837.1	34.568	162	106	0	153	314	279	440
## 4016	NP_001348394.1	XP_017211226.1	39.738	229	137	1	140	368	59	286
## 4017	NP_001348394.1	XP_017211226.1	43.284	201	114	0	153	353	99	299
## 4018	NP_001348394.1	XP_017211226.1	41.361	191	112	0	153	343	127	317
## 4019	NP_001348394.1	XP_021331488.1	42.487	193	111	0	176	368	96	288
## 4020	NP_001348394.1	XP_021331488.1	39.720	214	129	0	153	366	101	314
## 4021	NP_001348394.1	XP_021331488.1	45.455	165	90	0	175	339	151	315
## 4022	NP_001348394.1	XP_021331488.1	43.293	164	93	0	203	366	95	258
## 4023	NP_001348394.1	XP_021331488.1	37.267	161	101	0	153	313	157	317
## 4024	NP_001348394.1	XP_021331488.1	34.862	109	71	0	148	256	208	316
## 4025	NP_001348394.1	NP_001373224.1	40.175	229	137	0	143	371	54	282
## 4026	NP_001348394.1	NP_001373224.1	37.500	208	130	0	159	366	42	249
## 4027	NP_001348394.1	NP_001373224.1	39.151	212	129	0	153	364	120	331
## 4028	NP_001348394.1	NP_001373224.1	34.653	101	66	0	152	252	231	331
## 4029	NP_001348394.1	XP_001338708.3	42.487	193	111	0	176	368	74	266
## 4030	NP_001348394.1	XP_001338708.3	39.720	214	129	0	153	366	79	292
## 4031	NP_001348394.1	XP_001338708.3	45.455	165	90	0	175	339	129	293
## 4032	NP_001348394.1	XP_001338708.3	43.293	164	93	0	203	366	73	236
## 4033	NP_001348394.1	XP_001338708.3	37.267	161	101	0	153	313	135	295
## 4034	NP_001348394.1	XP_001338708.3	34.862	109	71	0	148	256	186	294
## 4035	NP_001348394.1	XP_021325064.1	41.589	214	125	0	153	366	263	476
## 4036	NP_001348394.1	XP_021325064.1	41.121	214	126	0	153	366	235	448
## 4037	NP_001348394.1	XP_021325064.1	40.187	214	128	0	153	366	319	532
## 4038	NP_001348394.1	XP_021325064.1	41.589	214	125	0	153	366	67	280

## 4039	NP_001348394.1	XP_021325064.1	38.785	214	131	0	153	366	151	364
## 4040	NP_001348394.1	XP_021325064.1	39.535	215	130	0	153	367	123	337
## 4041	NP_001348394.1	XP_021325064.1	32.313	294	184	3	77	366	138	420
## 4042	NP_001348394.1	XP_021325064.1	37.500	168	105	0	199	366	57	224
## 4043	NP_001348394.1	XP_021325064.1	38.365	159	98	0	153	311	375	533
## 4044	NP_001348394.1	XP_021325064.1	33.654	104	69	0	153	256	431	534
## 4045	NP_001348394.1	XP_021327905.1	36.948	249	149	1	118	366	86	326
## 4046	NP_001348394.1	XP_021327905.1	42.408	191	110	0	176	366	52	242
## 4047	NP_001348394.1	XP_021327905.1	40.187	214	128	0	153	366	57	270
## 4048	NP_001348394.1	XP_021327905.1	38.660	194	119	0	153	346	169	362
## 4049	NP_001348394.1	XP_021327905.1	38.636	176	108	0	144	319	188	363
## 4050	NP_001348394.1	XP_021327905.1	38.202	89	55	0	280	368	44	132
## 4051	NP_001348394.1	XP_021327905.1	35.714	84	54	0	153	236	281	364
## 4052	NP_001348394.1	XP_017210371.1	36.948	249	149	1	118	366	86	326
## 4053	NP_001348394.1	XP_017210371.1	42.408	191	110	0	176	366	52	242
## 4054	NP_001348394.1	XP_017210371.1	40.187	214	128	0	153	366	57	270
## 4055	NP_001348394.1	XP_017210371.1	38.660	194	119	0	153	346	169	362
## 4056	NP_001348394.1	XP_017210371.1	38.636	176	108	0	144	319	188	363
## 4057	NP_001348394.1	XP_017210371.1	38.202	89	55	0	280	368	44	132
## 4058	NP_001348394.1	XP_017210371.1	35.714	84	54	0	153	236	281	364
## 4059	NP_001348394.1	XP_017208612.1	36.232	276	160	2	99	366	107	374
## 4060	NP_001348394.1	XP_017208612.1	40.654	214	127	0	153	366	49	262
## 4061	NP_001348394.1	XP_017208612.1	39.720	214	129	0	153	366	105	318
## 4062	NP_001348394.1	XP_017208612.1	39.252	214	130	0	153	366	77	290
## 4063	NP_001348394.1	XP_017208611.1	36.232	276	160	2	99	366	107	374
## 4064	NP_001348394.1	XP_017208611.1	40.654	214	127	0	153	366	49	262
## 4065	NP_001348394.1	XP_017208611.1	39.720	214	129	0	153	366	105	318
## 4066	NP_001348394.1	XP_017208611.1	39.252	214	130	0	153	366	77	290
## 4067	NP_001348394.1	XP_017208849.1	41.589	214	125	0	153	366	263	476
## 4068	NP_001348394.1	XP_017208849.1	41.121	214	126	0	153	366	235	448
## 4069	NP_001348394.1	XP_017208849.1	40.187	214	128	0	153	366	319	532
## 4070	NP_001348394.1	XP_017208849.1	41.589	214	125	0	153	366	67	280
## 4071	NP_001348394.1	XP_017208849.1	38.785	214	131	0	153	366	151	364
## 4072	NP_001348394.1	XP_017208849.1	39.535	215	130	0	153	367	123	337
## 4073	NP_001348394.1	XP_017208849.1	32.313	294	184	3	77	366	138	420
## 4074	NP_001348394.1	XP_017208849.1	38.788	165	101	0	153	317	375	539
## 4075	NP_001348394.1	XP_017208849.1	37.500	168	105	0	199	366	57	224
## 4076	NP_001348394.1	XP_021331152.1	40.984	244	140	2	127	366	57	300
## 4077	NP_001348394.1	XP_021331152.1	44.041	193	108	0	176	368	82	274
## 4078	NP_001348394.1	XP_021331152.1	38.605	215	132	0	153	367	143	357
## 4079	NP_001348394.1	XP_021331152.1	35.043	234	144	2	109	338	127	356
## 4080	NP_001348394.1	XP_021331152.1	32.407	216	146	0	99	314	145	360
## 4081	NP_001348394.1	XP_021331358.1	39.535	215	130	0	153	367	104	318
## 4082	NP_001348394.1	XP_021331358.1	40.179	224	134	0	143	366	66	289
## 4083	NP_001348394.1	XP_021331358.1	36.404	228	144	1	140	367	119	345
## 4084	NP_001348394.1	XP_021331358.1	41.176	170	100	0	197	366	64	233
## 4085	NP_001348394.1	XP_021331358.1	37.037	162	101	1	153	314	188	348
## 4086	NP_001348394.1	XP_021331358.1	39.286	84	47	1	288	371	47	126
## 4087	NP_001348394.1	XP_021331358.1	33.333	51	33	1	153	203	300	349
## 4088	NP_001348394.1	XP_021328583.1	43.925	214	120	0	153	366	431	644
## 4089	NP_001348394.1	XP_021328583.1	40.625	224	133	0	145	368	1095	1318
## 4090	NP_001348394.1	XP_021328583.1	41.589	214	125	0	153	366	935	1148
## 4091	NP_001348394.1	XP_021328583.1	42.523	214	123	0	153	366	543	756
## 4092	NP_001348394.1	XP_021328583.1	40.654	214	127	0	153	366	375	588

## 4093	NP_001348394.1	XP_021328583.1	41.121	214	126	0	153	366	151	364
## 4094	NP_001348394.1	XP_021328583.1	41.451	193	113	0	174	366	536	728
## 4095	NP_001348394.1	XP_021328583.1	40.271	221	122	2	153	371	1299	1511
## 4096	NP_001348394.1	XP_021328583.1	43.455	191	108	0	176	366	62	252
## 4097	NP_001348394.1	XP_021328583.1	39.252	214	130	0	153	366	823	1036
## 4098	NP_001348394.1	XP_021328583.1	38.785	214	131	0	153	366	347	560
## 4099	NP_001348394.1	XP_021328583.1	41.451	193	113	0	174	366	816	1008
## 4100	NP_001348394.1	XP_021328583.1	38.785	214	131	0	153	366	851	1064
## 4101	NP_001348394.1	XP_021328583.1	35.656	244	129	2	153	368	879	1122
## 4102	NP_001348394.1	XP_021328583.1	38.426	216	133	0	153	368	1243	1458
## 4103	NP_001348394.1	XP_021328583.1	40.476	210	125	0	144	353	170	379
## 4104	NP_001348394.1	XP_021328583.1	40.187	214	128	0	153	366	291	504
## 4105	NP_001348394.1	XP_021328583.1	42.487	193	111	0	174	366	704	896
## 4106	NP_001348394.1	XP_021328583.1	40.513	195	109	1	174	361	760	954
## 4107	NP_001348394.1	XP_021328583.1	41.969	193	112	0	174	366	732	924
## 4108	NP_001348394.1	XP_021328583.1	36.522	230	146	0	137	366	1199	1428
## 4109	NP_001348394.1	XP_021328583.1	43.299	194	108	2	174	366	676	868
## 4110	NP_001348394.1	XP_021328583.1	39.216	204	124	0	163	366	1029	1232
## 4111	NP_001348394.1	XP_021328583.1	39.070	215	131	0	153	367	627	841
## 4112	NP_001348394.1	XP_021328583.1	40.415	193	115	0	174	366	284	476
## 4113	NP_001348394.1	XP_021328583.1	37.281	228	142	1	140	366	1173	1400
## 4114	NP_001348394.1	XP_021328583.1	42.222	180	104	0	174	353	256	435
## 4115	NP_001348394.1	XP_021328583.1	39.216	204	124	0	163	366	1169	1372
## 4116	NP_001348394.1	XP_021328583.1	37.824	193	120	0	174	366	788	980
## 4117	NP_001348394.1	XP_021328583.1	38.318	214	132	0	153	366	1047	1260
## 4118	NP_001348394.1	XP_021328583.1	38.140	215	133	0	153	367	207	421
## 4119	NP_001348394.1	XP_021330458.1	41.121	214	126	0	153	366	89	302
## 4120	NP_001348394.1	XP_021330458.1	41.410	227	132	1	140	366	49	274
## 4121	NP_001348394.1	XP_021330458.1	41.121	214	126	0	153	366	117	330
## 4122	NP_001348394.1	XP_021330458.1	37.313	268	168	0	99	366	91	358
## 4123	NP_001348394.1	XP_021330458.1	42.130	216	125	0	153	368	201	416
## 4124	NP_001348394.1	XP_021330458.1	40.654	214	127	0	153	366	173	386
## 4125	NP_001348394.1	XP_021327156.1	37.226	274	162	2	98	366	118	386
## 4126	NP_001348394.1	XP_021327156.1	41.121	214	126	0	153	366	201	414
## 4127	NP_001348394.1	XP_021327156.1	44.615	195	108	0	172	366	52	246
## 4128	NP_001348394.1	XP_021327156.1	46.667	180	96	0	174	353	250	429
## 4129	NP_001348394.1	XP_021327156.1	40.654	214	127	0	153	366	257	470
## 4130	NP_001348394.1	XP_021327156.1	41.121	214	126	0	153	366	89	302
## 4131	NP_001348394.1	XP_021327156.1	36.986	219	138	0	148	366	112	330
## 4132	NP_001348394.1	XP_021327156.1	38.785	214	131	0	153	366	61	274
## 4133	NP_001348394.1	XP_021327156.1	40.816	196	116	0	153	348	285	480
## 4134	NP_001348394.1	NP_001083040.2	42.523	214	123	0	153	366	150	363
## 4135	NP_001348394.1	NP_001083040.2	39.171	217	130	1	148	362	201	417
## 4136	NP_001348394.1	NP_001083040.2	37.104	221	138	1	146	366	60	279
## 4137	NP_001348394.1	NP_001083040.2	35.165	273	166	4	99	366	69	335
## 4138	NP_001348394.1	NP_001083040.2	42.262	168	96	1	199	366	57	223
## 4139	NP_001348394.1	XP_021325073.1	42.523	214	123	0	153	366	150	363
## 4140	NP_001348394.1	XP_021325073.1	39.171	217	130	1	148	362	201	417
## 4141	NP_001348394.1	XP_021325073.1	37.104	221	138	1	146	366	60	279
## 4142	NP_001348394.1	XP_021325073.1	35.165	273	166	4	99	366	69	335
## 4143	NP_001348394.1	XP_021325073.1	42.262	168	96	1	199	366	57	223
## 4144	NP_001348394.1	NP_001122163.1	37.391	230	144	0	142	371	32	261
## 4145	NP_001348394.1	XP_017209821.1	40.654	214	127	0	140	353	69	282
## 4146	NP_001348394.1	XP_017209821.1	36.404	228	145	0	140	367	97	324

## 4147	NP_001348394.1	XP_017209821.1	38.140	215	132	1	153	367	138	351
## 4148	NP_001348394.1	XP_017209821.1	44.203	138	77	0	232	369	77	214
## 4149	NP_001348394.1	XP_017209821.1	37.037	162	101	1	153	314	194	354
## 4150	NP_001348394.1	XP_017209820.1	40.654	214	127	0	140	353	69	282
## 4151	NP_001348394.1	XP_017209820.1	36.404	228	145	0	140	367	97	324
## 4152	NP_001348394.1	XP_017209820.1	38.140	215	132	1	153	367	138	351
## 4153	NP_001348394.1	XP_017209820.1	44.203	138	77	0	232	369	77	214
## 4154	NP_001348394.1	XP_017209820.1	37.037	162	101	1	153	314	194	354
## 4155	NP_001348394.1	XP_017210895.1	37.652	247	151	1	123	366	50	296
## 4156	NP_001348394.1	XP_017210895.1	40.639	219	130	0	153	371	167	385
## 4157	NP_001348394.1	XP_017210895.1	38.785	214	131	0	153	366	139	352
## 4158	NP_001348394.1	XP_017210895.1	40.104	192	115	0	175	366	133	324
## 4159	NP_001348394.1	XP_017210895.1	39.062	192	117	0	175	366	217	408
## 4160	NP_001348394.1	XP_017210895.1	38.342	193	119	0	175	367	245	437
## 4161	NP_001348394.1	XP_017210895.1	36.420	162	103	0	153	314	279	440
## 4162	NP_001348394.1	XP_017209848.1	37.247	247	152	1	123	366	50	296
## 4163	NP_001348394.1	XP_017209848.1	37.868	272	161	3	99	366	113	380
## 4164	NP_001348394.1	XP_017209848.1	39.583	192	116	0	175	366	217	408
## 4165	NP_001348394.1	XP_017209848.1	38.860	193	118	0	175	367	245	437
## 4166	NP_001348394.1	XP_017209848.1	36.420	162	103	0	153	314	279	440
## 4167	NP_001348394.1	NP_001278252.1	38.261	230	142	0	137	366	56	285
## 4168	NP_001348394.1	NP_001278252.1	37.566	189	118	0	153	341	128	316
## 4169	NP_001348394.1	NP_001278252.1	35.644	101	65	0	152	252	211	311
## 4170	NP_001348394.1	NP_001012513.2	38.261	230	142	0	137	366	56	285
## 4171	NP_001348394.1	NP_001012513.2	37.566	189	118	0	153	341	128	316
## 4172	NP_001348394.1	NP_001012513.2	35.644	101	65	0	152	252	211	311
## 4173	NP_001348394.1	NP_001108581.1	45.810	179	97	0	176	354	82	260
## 4174	NP_001348394.1	NP_001108581.1	46.951	164	87	0	203	366	81	244
## 4175	NP_001348394.1	NP_001108581.1	39.252	214	122	1	113	326	55	260
## 4176	NP_001348394.1	XP_021326747.1	38.306	248	149	1	123	366	48	295
## 4177	NP_001348394.1	XP_021326747.1	37.037	216	136	0	153	368	110	325
## 4178	NP_001348394.1	XP_021326747.1	38.710	186	114	0	153	338	166	351
## 4179	NP_001348394.1	XP_021326747.1	36.420	162	103	0	153	314	194	355
## 4180	NP_001348394.1	XP_021326747.1	35.780	109	70	0	153	261	250	358
## 4181	NP_001348394.1	NP_001108393.1	41.228	228	131	2	140	367	49	273
## 4182	NP_001348394.1	NP_001108393.1	34.043	235	135	4	90	314	52	276
## 4183	NP_001348394.1	XP_021323164.1	41.204	216	127	0	153	368	79	294
## 4184	NP_001348394.1	XP_021323164.1	39.252	214	130	0	153	366	107	320
## 4185	NP_001348394.1	XP_021323164.1	38.318	214	132	0	153	366	135	348
## 4186	NP_001348394.1	XP_021323164.1	40.526	190	113	0	177	366	75	264
## 4187	NP_001348394.1	XP_021323164.1	43.353	173	98	0	153	325	191	363
## 4188	NP_001348394.1	XP_021323164.1	38.308	201	124	0	153	353	163	363
## 4189	NP_001348394.1	XP_021323164.1	43.662	142	80	0	225	366	67	208
## 4190	NP_001348394.1	XP_021323164.1	24.370	119	82	2	99	213	249	363
## 4191	NP_001348394.1	XP_021323880.1	41.004	239	139	1	130	366	481	719
## 4192	NP_001348394.1	XP_021323880.1	42.991	214	122	0	153	366	71	284
## 4193	NP_001348394.1	XP_021323880.1	43.458	214	121	0	153	366	422	635
## 4194	NP_001348394.1	XP_021323880.1	42.056	214	124	0	153	366	478	691
## 4195	NP_001348394.1	XP_021323880.1	42.523	214	123	0	153	366	590	803
## 4196	NP_001348394.1	XP_021323880.1	45.078	193	106	0	174	366	8	200
## 4197	NP_001348394.1	XP_021323880.1	36.567	268	170	0	99	366	45	312
## 4198	NP_001348394.1	XP_021323880.1	40.000	215	129	0	153	367	534	748
## 4199	NP_001348394.1	XP_021323880.1	40.930	215	127	0	153	367	15	229
## 4200	NP_001348394.1	XP_021323880.1	44.041	193	108	0	174	366	471	663

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## 4201 NP_001348394.1 XP_021323880.1 40.455 220 131 0 147 366 388 607
## 4202 NP_001348394.1 XP_021323880.1 40.654 214 127 0 153 366 127 340
## 4203 NP_001348394.1 XP_021323880.1 39.815 216 130 0 153 368 562 777
## 4204 NP_001348394.1 XP_021323880.1 44.706 170 94 0 197 366 3 172
## 4205 NP_001348394.1 XP_021323880.1 34.836 244 159 0 99 342 564 807
## 4206 NP_001348394.1 XP_021323880.1 34.630 257 125 1 153 366 295 551
## 4207 NP_001348394.1 XP_021323880.1 31.008 258 135 1 153 367 183 440
## 4208 NP_001348394.1 XP_021323880.1 48.951 143 73 0 224 366 2 144
## 4209 NP_001348394.1 XP_021323880.1 41.718 163 95 0 153 315 646 808
## 4210 NP_001348394.1 NP_001353349.1 44.103 195 109 0 172 366 52 246
## 4211 NP_001348394.1 NP_001353349.1 38.326 227 140 0 141 367 49 275
## 4212 NP_001348394.1 NP_001353349.1 40.654 214 127 0 153 366 89 302
## 4213 NP_001348394.1 NP_001353349.1 38.342 193 91 1 153 317 117 309
## 4214 NP_001348394.1 XP_017209933.1 40.807 223 131 1 145 367 91 312
## 4215 NP_001348394.1 XP_017209933.1 43.455 191 107 1 176 366 66 255
## 4216 NP_001348394.1 XP_017209933.1 41.410 227 131 2 140 366 59 283
## 4217 NP_001348394.1 XP_017209933.1 45.399 163 88 1 153 315 155 316
## 4218 NP_001348394.1 XP_017210982.1 42.718 206 118 0 148 353 166 371
## 4219 NP_001348394.1 XP_017210982.1 40.000 215 129 0 153 367 199 413
## 4220 NP_001348394.1 XP_017210982.1 38.723 235 141 1 135 366 66 300
## 4221 NP_001348394.1 XP_017210982.1 39.207 227 138 0 140 366 102 328
## 4222 NP_001348394.1 XP_017210982.1 43.367 196 111 0 173 368 79 274
## 4223 NP_001348394.1 XP_017210982.1 35.496 262 157 3 99 354 173 428
## 4224 NP_001348394.1 XP_017210982.1 33.023 215 144 0 99 313 229 443
## 4225 NP_001348394.1 XP_021331303.1 42.786 201 115 0 153 353 127 327
## 4226 NP_001348394.1 XP_021331303.1 40.741 216 128 0 153 368 99 314
## 4227 NP_001348394.1 XP_021331303.1 38.326 227 139 1 140 366 59 284
## 4228 NP_001348394.1 XP_021331303.1 37.615 218 132 1 151 368 45 258
## 4229 NP_001348394.1 XP_021331303.1 40.314 191 114 0 153 343 155 345
## 4230 NP_001348394.1 XP_021331500.1 39.749 239 136 2 130 367 34 265
## 4231 NP_001348394.1 XP_021331500.1 38.603 272 161 2 99 367 221 489
## 4232 NP_001348394.1 XP_021331500.1 39.269 219 133 0 148 366 186 404
## 4233 NP_001348394.1 XP_021331500.1 42.408 191 110 0 176 366 158 348
## 4234 NP_001348394.1 XP_021331500.1 36.296 270 172 0 99 368 109 378
## 4235 NP_001348394.1 XP_021331500.1 40.654 214 127 0 153 366 79 292
## 4236 NP_001348394.1 XP_021331500.1 33.758 157 104 0 152 308 358 514
## 4237 NP_001348394.1 XP_021331500.1 31.081 74 51 0 152 225 442 515
## 4238 NP_001348394.1 XP_021330459.1 38.554 249 145 1 118 366 367 607
## 4239 NP_001348394.1 XP_021330459.1 42.056 214 124 0 153 366 366 579
## 4240 NP_001348394.1 XP_021330459.1 39.224 232 136 2 141 367 465 696
## 4241 NP_001348394.1 XP_021330459.1 40.278 216 129 0 153 368 422 637
## 4242 NP_001348394.1 XP_021330459.1 42.487 193 111 0 174 366 359 551
## 4243 NP_001348394.1 XP_021330459.1 37.727 220 133 1 153 368 250 469
## 4244 NP_001348394.1 XP_021330459.1 38.785 214 131 0 153 366 110 323
## 4245 NP_001348394.1 XP_021330459.1 38.532 218 130 1 153 366 306 523
## 4246 NP_001348394.1 XP_021330459.1 36.548 197 125 0 170 366 43 239
## 4247 NP_001348394.1 XP_021330459.1 35.514 214 138 0 153 366 82 295
## 4248 NP_001348394.1 XP_021330459.1 36.486 222 137 1 149 366 46 267
## 4249 NP_001348394.1 XP_021330459.1 42.771 166 91 1 153 314 534 699
## 4250 NP_001348394.1 NP_001025265.3 42.932 191 109 0 176 366 39 229
## 4251 NP_001348394.1 NP_001025265.3 39.815 216 130 0 153 368 44 259
## 4252 NP_001348394.1 NP_001025265.3 41.121 214 126 0 153 366 100 313
## 4253 NP_001348394.1 NP_001025265.3 40.187 214 128 0 153 366 72 285
## 4254 NP_001348394.1 NP_001025265.3 41.121 214 126 0 153 366 156 369

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## 4255 NP_001348394.1 NP_001025265.3 40.187 214 128 0 153 366 128 341
## 4256 NP_001348394.1 NP_001025265.3 41.053 190 112 0 153 342 184 373
## 4257 NP_001348394.1 NP_001025265.3 42.222 135 78 0 153 287 240 374
## 4258 NP_001348394.1 NP_001025265.3 34.167 120 79 0 140 259 255 374
## 4259 NP_001348394.1 XP_009294078.1 44.554 202 112 0 153 354 151 352
## 4260 NP_001348394.1 XP_009294078.1 39.252 214 130 0 153 366 207 420
## 4261 NP_001348394.1 XP_009294078.1 37.443 219 137 0 153 371 263 481
## 4262 NP_001348394.1 XP_009294078.1 35.433 254 154 4 113 366 65 308
## 4263 NP_001348394.1 XP_009294078.1 39.683 189 114 0 178 366 148 336
## 4264 NP_001348394.1 XP_009294078.1 37.306 193 121 0 174 366 60 252
## 4265 NP_001348394.1 XP_009294078.1 39.286 168 102 0 199 366 57 224
## 4266 NP_001348394.1 XP_009294078.1 40.000 55 33 0 314 368 60 114
## 4267 NP_001348394.1 NP_001013514.1 36.232 276 160 2 99 366 106 373
## 4268 NP_001348394.1 NP_001013514.1 41.121 214 126 0 153 366 48 261
## 4269 NP_001348394.1 NP_001013514.1 39.252 214 130 0 153 366 104 317
## 4270 NP_001348394.1 NP_001013514.1 38.785 214 131 0 153 366 76 289
## 4271 NP_001348394.1 NP_001013514.1 29.688 192 133 2 98 288 217 407
## 4272 NP_001348394.1 XP_017211198.1 38.934 244 145 1 127 366 22 265
## 4273 NP_001348394.1 XP_017211198.1 36.574 216 137 0 153 368 80 295
## 4274 NP_001348394.1 XP_017211198.1 37.209 215 135 0 153 367 108 322
## 4275 NP_001348394.1 XP_017211198.1 37.037 162 102 0 153 314 164 325
## 4276 NP_001348394.1 XP_017211198.1 35.780 109 70 0 153 261 220 328
## 4277 NP_001348394.1 XP_683662.5 39.720 214 129 0 153 366 114 327
## 4278 NP_001348394.1 XP_683662.5 39.149 235 140 1 135 366 65 299
## 4279 NP_001348394.1 XP_683662.5 39.269 219 133 0 148 366 137 355
## 4280 NP_001348394.1 XP_683662.5 38.725 204 125 0 153 356 170 373
## 4281 NP_001348394.1 XP_021331485.1 39.720 214 129 0 153 366 114 327
## 4282 NP_001348394.1 XP_021331485.1 39.149 235 140 1 135 366 65 299
## 4283 NP_001348394.1 XP_021331485.1 39.269 219 133 0 148 366 137 355
## 4284 NP_001348394.1 XP_021331485.1 38.725 204 125 0 153 356 170 373
## 4285 NP_001348394.1 XP_021327154.1 41.121 214 126 0 153 366 60 273
## 4286 NP_001348394.1 XP_021327154.1 45.026 191 105 0 176 366 55 245
## 4287 NP_001348394.1 XP_021327154.1 40.816 196 116 0 153 348 88 283
## 4288 NP_001348394.1 NP_001120944.1 41.589 214 125 0 153 366 89 302
## 4289 NP_001348394.1 NP_001120944.1 39.640 222 134 0 145 366 53 274
## 4290 NP_001348394.1 NP_001120944.1 39.545 220 133 0 148 367 168 387
## 4291 NP_001348394.1 NP_001120944.1 40.187 214 128 0 153 366 145 358
## 4292 NP_001348394.1 NP_001120944.1 38.785 214 131 0 153 366 117 330
## 4293 NP_001348394.1 NP_001120944.1 41.117 197 116 0 170 366 50 246
## 4294 NP_001348394.1 NP_001120944.1 35.417 192 96 1 153 316 201 392
## 4295 NP_001348394.1 XP_017210204.2 40.086 232 137 2 135 366 4 233
## 4296 NP_001348394.1 XP_017210204.2 44.526 137 76 0 178 314 101 237
## 4297 NP_001348394.1 XP_017210204.2 35.556 135 87 0 152 286 103 237
## 4298 NP_001348394.1 XP_005161011.1 39.450 218 132 0 153 370 137 354
## 4299 NP_001348394.1 XP_005161011.1 42.326 215 123 1 153 366 80 294
## 4300 NP_001348394.1 XP_005161011.1 40.465 215 127 1 153 366 52 266
## 4301 NP_001348394.1 XP_005161011.1 39.791 191 114 1 178 367 49 239
## 4302 NP_001348394.1 XP_005161011.1 44.848 165 90 1 203 366 46 210
## 4303 NP_001348394.1 XP_009297802.1 34.688 320 180 5 74 366 29 346
## 4304 NP_001348394.1 XP_009297802.1 40.909 220 130 0 148 367 184 403
## 4305 NP_001348394.1 XP_009297802.1 40.187 214 128 0 153 366 161 374
## 4306 NP_001348394.1 XP_009297802.1 43.814 194 109 0 148 341 212 405
## 4307 NP_001348394.1 XP_005170427.2 39.095 243 120 1 153 367 67 309
## 4308 NP_001348394.1 XP_005170427.2 36.916 214 135 0 153 366 123 336

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## 4309	NP_001348394.1	XP_005170427.2	38.220	191	118	0	176	366	62	252
## 4310	NP_001348394.1	XP_005170427.2	39.521	167	101	0	200	366	58	224
## 4311	NP_001348394.1	XP_005170427.2	40.789	152	88	1	162	313	218	367
## 4312	NP_001348394.1	XP_005170427.2	37.179	78	49	0	152	229	290	367
## 4313	NP_001348394.1	XP_005174664.1	41.589	214	125	0	153	366	69	282
## 4314	NP_001348394.1	XP_005174664.1	36.139	202	129	0	166	367	54	255
## 4315	NP_001348394.1	XP_005174664.1	37.126	167	105	0	152	318	152	318
## 4316	NP_001348394.1	XP_005174664.1	34.286	175	113	1	194	366	24	198
## 4317	NP_001348394.1	XP_005174664.1	28.358	67	48	0	140	206	252	318
## 4318	NP_001348394.1	XP_017210824.1	40.654	214	127	0	140	353	69	282
## 4319	NP_001348394.1	XP_017210824.1	35.965	228	146	0	140	367	97	324
## 4320	NP_001348394.1	XP_017210824.1	38.140	215	132	1	153	367	138	351
## 4321	NP_001348394.1	XP_017210824.1	43.571	140	79	0	232	371	77	216
## 4322	NP_001348394.1	XP_017210824.1	37.037	162	101	1	153	314	194	354
## 4323	NP_001348394.1	NP_001121721.2	36.948	249	153	2	122	366	50	298
## 4324	NP_001348394.1	NP_001121721.2	39.252	214	130	0	153	366	141	354
## 4325	NP_001348394.1	NP_001121721.2	33.091	275	168	4	101	367	117	383
## 4326	NP_001348394.1	NP_001121721.2	42.604	169	97	0	203	371	79	247
## 4327	NP_001348394.1	NP_001121721.2	37.654	162	101	0	153	314	225	386
## 4328	NP_001348394.1	NP_001121721.2	29.412	51	36	0	153	203	337	387
## 4329	NP_001348394.1	NP_001353568.1	40.789	228	132	1	131	355	73	300
## 4330	NP_001348394.1	NP_001353568.1	40.704	199	118	0	168	366	85	283
## 4331	NP_001348394.1	NP_001353568.1	36.522	230	135	1	148	366	149	378
## 4332	NP_001348394.1	NP_001353568.1	31.481	270	136	1	151	371	331	600
## 4333	NP_001348394.1	NP_001353568.1	33.865	251	145	3	109	338	345	595
## 4334	NP_001348394.1	NP_001353568.1	32.099	243	116	1	174	367	326	568
## 4335	NP_001348394.1	NP_001353568.1	36.316	190	118	1	127	313	409	598
## 4336	NP_001348394.1	XP_021331483.1	44.388	196	108	1	175	369	9	204
## 4337	NP_001348394.1	XP_021331483.1	46.471	170	91	0	197	366	3	172
## 4338	NP_001348394.1	XP_021331483.1	49.650	143	72	0	224	366	2	144
## 4339	NP_001348394.1	XP_021331483.1	39.683	189	106	1	118	306	16	196
## 4340	NP_001348394.1	XP_009299293.1	41.096	219	129	0	148	366	165	383
## 4341	NP_001348394.1	XP_009299293.1	41.584	202	118	0	153	354	114	315
## 4342	NP_001348394.1	XP_009299293.1	37.647	255	159	0	99	353	88	342
## 4343	NP_001348394.1	XP_009299293.1	40.930	215	126	1	153	367	198	411
## 4344	NP_001348394.1	XP_009299293.1	40.594	202	120	0	165	366	70	271
## 4345	NP_001348394.1	XP_009299293.1	39.683	189	113	1	153	341	226	413
## 4346	NP_001348394.1	XP_017211087.1	41.553	219	128	0	148	366	82	300
## 4347	NP_001348394.1	XP_017211087.1	43.284	201	114	0	153	353	115	315
## 4348	NP_001348394.1	XP_017211087.1	38.793	232	141	1	138	368	127	358
## 4349	NP_001348394.1	XP_017211087.1	37.727	220	137	0	148	367	166	385
## 4350	NP_001348394.1	XP_017211087.1	44.578	166	92	0	203	368	81	246
## 4351	NP_001348394.1	XP_017211087.1	31.019	216	149	0	99	314	173	388
## 4352	NP_001348394.1	NP_001314920.1	38.525	244	146	1	127	366	52	295
## 4353	NP_001348394.1	NP_001314920.1	36.574	216	137	0	153	368	110	325
## 4354	NP_001348394.1	NP_001314920.1	36.744	215	136	0	153	367	138	352
## 4355	NP_001348394.1	NP_001314920.1	38.298	188	116	0	151	338	164	351
## 4356	NP_001348394.1	NP_001314920.1	36.420	162	103	0	153	314	194	355
## 4357	NP_001348394.1	XP_001334166.2	37.652	247	150	1	126	368	56	302
## 4358	NP_001348394.1	XP_001334166.2	38.605	215	132	0	153	367	115	329
## 4359	NP_001348394.1	XP_001334166.2	37.126	167	105	0	148	314	166	332
## 4360	NP_001348394.1	XP_001334166.2	29.412	51	36	0	153	203	283	333
## 4361	NP_001348394.1	XP_017211097.1	40.654	214	127	0	140	353	69	282
## 4362	NP_001348394.1	XP_017211097.1	36.404	228	145	0	140	367	97	324

## 4363	NP_001348394.1	XP_017211097.1	38.140	215	132	1	153	367	138	351
## 4364	NP_001348394.1	XP_017211097.1	44.203	138	77	0	232	369	77	214
## 4365	NP_001348394.1	XP_017211097.1	37.037	162	101	1	153	314	194	354
## 4366	NP_001348394.1	XP_021331405.1	39.338	272	157	2	99	366	101	368
## 4367	NP_001348394.1	XP_021331405.1	35.786	299	185	1	68	366	245	536
## 4368	NP_001348394.1	XP_021331405.1	37.319	276	155	4	99	366	605	870
## 4369	NP_001348394.1	XP_021331405.1	42.056	214	124	0	153	366	43	256
## 4370	NP_001348394.1	XP_021331405.1	37.319	276	157	2	99	366	129	396
## 4371	NP_001348394.1	XP_021331405.1	40.654	214	127	0	153	366	407	620
## 4372	NP_001348394.1	XP_021331405.1	36.861	274	163	3	98	366	296	564
## 4373	NP_001348394.1	XP_021331405.1	41.121	214	126	0	153	366	15	228
## 4374	NP_001348394.1	XP_021331405.1	42.523	214	123	0	153	366	99	312
## 4375	NP_001348394.1	XP_021331405.1	41.121	214	126	0	153	366	211	424
## 4376	NP_001348394.1	XP_021331405.1	40.179	224	133	1	143	366	593	815
## 4377	NP_001348394.1	XP_021331405.1	45.556	180	98	0	174	353	8	187
## 4378	NP_001348394.1	XP_021331405.1	40.654	214	127	0	153	366	239	452
## 4379	NP_001348394.1	XP_021331405.1	33.770	305	187	3	68	368	301	594
## 4380	NP_001348394.1	XP_021331405.1	39.640	222	134	0	145	366	63	284
## 4381	NP_001348394.1	XP_021331405.1	39.004	241	120	1	153	366	714	954
## 4382	NP_001348394.1	XP_021331405.1	39.720	214	128	1	153	366	435	647
## 4383	NP_001348394.1	XP_021331405.1	43.529	170	96	0	197	366	3	172
## 4384	NP_001348394.1	XP_021331405.1	36.948	249	148	3	99	343	716	959
## 4385	NP_001348394.1	XP_021331405.1	44.056	143	80	0	224	366	2	144
## 4386	NP_001348394.1	XP_009301296.1	41.589	214	125	0	153	366	114	327
## 4387	NP_001348394.1	XP_009301296.1	40.933	193	114	0	174	366	51	243
## 4388	NP_001348394.1	XP_009301296.1	37.850	214	133	0	153	366	170	383
## 4389	NP_001348394.1	XP_009301296.1	40.206	194	116	0	174	367	219	412
## 4390	NP_001348394.1	XP_009301296.1	38.318	214	132	0	153	366	58	271
## 4391	NP_001348394.1	XP_009301296.1	37.850	214	133	0	153	366	86	299
## 4392	NP_001348394.1	XP_009301296.1	37.870	169	105	0	174	342	247	415
## 4393	NP_001348394.1	XP_009301296.1	38.312	154	95	0	162	315	263	416
## 4394	NP_001348394.1	XP_009301295.1	41.589	214	125	0	153	366	126	339
## 4395	NP_001348394.1	XP_009301295.1	35.827	254	160	1	116	366	2	255
## 4396	NP_001348394.1	XP_009301295.1	37.850	214	133	0	153	366	182	395
## 4397	NP_001348394.1	XP_009301295.1	40.206	194	116	0	174	367	231	424
## 4398	NP_001348394.1	XP_009301295.1	38.318	214	132	0	153	366	70	283
## 4399	NP_001348394.1	XP_009301295.1	37.850	214	133	0	153	366	98	311
## 4400	NP_001348394.1	XP_009301295.1	37.870	169	105	0	174	342	259	427
## 4401	NP_001348394.1	XP_009301295.1	38.312	154	95	0	162	315	275	428
## 4402	NP_001348394.1	XP_009299259.1	42.991	214	122	0	153	366	114	327
## 4403	NP_001348394.1	XP_009299259.1	39.726	219	132	0	153	371	86	304
## 4404	NP_001348394.1	XP_009299259.1	39.691	194	117	0	175	368	80	273
## 4405	NP_001348394.1	XP_009299259.1	34.109	258	159	5	99	351	88	339
## 4406	NP_001348394.1	XP_002667484.1	34.228	298	191	2	74	366	36	333
## 4407	NP_001348394.1	XP_002667484.1	40.994	161	95	0	153	313	176	336
## 4408	NP_001348394.1	NP_001103309.1	40.741	216	124	2	153	366	71	284
## 4409	NP_001348394.1	NP_001103309.1	45.087	173	95	0	174	346	120	292
## 4410	NP_001348394.1	NP_001103309.1	42.487	193	107	2	176	366	66	256
## 4411	NP_001348394.1	NP_001103309.1	39.521	167	101	0	200	366	62	228
## 4412	NP_001348394.1	NP_001103309.1	41.818	110	64	0	153	262	183	292
## 4413	NP_001348394.1	NP_001103309.1	41.379	87	47	1	267	353	49	131
## 4414	NP_001348394.1	XP_021327909.1	40.654	214	127	0	153	366	60	273
## 4415	NP_001348394.1	XP_021327909.1	45.026	191	105	0	176	366	55	245
## 4416	NP_001348394.1	XP_021327909.1	39.474	190	115	0	153	342	88	277

## 4417	NP_001348394.1	XP_021327909.1	40.580	138	82	0	229	366	52	189
## 4418	NP_001348394.1	XP_021327909.1	41.379	87	51	0	280	366	47	133
## 4419	NP_001348394.1	XP_009301868.1	35.821	268	172	0	99	366	93	360
## 4420	NP_001348394.1	XP_009301868.1	39.640	222	134	0	146	367	84	305
## 4421	NP_001348394.1	XP_009301868.1	43.077	195	111	0	174	368	84	278
## 4422	NP_001348394.1	XP_009301868.1	32.000	275	171	2	99	365	121	387
## 4423	NP_001348394.1	XP_003198250.1	39.623	212	124	1	155	366	38	245
## 4424	NP_001348394.1	XP_003198250.1	40.526	190	113	0	153	342	60	249
## 4425	NP_001348394.1	XP_003198250.1	42.073	164	95	0	204	367	55	218
## 4426	NP_001348394.1	XP_003198250.1	42.945	163	93	0	153	315	88	250
## 4427	NP_001348394.1	XP_003198589.1	41.304	230	124	3	139	367	218	437
## 4428	NP_001348394.1	XP_003198589.1	38.739	222	130	1	153	368	105	326
## 4429	NP_001348394.1	XP_003198589.1	34.783	253	131	1	153	371	161	413
## 4430	NP_001348394.1	XP_003198589.1	37.500	216	124	2	162	366	53	268
## 4431	NP_001348394.1	XP_003198589.1	37.850	214	133	0	153	366	279	492
## 4432	NP_001348394.1	XP_003198589.1	42.169	166	96	0	203	368	71	236
## 4433	NP_001348394.1	XP_003198589.1	36.316	190	121	0	153	342	307	496
## 4434	NP_001348394.1	XP_003198589.1	33.333	87	58	0	144	230	410	496
## 4435	NP_001348394.1	NP_001124102.1	39.252	214	130	0	153	366	15	228
## 4436	NP_001348394.1	NP_001124102.1	39.896	193	116	0	174	366	8	200
## 4437	NP_001348394.1	NP_001124102.1	37.850	214	130	1	129	339	16	229
## 4438	NP_001348394.1	NP_001124102.1	41.176	170	100	0	197	366	3	172
## 4439	NP_001348394.1	NP_001124102.1	40.559	143	85	0	224	366	2	144
## 4440	NP_001348394.1	NP_001124102.1	42.424	33	19	0	336	368	2	34
## 4441	NP_001348394.1	NP_001124121.1	39.252	214	130	0	153	366	15	228
## 4442	NP_001348394.1	NP_001124121.1	39.896	193	116	0	174	366	8	200
## 4443	NP_001348394.1	NP_001124121.1	37.850	214	130	1	129	339	16	229
## 4444	NP_001348394.1	NP_001124121.1	41.176	170	100	0	197	366	3	172
## 4445	NP_001348394.1	NP_001124121.1	40.559	143	85	0	224	366	2	144
## 4446	NP_001348394.1	NP_001124121.1	42.424	33	19	0	336	368	2	34
## 4447	NP_001348394.1	XP_021325334.1	42.523	214	123	0	153	366	595	808
## 4448	NP_001348394.1	XP_021325334.1	37.143	245	147	1	130	367	509	753
## 4449	NP_001348394.1	XP_021325334.1	40.415	193	115	0	176	368	534	726
## 4450	NP_001348394.1	XP_021325334.1	33.962	265	159	2	110	366	61	317
## 4451	NP_001348394.1	XP_021325334.1	38.318	214	132	0	153	366	651	864
## 4452	NP_001348394.1	XP_021325334.1	39.252	214	130	0	153	366	567	780
## 4453	NP_001348394.1	XP_021325334.1	39.175	194	118	0	173	366	40	233
## 4454	NP_001348394.1	XP_021325334.1	40.000	195	117	0	174	368	209	403
## 4455	NP_001348394.1	XP_021325334.1	38.342	193	119	0	174	366	700	892
## 4456	NP_001348394.1	XP_021325334.1	35.349	215	139	0	152	366	47	261
## 4457	NP_001348394.1	XP_021325334.1	32.210	267	176	1	105	366	430	696
## 4458	NP_001348394.1	XP_021325334.1	31.963	219	149	0	148	366	239	457
## 4459	NP_001348394.1	XP_021325334.1	38.462	169	104	0	174	342	728	896
## 4460	NP_001348394.1	XP_021325334.1	36.269	193	123	0	174	366	181	373
## 4461	NP_001348394.1	XP_021325334.1	30.651	261	130	3	153	366	412	668
## 4462	NP_001348394.1	XP_021325334.1	37.662	154	96	0	162	315	744	897
## 4463	NP_001348394.1	XP_021325334.1	35.542	166	107	0	148	313	295	460
## 4464	NP_001348394.1	XP_017211883.2	41.121	214	126	0	153	366	24	237
## 4465	NP_001348394.1	XP_017211883.2	37.963	216	134	0	153	368	52	267
## 4466	NP_001348394.1	XP_017211883.2	39.720	214	129	0	153	366	108	321
## 4467	NP_001348394.1	XP_017211883.2	41.451	193	113	0	174	366	157	349
## 4468	NP_001348394.1	XP_017211883.2	42.408	191	110	0	176	366	19	209
## 4469	NP_001348394.1	XP_017211883.2	36.986	219	138	0	148	366	75	293
## 4470	NP_001348394.1	XP_017211883.2	36.842	190	120	0	153	342	164	353

## 4471	NP_001348394.1	XP_017211883.2	42.331	163	94	0	153	315	192	354
## 4472	NP_001348394.1	XP_017211883.2	40.288	139	83	0	228	366	15	153
## 4473	NP_001348394.1	XP_017211883.2	32.609	92	62	0	140	231	263	354
## 4474	NP_001348394.1	XP_017211082.1	42.564	195	112	0	174	368	108	302
## 4475	NP_001348394.1	XP_017211082.1	38.605	215	132	0	153	367	115	329
## 4476	NP_001348394.1	XP_017211082.1	36.527	167	106	0	148	314	166	332
## 4477	NP_001348394.1	XP_021330478.1	42.056	214	124	0	153	366	51	264
## 4478	NP_001348394.1	XP_021330478.1	39.535	215	129	1	153	366	448	662
## 4479	NP_001348394.1	XP_021330478.1	41.589	214	125	0	153	366	191	404
## 4480	NP_001348394.1	XP_021330478.1	39.720	214	129	0	153	366	135	348
## 4481	NP_001348394.1	XP_021330478.1	39.056	233	136	2	140	366	318	550
## 4482	NP_001348394.1	XP_021330478.1	39.720	214	129	0	153	366	79	292
## 4483	NP_001348394.1	XP_021330478.1	42.487	193	111	0	174	366	16	208
## 4484	NP_001348394.1	XP_021330478.1	38.889	216	132	0	153	368	107	322
## 4485	NP_001348394.1	XP_021330478.1	39.070	215	131	0	153	367	23	237
## 4486	NP_001348394.1	XP_021330478.1	39.252	214	130	0	153	366	219	432
## 4487	NP_001348394.1	XP_021330478.1	39.252	214	130	0	153	366	477	690
## 4488	NP_001348394.1	XP_021330478.1	38.785	214	131	0	153	366	533	746
## 4489	NP_001348394.1	XP_021330478.1	39.252	214	130	0	153	366	505	718
## 4490	NP_001348394.1	XP_021330478.1	39.303	201	122	0	153	353	163	363
## 4491	NP_001348394.1	XP_021330478.1	42.458	179	103	0	188	366	2	180
## 4492	NP_001348394.1	XP_021330478.1	33.871	248	130	1	153	366	247	494
## 4493	NP_001348394.1	XP_021330478.1	39.474	190	115	0	153	342	561	750
## 4494	NP_001348394.1	XP_009294086.1	45.078	193	106	0	174	366	79	271
## 4495	NP_001348394.1	XP_009294086.1	39.252	214	130	0	153	366	114	327
## 4496	NP_001348394.1	XP_009294086.1	40.933	193	114	0	174	366	163	355
## 4497	NP_001348394.1	XP_009294086.1	41.667	168	98	0	199	366	76	243
## 4498	NP_001348394.1	XP_009294086.1	41.718	163	95	0	153	315	198	360
## 4499	NP_001348394.1	XP_009294086.1	38.503	187	115	0	153	339	170	356
## 4500	NP_001348394.1	XP_009294086.1	42.958	142	81	0	227	368	76	217
## 4501	NP_001348394.1	XP_009297410.1	41.121	214	126	0	153	366	141	354
## 4502	NP_001348394.1	XP_009297410.1	40.465	215	128	0	152	366	84	298
## 4503	NP_001348394.1	XP_009297410.1	39.720	214	129	0	153	366	57	270
## 4504	NP_001348394.1	XP_009297410.1	38.356	219	107	1	176	366	24	242
## 4505	NP_001348394.1	XP_009297410.1	39.720	214	129	0	153	366	197	410
## 4506	NP_001348394.1	XP_009297410.1	41.451	193	113	0	174	366	246	438
## 4507	NP_001348394.1	XP_009297410.1	40.828	169	100	0	174	342	274	442
## 4508	NP_001348394.1	XP_009297410.1	41.549	142	83	0	174	315	302	443
## 4509	NP_001348394.1	XP_009297410.1	41.481	135	79	0	234	368	26	160
## 4510	NP_001348394.1	XP_009297410.1	31.250	80	55	0	152	231	364	443
## 4511	NP_001348394.1	NP_001103195.1	41.667	216	126	0	153	368	81	296
## 4512	NP_001348394.1	NP_001103195.1	41.885	191	111	0	176	366	76	266
## 4513	NP_001348394.1	NP_001103195.1	41.579	190	111	0	153	342	109	298
## 4514	NP_001348394.1	NP_001103195.1	35.321	218	137	2	99	314	83	298
## 4515	NP_001348394.1	XP_021327024.1	39.655	232	138	2	135	366	4	233
## 4516	NP_001348394.1	XP_021327024.1	43.796	137	77	0	178	314	101	237
## 4517	NP_001348394.1	XP_021327024.1	35.556	135	87	0	152	286	103	237
## 4518	NP_001348394.1	XP_021323166.1	40.000	215	129	0	153	367	69	283
## 4519	NP_001348394.1	XP_021323166.1	40.496	242	116	3	153	366	13	254
## 4520	NP_001348394.1	XP_021323166.1	40.206	194	116	0	173	366	5	198
## 4521	NP_001348394.1	XP_021323166.1	36.269	193	95	2	153	317	97	289
## 4522	NP_001348394.1	XP_021331135.1	42.991	214	122	0	140	353	71	284
## 4523	NP_001348394.1	XP_021331135.1	43.523	193	109	0	174	366	77	269
## 4524	NP_001348394.1	XP_021331135.1	39.545	220	133	0	148	367	135	354

## 4525	NP_001348394.1	XP_021331135.1	41.885	191	111	0	176	366	51	241
## 4526	NP_001348394.1	XP_021331135.1	35.802	162	104	0	153	314	196	357
## 4527	NP_001348394.1	XP_021331135.1	33.962	53	35	0	316	368	51	103
## 4528	NP_001348394.1	XP_021323165.1	40.000	215	129	0	153	367	134	348
## 4529	NP_001348394.1	XP_021323165.1	40.496	242	116	3	153	366	78	319
## 4530	NP_001348394.1	XP_021323165.1	40.206	194	116	0	173	366	70	263
## 4531	NP_001348394.1	XP_021323165.1	36.269	193	95	2	153	317	162	354
## 4532	NP_001348394.1	XP_002661922.1	40.930	215	126	1	153	367	119	332
## 4533	NP_001348394.1	XP_002661922.1	39.252	214	130	0	153	366	91	304
## 4534	NP_001348394.1	XP_002661922.1	40.625	192	114	0	176	367	86	277
## 4535	NP_001348394.1	XP_002661922.1	35.450	189	121	1	153	341	175	362
## 4536	NP_001348394.1	XP_002661922.1	51.376	109	53	0	260	368	86	194
## 4537	NP_001348394.1	XP_002661922.1	34.946	186	119	2	129	313	178	362
## 4538	NP_001348394.1	XP_021331461.1	40.930	215	126	1	153	367	119	332
## 4539	NP_001348394.1	XP_021331461.1	39.252	214	130	0	153	366	91	304
## 4540	NP_001348394.1	XP_021331461.1	40.625	192	114	0	176	367	86	277
## 4541	NP_001348394.1	XP_021331461.1	35.450	189	121	1	153	341	175	362
## 4542	NP_001348394.1	XP_021331461.1	51.376	109	53	0	260	368	86	194
## 4543	NP_001348394.1	XP_021331461.1	34.946	186	119	2	129	313	178	362
## 4544	NP_001348394.1	NP_001107943.1	42.056	214	124	0	153	366	65	278
## 4545	NP_001348394.1	NP_001107943.1	41.121	214	126	0	153	366	93	306
## 4546	NP_001348394.1	NP_001107943.1	41.121	214	126	0	153	366	177	390
## 4547	NP_001348394.1	NP_001107943.1	40.838	191	113	0	178	368	62	252
## 4548	NP_001348394.1	NP_001107943.1	40.187	214	128	0	153	366	149	362
## 4549	NP_001348394.1	NP_001107943.1	40.654	214	127	0	153	366	121	334
## 4550	NP_001348394.1	NP_001107943.1	41.040	173	102	0	194	366	50	222
## 4551	NP_001348394.1	NP_001107943.1	40.625	96	57	0	271	366	43	138
## 4552	NP_001348394.1	XP_017211081.1	39.367	221	134	0	148	368	144	364
## 4553	NP_001348394.1	XP_017211081.1	43.719	199	106	2	174	366	108	306
## 4554	NP_001348394.1	XP_017211081.1	38.605	215	132	0	153	367	177	391
## 4555	NP_001348394.1	XP_017211081.1	39.535	172	98	1	203	368	81	252
## 4556	NP_001348394.1	XP_017211081.1	36.810	163	103	0	152	314	232	394
## 4557	NP_001348394.1	XP_005161014.1	37.963	216	131	1	154	369	60	272
## 4558	NP_001348394.1	XP_005161014.1	41.935	186	108	0	153	338	84	269
## 4559	NP_001348394.1	XP_017211187.1	38.367	245	147	1	126	366	56	300
## 4560	NP_001348394.1	XP_017211187.1	41.026	195	115	0	174	368	164	358
## 4561	NP_001348394.1	XP_017211187.1	37.727	220	137	0	148	367	166	385
## 4562	NP_001348394.1	XP_017211187.1	42.771	166	95	0	203	368	81	246
## 4563	NP_001348394.1	XP_017211187.1	32.407	216	146	0	99	314	173	388
## 4564	NP_001348394.1	XP_021324487.1	42.056	214	124	0	153	366	64	277
## 4565	NP_001348394.1	XP_021324487.1	41.121	214	126	0	153	366	92	305
## 4566	NP_001348394.1	XP_021324487.1	41.121	214	126	0	153	366	176	389
## 4567	NP_001348394.1	XP_021324487.1	41.361	191	112	0	178	368	61	251
## 4568	NP_001348394.1	XP_021324487.1	40.187	214	128	0	153	366	148	361
## 4569	NP_001348394.1	XP_021324487.1	41.040	173	102	0	194	366	49	221
## 4570	NP_001348394.1	XP_021324487.1	40.625	96	57	0	271	366	42	137
## 4571	NP_001348394.1	NP_001104560.1	41.294	201	118	0	166	366	44	244
## 4572	NP_001348394.1	NP_001104560.1	34.364	291	160	5	77	364	8	270
## 4573	NP_001348394.1	NP_001104560.1	30.544	239	131	2	70	308	67	270
## 4574	NP_001348394.1	NP_001104560.1	45.570	79	43	0	290	368	56	134
## 4575	NP_001348394.1	XP_009299297.1	40.741	216	128	0	153	368	81	296
## 4576	NP_001348394.1	XP_009299297.1	37.004	227	133	2	116	342	82	298
## 4577	NP_001348394.1	XP_021330444.1	40.654	214	127	0	153	366	23	236
## 4578	NP_001348394.1	XP_021330444.1	43.455	191	108	0	176	366	18	208

## 4579	NP_001348394.1	XP_021330444.1	45.087	173	95	0	194	366	8	180
## 4580	NP_001348394.1	XP_021330444.1	39.474	190	115	0	153	342	51	240
## 4581	NP_001348394.1	XP_021330444.1	40.741	135	80	0	153	287	107	241
## 4582	NP_001348394.1	XP_009298135.1	40.654	214	127	0	153	366	23	236
## 4583	NP_001348394.1	XP_009298135.1	43.455	191	108	0	176	366	18	208
## 4584	NP_001348394.1	XP_009298135.1	45.087	173	95	0	194	366	8	180
## 4585	NP_001348394.1	XP_009298135.1	39.474	190	115	0	153	342	51	240
## 4586	NP_001348394.1	XP_009298135.1	40.741	135	80	0	153	287	107	241
## 4587	NP_001348394.1	XP_005168174.1	40.930	215	126	1	153	367	117	330
## 4588	NP_001348394.1	XP_005168174.1	39.252	214	130	0	153	366	89	302
## 4589	NP_001348394.1	XP_005168174.1	38.647	207	127	0	161	367	69	275
## 4590	NP_001348394.1	XP_005168174.1	35.450	189	121	1	153	341	173	360
## 4591	NP_001348394.1	XP_005168174.1	51.402	107	52	0	262	368	86	192
## 4592	NP_001348394.1	XP_005168174.1	34.946	186	119	2	129	313	176	360
## 4593	NP_001348394.1	XP_009294081.2	41.553	219	128	0	148	366	174	392
## 4594	NP_001348394.1	XP_009294081.2	39.720	214	129	0	153	366	123	336
## 4595	NP_001348394.1	XP_009294081.2	39.252	214	130	0	153	366	95	308
## 4596	NP_001348394.1	XP_009294081.2	38.785	214	131	0	153	366	67	280
## 4597	NP_001348394.1	XP_009294081.2	38.860	193	118	0	176	368	62	254
## 4598	NP_001348394.1	XP_009294081.2	41.212	165	97	0	153	317	235	399
## 4599	NP_001348394.1	XP_009294081.2	36.310	168	107	0	199	366	57	224
## 4600	NP_001348394.1	XP_021324489.1	42.056	214	124	0	153	366	15	228
## 4601	NP_001348394.1	XP_021324489.1	41.121	214	126	0	153	366	43	256
## 4602	NP_001348394.1	XP_021324489.1	41.121	214	126	0	153	366	127	340
## 4603	NP_001348394.1	XP_021324489.1	41.146	192	113	0	177	368	11	202
## 4604	NP_001348394.1	XP_021324489.1	40.187	214	128	0	153	366	99	312
## 4605	NP_001348394.1	XP_021324489.1	41.420	169	99	0	198	366	4	172
## 4606	NP_001348394.1	XP_021324489.1	41.549	142	83	0	225	366	3	144
## 4607	NP_001348394.1	XP_021324420.1	39.252	214	130	0	153	366	115	328
## 4608	NP_001348394.1	XP_021324420.1	37.500	224	140	0	143	366	49	272
## 4609	NP_001348394.1	XP_021324420.1	36.885	244	148	2	99	339	89	329
## 4610	NP_001348394.1	XP_021324420.1	39.344	61	37	0	308	368	74	134
## 4611	NP_001348394.1	XP_021324519.1	42.056	214	124	0	153	366	58	271
## 4612	NP_001348394.1	XP_021324519.1	41.969	193	112	0	174	366	51	243
## 4613	NP_001348394.1	XP_021324519.1	42.945	163	93	0	153	315	114	276
## 4614	NP_001348394.1	XP_005161013.1	37.963	216	131	1	154	369	81	293
## 4615	NP_001348394.1	XP_005161013.1	41.935	186	108	0	153	338	105	290
## 4616	NP_001349068.1	XP_021331369.1	54.198	262	120	0	58	319	23	284
## 4617	NP_001349068.1	XP_021331369.1	53.053	262	123	0	58	319	79	340
## 4618	NP_001349068.1	XP_021331369.1	51.953	256	123	0	60	315	53	308
## 4619	NP_001349068.1	XP_021331369.1	52.756	254	120	0	58	311	107	360
## 4620	NP_001349068.1	XP_021331369.1	53.386	251	117	0	65	315	2	252
## 4621	NP_001349068.1	XP_021331369.1	53.000	200	94	0	58	257	163	362
## 4622	NP_001349068.1	XP_021331369.1	48.810	84	43	0	232	315	1	84
## 4623	NP_001349068.1	XP_021330855.1	55.814	258	114	0	58	315	95	352
## 4624	NP_001349068.1	XP_021330855.1	49.275	276	134	1	44	313	159	434
## 4625	NP_001349068.1	XP_021330855.1	50.365	274	135	1	58	330	39	312
## 4626	NP_001349068.1	XP_021330855.1	49.813	267	134	0	49	315	2	268
## 4627	NP_001349068.1	XP_021330855.1	48.188	276	137	1	47	316	134	409
## 4628	NP_001349068.1	XP_021330855.1	50.775	258	127	0	58	315	67	324
## 4629	NP_001349068.1	XP_021330855.1	48.756	201	103	0	58	258	235	435
## 4630	NP_001349068.1	XP_021330855.1	51.562	64	31	0	256	319	13	76
## 4631	NP_001349068.1	XP_017211154.1	49.013	304	152	2	33	333	33	336
## 4632	NP_001349068.1	XP_017211154.1	51.986	277	132	1	58	333	116	392

## 4633	NP_001349068.1	XP_017211154.1	54.651	258	117	0	58	315	144	401
## 4634	NP_001349068.1	XP_017211154.1	55.039	258	116	0	58	315	32	289
## 4635	NP_001349068.1	XP_017211154.1	53.101	258	121	0	58	315	88	345
## 4636	NP_001349068.1	XP_017211154.1	54.264	258	118	0	58	315	172	429
## 4637	NP_001349068.1	XP_017211154.1	53.876	258	119	0	58	315	4	261
## 4638	NP_001349068.1	XP_017211154.1	50.965	259	127	0	58	316	228	486
## 4639	NP_001349068.1	XP_017211154.1	50.781	256	126	0	58	313	256	511
## 4640	NP_001349068.1	XP_017211154.1	54.113	231	106	0	85	315	3	233
## 4641	NP_001349068.1	XP_017211154.1	52.451	204	97	0	112	315	2	205
## 4642	NP_001349068.1	XP_017211154.1	52.308	65	31	0	251	315	1	65
## 4643	NP_001349068.1	XP_021331294.1	55.212	259	116	0	58	316	145	403
## 4644	NP_001349068.1	XP_021331294.1	51.264	277	134	1	58	333	89	365
## 4645	NP_001349068.1	XP_021331294.1	53.101	258	121	0	58	315	61	318
## 4646	NP_001349068.1	XP_021331294.1	52.713	258	122	0	58	315	5	262
## 4647	NP_001349068.1	XP_021331294.1	47.039	304	158	2	33	333	6	309
## 4648	NP_001349068.1	XP_021331294.1	50.400	250	123	1	82	330	1	250
## 4649	NP_001349068.1	XP_021331294.1	50.920	163	80	0	58	220	257	419
## 4650	NP_001349068.1	XP_021331294.1	47.706	109	57	0	58	166	313	421
## 4651	NP_001349068.1	XP_021328503.1	53.333	270	126	0	50	319	193	462
## 4652	NP_001349068.1	XP_021328503.1	54.054	259	119	0	58	316	145	403
## 4653	NP_001349068.1	XP_021328503.1	49.281	278	141	0	38	315	13	290
## 4654	NP_001349068.1	XP_021328503.1	52.326	258	123	0	58	315	61	318
## 4655	NP_001349068.1	XP_021328503.1	50.775	258	127	0	58	315	117	374
## 4656	NP_001349068.1	XP_021328503.1	51.550	258	125	0	58	315	5	262
## 4657	NP_001349068.1	XP_021328503.1	52.564	234	111	0	82	315	1	234
## 4658	NP_001349068.1	XP_021328503.1	51.948	231	111	0	58	288	257	487
## 4659	NP_001349068.1	XP_021331184.1	54.580	262	119	0	58	319	134	395
## 4660	NP_001349068.1	XP_021331184.1	52.896	259	122	0	58	316	78	336
## 4661	NP_001349068.1	XP_021331184.1	53.101	258	121	0	58	315	22	279
## 4662	NP_001349068.1	XP_021331184.1	52.529	257	122	0	58	314	218	474
## 4663	NP_001349068.1	XP_021331184.1	51.550	258	125	0	58	315	190	447
## 4664	NP_001349068.1	XP_021331184.1	51.394	251	122	0	65	315	1	251
## 4665	NP_001349068.1	XP_021331184.1	49.606	254	128	0	58	311	246	499
## 4666	NP_001349068.1	XP_021328508.1	52.963	270	127	0	50	319	193	462
## 4667	NP_001349068.1	XP_021328508.1	54.054	259	119	0	58	316	145	403
## 4668	NP_001349068.1	XP_021328508.1	49.281	278	141	0	38	315	13	290
## 4669	NP_001349068.1	XP_021328508.1	52.326	258	123	0	58	315	61	318
## 4670	NP_001349068.1	XP_021328508.1	50.775	258	127	0	58	315	117	374
## 4671	NP_001349068.1	XP_021328508.1	51.550	258	125	0	58	315	5	262
## 4672	NP_001349068.1	XP_021328508.1	52.564	234	111	0	82	315	1	234
## 4673	NP_001349068.1	XP_021328508.1	52.814	231	109	0	58	288	257	487
## 4674	NP_001349068.1	XP_021326559.1	53.488	258	120	0	58	315	23	280
## 4675	NP_001349068.1	XP_021326559.1	54.198	262	120	0	58	319	107	368
## 4676	NP_001349068.1	XP_021326559.1	51.825	274	131	1	58	330	79	352
## 4677	NP_001349068.1	XP_021326559.1	52.191	251	120	0	65	315	2	252
## 4678	NP_001349068.1	XP_021326559.1	52.093	215	103	0	58	272	163	377
## 4679	NP_001349068.1	XP_021326559.1	57.857	140	59	0	176	315	1	140
## 4680	NP_001349068.1	XP_021331301.1	53.817	262	121	0	58	319	61	322
## 4681	NP_001349068.1	XP_021331301.1	54.440	259	118	0	58	316	5	263
## 4682	NP_001349068.1	XP_021331301.1	53.488	258	120	0	58	315	145	402
## 4683	NP_001349068.1	XP_021331301.1	51.550	258	125	0	58	315	117	374
## 4684	NP_001349068.1	XP_021331301.1	51.709	234	113	0	82	315	1	234
## 4685	NP_001349068.1	XP_021331301.1	52.000	175	84	0	58	232	229	403
## 4686	NP_001349068.1	XP_021331368.1	52.273	264	126	0	50	313	9	272

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## 4687 NP_001349068.1 XP_021331368.1 52.326 258 123 0 58 315 73 330
## 4688 NP_001349068.1 XP_021331368.1 49.057 265 135 0 46 310 89 353
## 4689 NP_001349068.1 XP_021331368.1 50.391 256 127 0 58 313 157 412
## 4690 NP_001349068.1 XP_021331368.1 52.049 244 117 0 70 313 1 244
## 4691 NP_001349068.1 XP_021331368.1 47.232 271 143 0 46 316 117 387
## 4692 NP_001349068.1 XP_021331368.1 47.761 201 105 0 58 258 213 413
## 4693 NP_001349068.1 XP_021331368.1 50.000 162 81 0 154 315 1 162
## 4694 NP_001349068.1 XP_021331448.1 53.817 262 121 0 58 319 5 266
## 4695 NP_001349068.1 XP_021331448.1 53.488 258 120 0 58 315 145 402
## 4696 NP_001349068.1 XP_021331448.1 53.696 257 119 0 60 316 91 347
## 4697 NP_001349068.1 XP_021331448.1 54.264 258 118 0 58 315 173 430
## 4698 NP_001349068.1 XP_021331448.1 51.938 258 124 0 58 315 117 374
## 4699 NP_001349068.1 XP_021331448.1 53.101 258 121 0 58 315 229 486
## 4700 NP_001349068.1 XP_021331448.1 52.713 258 122 0 58 315 61 318
## 4701 NP_001349068.1 XP_021331448.1 53.876 258 119 0 58 315 257 514
## 4702 NP_001349068.1 XP_021331448.1 51.172 256 125 0 60 315 35 290
## 4703 NP_001349068.1 XP_021331448.1 51.938 258 124 0 58 315 201 458
## 4704 NP_001349068.1 XP_021331448.1 49.630 270 136 0 46 315 273 542
## 4705 NP_001349068.1 XP_021331448.1 54.936 233 105 0 58 290 313 545
## 4706 NP_001349068.1 XP_021331448.1 52.137 234 112 0 82 315 1 234
## 4707 NP_001349068.1 XP_021331448.1 55.319 94 42 0 223 316 2 95
## 4708 NP_001349068.1 XP_021331293.1 53.846 260 120 0 58 317 145 404
## 4709 NP_001349068.1 XP_021331293.1 51.264 277 134 1 58 333 89 365
## 4710 NP_001349068.1 XP_021331293.1 53.101 258 121 0 58 315 61 318
## 4711 NP_001349068.1 XP_021331293.1 52.713 258 122 0 58 315 5 262
## 4712 NP_001349068.1 XP_021331293.1 47.039 304 158 2 33 333 6 309
## 4713 NP_001349068.1 XP_021331293.1 50.400 250 123 1 82 330 1 250
## 4714 NP_001349068.1 XP_021331293.1 51.046 239 117 0 58 296 173 411
## 4715 NP_001349068.1 XP_021331474.1 48.980 294 141 2 31 315 22 315
## 4716 NP_001349068.1 XP_021331474.1 50.775 258 127 0 58 315 114 371
## 4717 NP_001349068.1 XP_021331474.1 50.394 254 126 0 58 311 142 395
## 4718 NP_001349068.1 XP_021331474.1 52.500 200 95 0 58 257 198 397
## 4719 NP_001349068.1 XP_021331422.1 53.876 258 119 0 58 315 145 402
## 4720 NP_001349068.1 XP_021331422.1 53.053 262 123 0 58 319 89 350
## 4721 NP_001349068.1 XP_021331422.1 52.713 258 122 0 58 315 117 374
## 4722 NP_001349068.1 XP_021331422.1 53.150 254 119 0 58 311 173 426
## 4723 NP_001349068.1 XP_021331422.1 50.916 273 133 1 58 329 61 333
## 4724 NP_001349068.1 XP_021331422.1 53.101 258 121 0 58 315 5 262
## 4725 NP_001349068.1 XP_021331422.1 50.000 272 135 1 60 330 35 306
## 4726 NP_001349068.1 XP_021331422.1 51.709 234 113 0 82 315 1 234
## 4727 NP_001349068.1 XP_021331422.1 52.000 200 96 0 58 257 229 428
## 4728 NP_001349068.1 XP_021331422.1 50.510 196 96 1 139 333 2 197
## 4729 NP_001349068.1 XP_021328522.1 50.345 290 116 1 58 319 145 434
## 4730 NP_001349068.1 XP_021328522.1 53.383 266 124 0 50 315 193 458
## 4731 NP_001349068.1 XP_021328522.1 49.281 278 141 0 38 315 13 290
## 4732 NP_001349068.1 XP_021328522.1 51.737 259 125 0 58 316 117 375
## 4733 NP_001349068.1 XP_021328522.1 52.326 258 123 0 58 315 61 318
## 4734 NP_001349068.1 XP_021328522.1 51.550 258 125 0 58 315 5 262
## 4735 NP_001349068.1 XP_021328522.1 52.564 234 111 0 82 315 1 234
## 4736 NP_001349068.1 XP_021328522.1 53.143 175 82 0 58 232 285 459
## 4737 NP_001349068.1 XP_021331014.1 53.506 271 126 0 60 330 223 493
## 4738 NP_001349068.1 XP_021331014.1 52.326 258 123 0 58 315 165 422
## 4739 NP_001349068.1 XP_021331014.1 52.326 258 123 0 58 315 137 394
## 4740 NP_001349068.1 XP_021331014.1 51.163 258 126 0 58 315 193 450

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## 4741 NP_001349068.1 XP_021331014.1 51.938 258 124 0 58 315 109 366
## 4742 NP_001349068.1 XP_021331014.1 49.612 258 130 0 58 315 81 338
## 4743 NP_001349068.1 XP_021331014.1 45.973 298 159 2 19 315 14 310
## 4744 NP_001349068.1 XP_021331014.1 54.936 233 104 1 58 290 277 508
## 4745 NP_001349068.1 XP_021331014.1 46.970 198 105 0 119 316 58 255
## 4746 NP_001349068.1 XP_021331025.1 49.819 277 138 1 58 333 35 311
## 4747 NP_001349068.1 XP_021331025.1 49.438 267 135 0 49 315 54 320
## 4748 NP_001349068.1 XP_021331025.1 46.403 278 147 2 54 330 4 280
## 4749 NP_001349068.1 XP_021331025.1 49.794 243 119 1 58 297 119 361
## 4750 NP_001349068.1 XP_021331025.1 50.230 217 105 1 60 273 149 365
## 4751 NP_001349068.1 XP_017210610.1 52.555 274 129 1 58 330 58 331
## 4752 NP_001349068.1 XP_017210610.1 49.823 283 140 2 50 330 21 303
## 4753 NP_001349068.1 XP_017210610.1 50.787 254 125 0 58 311 86 339
## 4754 NP_001349068.1 XP_021328514.1 53.383 266 124 0 50 315 193 458
## 4755 NP_001349068.1 XP_021328514.1 49.281 278 141 0 38 315 13 290
## 4756 NP_001349068.1 XP_021328514.1 53.101 258 121 0 58 315 145 402
## 4757 NP_001349068.1 XP_021328514.1 52.326 258 123 0 58 315 61 318
## 4758 NP_001349068.1 XP_021328514.1 50.382 262 130 0 58 319 117 378
## 4759 NP_001349068.1 XP_021328514.1 51.550 258 125 0 58 315 5 262
## 4760 NP_001349068.1 XP_021328514.1 52.564 234 111 0 82 315 1 234
## 4761 NP_001349068.1 XP_021328514.1 51.429 175 85 0 58 232 285 459
## 4762 NP_001349068.1 XP_021326473.1 53.516 256 119 0 58 313 58 313
## 4763 NP_001349068.1 XP_021326473.1 50.181 277 137 1 58 333 86 362
## 4764 NP_001349068.1 XP_021326473.1 52.326 258 123 0 58 315 142 399
## 4765 NP_001349068.1 XP_021326473.1 53.543 254 118 0 60 313 32 285
## 4766 NP_001349068.1 XP_021326473.1 52.124 259 124 0 58 316 170 428
## 4767 NP_001349068.1 XP_021326473.1 53.125 256 120 0 58 313 114 369
## 4768 NP_001349068.1 XP_021326473.1 48.201 278 143 1 57 333 1 278
## 4769 NP_001349068.1 XP_021331434.1 53.053 262 123 0 50 311 14 275
## 4770 NP_001349068.1 XP_021331434.1 50.193 259 129 0 58 316 50 308
## 4771 NP_001349068.1 XP_021331434.1 51.793 251 121 0 65 315 1 251
## 4772 NP_001349068.1 XP_021331434.1 49.609 256 129 0 58 313 78 333
## 4773 NP_001349068.1 XP_021331434.1 53.304 227 106 0 93 319 1 227
## 4774 NP_001349068.1 XP_021330857.1 50.735 272 129 1 45 311 39 310
## 4775 NP_001349068.1 XP_021330857.1 49.434 265 132 2 50 313 21 284
## 4776 NP_001349068.1 XP_021330857.1 45.926 135 73 0 38 172 177 311
## 4777 NP_001349068.1 XP_021330857.1 51.327 113 54 1 203 315 35 146
## 4778 NP_001349068.1 XP_021328500.1 52.593 270 128 0 50 319 193 462
## 4779 NP_001349068.1 XP_021328500.1 54.054 259 119 0 58 316 145 403
## 4780 NP_001349068.1 XP_021328500.1 53.488 258 120 0 58 315 285 542
## 4781 NP_001349068.1 XP_021328500.1 49.281 278 141 0 38 315 13 290
## 4782 NP_001349068.1 XP_021328500.1 52.326 258 123 0 58 315 61 318
## 4783 NP_001349068.1 XP_021328500.1 52.672 262 124 0 58 319 257 518
## 4784 NP_001349068.1 XP_021328500.1 50.775 258 127 0 58 315 117 374
## 4785 NP_001349068.1 XP_021328500.1 51.550 258 125 0 58 315 5 262
## 4786 NP_001349068.1 XP_021328500.1 52.564 234 111 0 82 315 1 234
## 4787 NP_001349068.1 XP_021328500.1 53.143 175 82 0 58 232 369 543
## 4788 NP_001349068.1 XP_021331203.1 51.264 277 134 1 58 333 117 393
## 4789 NP_001349068.1 XP_021331203.1 51.986 277 132 1 58 333 61 337
## 4790 NP_001349068.1 XP_021331203.1 49.819 277 138 1 58 333 145 421
## 4791 NP_001349068.1 XP_021331203.1 52.896 259 122 0 58 316 229 487
## 4792 NP_001349068.1 XP_021331203.1 52.326 258 123 0 58 315 201 458
## 4793 NP_001349068.1 XP_021331203.1 51.550 258 125 0 58 315 33 290
## 4794 NP_001349068.1 XP_021331203.1 53.125 256 120 0 58 313 173 428

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## 4795	NP_001349068.1	XP_021331203.1	52.344	256	122	0	58	313	5	260
## 4796	NP_001349068.1	XP_021331203.1	52.174	253	120	1	82	333	1	253
## 4797	NP_001349068.1	XP_021327006.1	53.282	259	121	0	58	316	244	502
## 4798	NP_001349068.1	XP_021327006.1	49.458	277	139	1	58	333	216	492
## 4799	NP_001349068.1	XP_021327006.1	51.460	274	132	1	58	330	160	433
## 4800	NP_001349068.1	XP_021327006.1	50.388	258	128	0	58	315	132	389
## 4801	NP_001349068.1	XP_021327006.1	49.804	255	128	0	59	313	49	303
## 4802	NP_001349068.1	XP_021327006.1	45.693	267	145	0	49	315	95	361
## 4803	NP_001349068.1	XP_021327006.1	51.502	233	113	0	58	290	272	504
## 4804	NP_001349068.1	XP_021327006.1	50.655	229	113	0	87	315	49	277
## 4805	NP_001349068.1	XP_021327006.1	47.525	202	106	0	115	316	49	250
## 4806	NP_001349068.1	XP_021328499.1	52.593	270	128	0	50	319	193	462
## 4807	NP_001349068.1	XP_021328499.1	54.054	259	119	0	58	316	145	403
## 4808	NP_001349068.1	XP_021328499.1	49.281	278	141	0	38	315	13	290
## 4809	NP_001349068.1	XP_021328499.1	52.326	258	123	0	58	315	61	318
## 4810	NP_001349068.1	XP_021328499.1	50.775	258	127	0	58	315	117	374
## 4811	NP_001349068.1	XP_021328499.1	53.257	261	119	1	58	315	285	545
## 4812	NP_001349068.1	XP_021328499.1	52.075	265	124	1	58	319	257	521
## 4813	NP_001349068.1	XP_021328499.1	51.550	258	125	0	58	315	5	262
## 4814	NP_001349068.1	XP_021328499.1	52.564	234	111	0	82	315	1	234
## 4815	NP_001349068.1	XP_021328499.1	52.809	178	81	1	58	232	369	546
## 4816	NP_001349068.1	XP_021328528.1	52.593	270	128	0	50	319	221	490
## 4817	NP_001349068.1	XP_021328528.1	54.054	259	119	0	58	316	173	431
## 4818	NP_001349068.1	XP_021328528.1	49.281	278	141	0	38	315	41	318
## 4819	NP_001349068.1	XP_021328528.1	52.326	258	123	0	58	315	5	262
## 4820	NP_001349068.1	XP_021328528.1	52.326	258	123	0	58	315	89	346
## 4821	NP_001349068.1	XP_021328528.1	52.713	258	122	0	58	315	313	570
## 4822	NP_001349068.1	XP_021328528.1	50.775	258	127	0	58	315	145	402
## 4823	NP_001349068.1	XP_021328528.1	51.550	258	125	0	58	315	33	290
## 4824	NP_001349068.1	XP_021328528.1	50.763	262	129	0	58	319	285	546
## 4825	NP_001349068.1	XP_021328528.1	53.846	234	108	0	82	315	1	234
## 4826	NP_001349068.1	XP_021328528.1	52.000	175	84	0	58	232	397	571
## 4827	NP_001349068.1	XP_021331207.1	50.903	277	135	1	58	333	117	393
## 4828	NP_001349068.1	XP_021331207.1	51.986	277	132	1	58	333	61	337
## 4829	NP_001349068.1	XP_021331207.1	53.906	256	118	0	58	313	229	484
## 4830	NP_001349068.1	XP_021331207.1	49.819	277	138	1	58	333	145	421
## 4831	NP_001349068.1	XP_021331207.1	52.510	259	123	0	58	316	201	459
## 4832	NP_001349068.1	XP_021331207.1	51.938	258	124	0	58	315	33	290
## 4833	NP_001349068.1	XP_021331207.1	52.713	258	122	0	58	315	173	430
## 4834	NP_001349068.1	XP_021331207.1	51.550	258	125	0	58	315	5	262
## 4835	NP_001349068.1	XP_021331207.1	50.988	253	123	1	82	333	1	253
## 4836	NP_001349068.1	XP_021326715.1	53.937	254	117	0	58	311	104	357
## 4837	NP_001349068.1	XP_021326715.1	47.020	302	155	2	19	319	12	309
## 4838	NP_001349068.1	XP_021326715.1	51.504	266	129	0	50	315	68	333
## 4839	NP_001349068.1	XP_021326715.1	49.807	259	130	0	58	316	132	390
## 4840	NP_001349068.1	XP_021326715.1	49.609	256	129	0	58	313	160	415
## 4841	NP_001349068.1	XP_021328513.1	54.054	259	119	0	58	316	145	403
## 4842	NP_001349068.1	XP_021328513.1	52.222	270	128	1	50	319	193	461
## 4843	NP_001349068.1	XP_021328513.1	49.281	278	141	0	38	315	13	290
## 4844	NP_001349068.1	XP_021328513.1	52.326	258	123	0	58	315	61	318
## 4845	NP_001349068.1	XP_021328513.1	50.775	258	127	0	58	315	117	374
## 4846	NP_001349068.1	XP_021328513.1	51.550	258	125	0	58	315	5	262
## 4847	NP_001349068.1	XP_021328513.1	52.564	234	111	0	82	315	1	234
## 4848	NP_001349068.1	XP_021328513.1	51.515	231	111	1	58	288	257	486

## 4849	NP_001349068.1	XP_021331206.1	50.542	277	136	1	58	333	89	365
## 4850	NP_001349068.1	XP_021331206.1	51.625	277	133	1	58	333	33	309
## 4851	NP_001349068.1	XP_021331206.1	55.078	256	115	0	58	313	61	316
## 4852	NP_001349068.1	XP_021331206.1	49.819	277	138	1	58	333	117	393
## 4853	NP_001349068.1	XP_021331206.1	52.326	258	123	0	58	315	5	262
## 4854	NP_001349068.1	XP_021331206.1	52.896	259	122	0	58	316	201	459
## 4855	NP_001349068.1	XP_021331206.1	52.326	258	123	0	58	315	173	430
## 4856	NP_001349068.1	XP_021331206.1	53.125	256	120	0	58	313	145	400
## 4857	NP_001349068.1	XP_021331206.1	54.741	232	105	0	82	313	1	232
## 4858	NP_001349068.1	XP_021331206.1	44.681	94	48	2	251	340	2	95
## 4859	NP_001349068.1	XP_021331202.1	50.903	277	135	1	58	333	117	393
## 4860	NP_001349068.1	XP_021331202.1	51.986	277	132	1	58	333	61	337
## 4861	NP_001349068.1	XP_021331202.1	49.819	277	138	1	58	333	145	421
## 4862	NP_001349068.1	XP_021331202.1	52.326	258	123	0	58	315	33	290
## 4863	NP_001349068.1	XP_021331202.1	52.896	259	122	0	58	316	229	487
## 4864	NP_001349068.1	XP_021331202.1	53.906	256	118	0	58	313	89	344
## 4865	NP_001349068.1	XP_021331202.1	52.326	258	123	0	58	315	201	458
## 4866	NP_001349068.1	XP_021331202.1	52.734	256	121	0	58	313	5	260
## 4867	NP_001349068.1	XP_021331202.1	53.125	256	120	0	58	313	173	428
## 4868	NP_001349068.1	XP_021331202.1	51.383	253	122	1	82	333	1	253
## 4869	NP_001349068.1	XP_021331375.1	54.264	258	118	0	58	315	89	346
## 4870	NP_001349068.1	XP_021331375.1	53.876	258	119	0	58	315	145	402
## 4871	NP_001349068.1	XP_021331375.1	54.264	258	118	0	58	315	229	486
## 4872	NP_001349068.1	XP_021331375.1	49.640	278	140	0	38	315	13	290
## 4873	NP_001349068.1	XP_021331375.1	54.264	258	118	0	58	315	173	430
## 4874	NP_001349068.1	XP_021331375.1	53.101	258	121	0	58	315	257	514
## 4875	NP_001349068.1	XP_021331375.1	53.571	252	117	0	58	309	285	536
## 4876	NP_001349068.1	XP_021331375.1	51.163	258	126	0	58	315	5	262
## 4877	NP_001349068.1	XP_021331375.1	52.564	234	111	0	82	315	1	234
## 4878	NP_001349068.1	XP_021330828.1	55.039	258	116	0	58	315	256	513
## 4879	NP_001349068.1	XP_021330828.1	49.320	294	148	1	38	330	124	417
## 4880	NP_001349068.1	XP_021330828.1	53.488	258	120	0	58	315	172	429
## 4881	NP_001349068.1	XP_021330828.1	55.039	258	116	0	58	315	396	653
## 4882	NP_001349068.1	XP_021330828.1	52.713	258	122	0	58	315	88	345
## 4883	NP_001349068.1	XP_021330828.1	52.713	258	122	0	58	315	200	457
## 4884	NP_001349068.1	XP_021330828.1	53.101	258	121	0	58	315	368	625
## 4885	NP_001349068.1	XP_021330828.1	52.344	256	122	0	60	315	426	681
## 4886	NP_001349068.1	XP_021330828.1	52.713	258	122	0	58	315	312	569
## 4887	NP_001349068.1	XP_021330828.1	47.712	306	154	3	12	315	16	317
## 4888	NP_001349068.1	XP_021330828.1	52.326	258	123	0	58	315	116	373
## 4889	NP_001349068.1	XP_021330828.1	50.730	274	134	1	58	330	340	613
## 4890	NP_001349068.1	XP_021330828.1	51.163	258	126	0	58	315	228	485
## 4891	NP_001349068.1	XP_021330828.1	50.385	260	129	0	58	317	452	711
## 4892	NP_001349068.1	NP_001103332.1	52.490	261	123	1	50	309	41	301
## 4893	NP_001349068.1	NP_001103332.1	47.737	243	123	1	73	315	41	279
## 4894	NP_001349068.1	XP_017211180.1	50.181	277	137	1	58	333	145	421
## 4895	NP_001349068.1	XP_017211180.1	50.566	265	131	0	49	313	108	372
## 4896	NP_001349068.1	XP_017211180.1	51.562	256	124	0	58	313	173	428
## 4897	NP_001349068.1	XP_017211180.1	50.187	267	132	1	50	315	52	318
## 4898	NP_001349068.1	XP_017211180.1	50.566	265	131	0	49	313	80	344
## 4899	NP_001349068.1	XP_017211180.1	50.644	233	115	0	58	290	201	433
## 4900	NP_001349068.1	XP_017211059.1	48.675	302	150	2	19	319	25	322
## 4901	NP_001349068.1	XP_017211059.1	52.632	266	126	0	50	315	81	346
## 4902	NP_001349068.1	XP_017211059.1	51.737	259	125	0	58	316	145	403

## 4903	NP_001349068.1	XP_017211059.1	51.562	256	124	0	58	313	117	372
## 4904	NP_001349068.1	XP_021330543.1	47.910	311	155	1	6	316	315	618
## 4905	NP_001349068.1	XP_021330543.1	53.101	258	121	0	58	315	248	505
## 4906	NP_001349068.1	XP_021330543.1	51.527	262	125	1	56	315	104	365
## 4907	NP_001349068.1	XP_021330543.1	50.775	258	127	0	58	315	220	477
## 4908	NP_001349068.1	XP_021330543.1	50.193	259	129	0	58	316	416	674
## 4909	NP_001349068.1	XP_021330543.1	48.689	267	137	0	49	315	295	561
## 4910	NP_001349068.1	XP_021330543.1	47.191	267	141	0	49	315	183	449
## 4911	NP_001349068.1	XP_021330543.1	50.000	258	129	0	59	316	473	730
## 4912	NP_001349068.1	XP_021330543.1	50.781	256	126	0	58	313	500	755
## 4913	NP_001349068.1	XP_021330543.1	46.718	259	138	0	58	316	444	702
## 4914	NP_001349068.1	XP_021330543.1	47.212	269	138	3	50	315	42	309
## 4915	NP_001349068.1	XP_021330543.1	47.490	259	133	2	60	316	81	338
## 4916	NP_001349068.1	XP_021330543.1	42.268	97	56	0	49	145	687	783
## 4917	NP_001349068.1	XP_021331208.1	50.542	277	136	1	58	333	89	365
## 4918	NP_001349068.1	XP_021331208.1	50.181	277	137	1	58	333	117	393
## 4919	NP_001349068.1	XP_021331208.1	53.906	256	118	0	58	313	201	456
## 4920	NP_001349068.1	XP_021331208.1	54.264	258	118	0	58	315	61	318
## 4921	NP_001349068.1	XP_021331208.1	51.264	277	134	1	58	333	33	309
## 4922	NP_001349068.1	XP_021331208.1	52.510	259	123	0	58	316	173	431
## 4923	NP_001349068.1	XP_021331208.1	51.938	258	124	0	58	315	5	262
## 4924	NP_001349068.1	XP_021331208.1	52.713	258	122	0	58	315	145	402
## 4925	NP_001349068.1	XP_021331208.1	54.274	234	107	0	82	315	1	234
## 4926	NP_001349068.1	XP_021331208.1	44.681	94	48	2	251	340	2	95
## 4927	NP_001349068.1	XP_021331209.1	50.545	275	135	1	60	333	35	309
## 4928	NP_001349068.1	XP_021331209.1	49.819	277	138	1	58	333	61	337
## 4929	NP_001349068.1	XP_021331209.1	52.896	259	122	0	58	316	145	403
## 4930	NP_001349068.1	XP_021331209.1	52.326	258	123	0	58	315	117	374
## 4931	NP_001349068.1	XP_021331209.1	53.125	256	120	0	58	313	89	344
## 4932	NP_001349068.1	XP_021331209.1	52.344	256	122	0	58	313	5	260
## 4933	NP_001349068.1	XP_021331209.1	50.988	253	123	1	82	333	1	253
## 4934	NP_001349068.1	XP_017211184.1	51.311	267	130	0	49	315	24	290
## 4935	NP_001349068.1	XP_017211184.1	49.097	277	140	1	58	333	5	281
## 4936	NP_001349068.1	XP_017211184.1	51.282	234	114	0	82	315	1	234
## 4937	NP_001349068.1	XP_017211184.1	51.502	233	113	0	58	290	61	293
## 4938	NP_001349068.1	XP_021331231.1	51.471	272	132	0	44	315	79	350
## 4939	NP_001349068.1	XP_021331231.1	52.713	258	122	0	58	315	149	406
## 4940	NP_001349068.1	XP_021331231.1	53.876	258	119	0	58	315	121	378
## 4941	NP_001349068.1	XP_021331231.1	53.053	262	119	1	58	315	61	322
## 4942	NP_001349068.1	XP_021331231.1	51.908	262	122	1	58	315	5	266
## 4943	NP_001349068.1	XP_021331231.1	52.941	238	108	1	82	315	1	238
## 4944	NP_001349068.1	XP_021331231.1	53.648	233	108	0	58	290	177	409
## 4945	NP_001349068.1	XP_021331231.1	51.064	141	64	2	195	330	2	142
## 4946	NP_001349068.1	XP_021331232.1	53.488	258	120	0	58	315	89	346
## 4947	NP_001349068.1	XP_021331232.1	52.713	258	122	0	58	315	145	402
## 4948	NP_001349068.1	XP_021331232.1	53.876	258	119	0	58	315	117	374
## 4949	NP_001349068.1	XP_021331232.1	53.488	258	120	0	58	315	5	262
## 4950	NP_001349068.1	XP_021331232.1	51.938	258	124	0	58	315	33	290
## 4951	NP_001349068.1	XP_021331232.1	53.488	258	120	0	58	315	61	318
## 4952	NP_001349068.1	XP_021331232.1	54.274	234	107	0	82	315	1	234
## 4953	NP_001349068.1	XP_021331232.1	53.648	233	108	0	58	290	173	405
## 4954	NP_001349068.1	XP_021331232.1	54.688	256	116	0	58	313	23	278
## 4955	NP_001349068.1	XP_021331232.1	55.422	249	111	0	65	313	2	250
## 4956	NP_001349068.1	XP_021331232.1	49.802	253	127	0	58	310	51	303

## 4957	NP_001349068.1	XP_021331394.1	50.196	255	126	1	60	314	81	334
## 4958	NP_001349068.1	XP_021331394.1	46.444	239	127	1	46	284	95	332
## 4959	NP_001349068.1	XP_021331394.1	56.098	82	36	0	232	313	1	82
## 4960	NP_001349068.1	XP_021330825.1	53.488	258	120	0	58	315	313	570
## 4961	NP_001349068.1	XP_021330825.1	53.543	254	118	0	58	311	341	594
## 4962	NP_001349068.1	XP_021330825.1	49.648	284	142	1	37	319	235	518
## 4963	NP_001349068.1	XP_021330825.1	52.713	258	122	0	58	315	285	542
## 4964	NP_001349068.1	XP_021330825.1	52.500	200	95	0	58	257	397	596
## 4965	NP_001349068.1	XP_021330825.1	41.958	286	138	3	58	315	5	290
## 4966	NP_001349068.1	XP_021330825.1	50.000	208	104	0	111	318	2	209
## 4967	NP_001349068.1	XP_021330825.1	47.236	199	105	0	82	280	1	199
## 4968	NP_001349068.1	XP_021330825.1	52.318	151	72	0	166	316	1	151
## 4969	NP_001349068.1	XP_021331440.1	46.894	322	162	3	21	333	100	421
## 4970	NP_001349068.1	XP_021331440.1	52.713	258	122	0	58	315	173	430
## 4971	NP_001349068.1	XP_021331440.1	52.326	258	123	0	58	315	5	262
## 4972	NP_001349068.1	XP_021331440.1	51.527	262	127	0	58	319	89	350
## 4973	NP_001349068.1	XP_021331440.1	51.351	259	126	0	58	316	33	291
## 4974	NP_001349068.1	XP_021331440.1	49.815	271	136	0	49	319	52	322
## 4975	NP_001349068.1	XP_021331440.1	52.137	234	112	0	82	315	1	234
## 4976	NP_001349068.1	XP_021331440.1	49.490	196	95	1	46	237	245	440
## 4977	NP_001349068.1	XP_021331233.1	53.488	258	120	0	58	315	117	374
## 4978	NP_001349068.1	XP_021331233.1	52.713	258	122	0	58	315	173	430
## 4979	NP_001349068.1	XP_021331233.1	53.876	258	119	0	58	315	145	402
## 4980	NP_001349068.1	XP_021331233.1	52.713	258	122	0	58	315	5	262
## 4981	NP_001349068.1	XP_021331233.1	53.488	258	120	0	58	315	89	346
## 4982	NP_001349068.1	XP_021331233.1	51.938	258	124	0	58	315	61	318
## 4983	NP_001349068.1	XP_021331233.1	51.938	258	124	0	58	315	33	290
## 4984	NP_001349068.1	XP_021331233.1	53.419	234	109	0	82	315	1	234
## 4985	NP_001349068.1	XP_021331233.1	53.648	233	108	0	58	290	201	433
## 4986	NP_001349068.1	XP_021330830.1	53.725	255	118	0	58	312	48	302
## 4987	NP_001349068.1	XP_021330830.1	51.471	272	129	2	43	313	6	275
## 4988	NP_001349068.1	XP_021330830.1	48.583	247	123	1	69	315	7	249
## 4989	NP_001349068.1	XP_021330830.1	50.820	183	90	0	46	228	120	302
## 4990	NP_001349068.1	XP_021329621.1	52.734	256	121	0	58	313	126	381
## 4991	NP_001349068.1	XP_021329621.1	50.388	258	128	0	58	315	98	355
## 4992	NP_001349068.1	XP_021329621.1	46.403	278	148	1	39	315	50	327
## 4993	NP_001349068.1	XP_021329620.1	52.734	256	121	0	58	313	126	381
## 4994	NP_001349068.1	XP_021329620.1	50.388	258	128	0	58	315	98	355
## 4995	NP_001349068.1	XP_021329620.1	46.403	278	148	1	39	315	50	327
## 4996	NP_001349068.1	XP_021329619.1	52.734	256	121	0	58	313	126	381
## 4997	NP_001349068.1	XP_021329619.1	50.388	258	128	0	58	315	98	355
## 4998	NP_001349068.1	XP_021329619.1	46.403	278	148	1	39	315	50	327
## 4999	NP_001349068.1	XP_021329618.1	52.734	256	121	0	58	313	126	381
## 5000	NP_001349068.1	XP_021329618.1	50.388	258	128	0	58	315	98	355
## 5001	NP_001349068.1	XP_021329618.1	46.403	278	148	1	39	315	50	327
## 5002	NP_001349068.1	XP_021329617.1	52.734	256	121	0	58	313	126	381
## 5003	NP_001349068.1	XP_021329617.1	50.388	258	128	0	58	315	98	355
## 5004	NP_001349068.1	XP_021329617.1	46.403	278	148	1	39	315	50	327
## 5005	NP_001349068.1	XP_017210929.2	52.713	258	122	0	58	315	10	267
## 5006	NP_001349068.1	XP_017210929.2	52.344	256	122	0	58	313	38	293
## 5007	NP_001349068.1	XP_017210929.2	49.012	253	129	0	46	298	54	306
## 5008	NP_001349068.1	XP_017210929.2	52.301	239	114	0	77	315	1	239
## 5009	NP_001349068.1	XP_017210929.2	48.756	201	102	1	134	333	2	202
## 5010	NP_001349068.1	XP_021331421.1	50.000	276	137	1	56	330	59	334

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## 5011 NP_001349068.1 XP_021331421.1 51.751 257 124 0 56 312 3 259
## 5012 NP_001349068.1 XP_021331421.1 51.154 260 127 0 56 315 87 346
## 5013 NP_001349068.1 XP_021331421.1 51.538 260 126 0 56 315 143 402
## 5014 NP_001349068.1 XP_021331421.1 51.154 260 127 0 56 315 171 430
## 5015 NP_001349068.1 XP_021331421.1 50.769 260 128 0 56 315 115 374
## 5016 NP_001349068.1 XP_021331421.1 46.667 285 151 1 50 333 25 309
## 5017 NP_001349068.1 XP_021331421.1 52.137 234 112 0 82 315 1 234
## 5018 NP_001349068.1 XP_021331421.1 52.340 235 112 0 56 290 199 433
## 5019 NP_001349068.1 XP_021331421.1 49.490 196 98 1 139 333 2 197
## 5020 NP_001349068.1 XP_021326992.1 52.326 258 123 0 58 315 126 383
## 5021 NP_001349068.1 XP_021326992.1 51.163 258 126 0 58 315 98 355
## 5022 NP_001349068.1 XP_021326992.1 46.043 278 149 1 39 315 50 327
## 5023 NP_001349068.1 XP_021326991.1 52.326 258 123 0 58 315 126 383
## 5024 NP_001349068.1 XP_021326991.1 51.163 258 126 0 58 315 98 355
## 5025 NP_001349068.1 XP_021326991.1 46.043 278 149 1 39 315 50 327
## 5026 NP_001349068.1 XP_021326990.1 52.326 258 123 0 58 315 126 383
## 5027 NP_001349068.1 XP_021326990.1 51.163 258 126 0 58 315 98 355
## 5028 NP_001349068.1 XP_021326990.1 46.043 278 149 1 39 315 50 327
## 5029 NP_001349068.1 XP_021326989.1 52.326 258 123 0 58 315 126 383
## 5030 NP_001349068.1 XP_021326989.1 51.163 258 126 0 58 315 98 355
## 5031 NP_001349068.1 XP_021326989.1 46.043 278 149 1 39 315 50 327
## 5032 NP_001349068.1 XP_021326988.1 52.326 258 123 0 58 315 126 383
## 5033 NP_001349068.1 XP_021326988.1 51.163 258 126 0 58 315 98 355
## 5034 NP_001349068.1 XP_021326988.1 46.043 278 149 1 39 315 50 327
## 5035 NP_001349068.1 XP_021326987.1 52.326 258 123 0 58 315 126 383
## 5036 NP_001349068.1 XP_021326987.1 51.163 258 126 0 58 315 98 355
## 5037 NP_001349068.1 XP_021326987.1 46.043 278 149 1 39 315 50 327
## 5038 NP_001349068.1 XP_021326986.1 52.326 258 123 0 58 315 126 383
## 5039 NP_001349068.1 XP_021326986.1 51.163 258 126 0 58 315 98 355
## 5040 NP_001349068.1 XP_021326986.1 46.043 278 149 1 39 315 50 327
## 5041 NP_001349068.1 XP_021330529.1 52.326 258 123 0 58 315 126 383
## 5042 NP_001349068.1 XP_021330529.1 51.163 258 126 0 58 315 98 355
## 5043 NP_001349068.1 XP_021330529.1 46.043 278 149 1 39 315 50 327
## 5044 NP_001349068.1 XP_021330528.1 52.326 258 123 0 58 315 126 383
## 5045 NP_001349068.1 XP_021330528.1 51.163 258 126 0 58 315 98 355
## 5046 NP_001349068.1 XP_021330528.1 46.043 278 149 1 39 315 50 327
## 5047 NP_001349068.1 XP_021330527.1 52.326 258 123 0 58 315 126 383
## 5048 NP_001349068.1 XP_021330527.1 51.163 258 126 0 58 315 98 355
## 5049 NP_001349068.1 XP_021330527.1 46.043 278 149 1 39 315 50 327
## 5050 NP_001349068.1 XP_021330526.1 52.326 258 123 0 58 315 126 383
## 5051 NP_001349068.1 XP_021330526.1 51.163 258 126 0 58 315 98 355
## 5052 NP_001349068.1 XP_021330526.1 46.043 278 149 1 39 315 50 327
## 5053 NP_001349068.1 XP_021330525.1 52.326 258 123 0 58 315 126 383
## 5054 NP_001349068.1 XP_021330525.1 51.163 258 126 0 58 315 98 355
## 5055 NP_001349068.1 XP_021330525.1 46.043 278 149 1 39 315 50 327
## 5056 NP_001349068.1 XP_021330524.1 52.326 258 123 0 58 315 126 383
## 5057 NP_001349068.1 XP_021330524.1 51.163 258 126 0 58 315 98 355
## 5058 NP_001349068.1 XP_021330524.1 46.043 278 149 1 39 315 50 327
## 5059 NP_001349068.1 XP_021330523.1 52.326 258 123 0 58 315 126 383
## 5060 NP_001349068.1 XP_021330523.1 51.163 258 126 0 58 315 98 355
## 5061 NP_001349068.1 XP_021330523.1 46.043 278 149 1 39 315 50 327
## 5062 NP_001349068.1 XP_021326998.1 52.326 258 123 0 58 315 107 364
## 5063 NP_001349068.1 XP_021326998.1 51.163 258 126 0 58 315 79 336
## 5064 NP_001349068.1 XP_021326998.1 46.043 278 149 1 39 315 31 308

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## 5065 NP_001349068.1 XP_021326997.1 52.326 258 123 0 58 315 107 364
## 5066 NP_001349068.1 XP_021326997.1 51.163 258 126 0 58 315 79 336
## 5067 NP_001349068.1 XP_021326997.1 46.043 278 149 1 39 315 31 308
## 5068 NP_001349068.1 XP_021326996.1 52.326 258 123 0 58 315 107 364
## 5069 NP_001349068.1 XP_021326996.1 51.163 258 126 0 58 315 79 336
## 5070 NP_001349068.1 XP_021326996.1 46.043 278 149 1 39 315 31 308
## 5071 NP_001349068.1 XP_021326995.1 52.326 258 123 0 58 315 107 364
## 5072 NP_001349068.1 XP_021326995.1 51.163 258 126 0 58 315 79 336
## 5073 NP_001349068.1 XP_021326995.1 46.043 278 149 1 39 315 31 308
## 5074 NP_001349068.1 XP_021326994.1 52.326 258 123 0 58 315 107 364
## 5075 NP_001349068.1 XP_021326994.1 51.163 258 126 0 58 315 79 336
## 5076 NP_001349068.1 XP_021326994.1 46.043 278 149 1 39 315 31 308
## 5077 NP_001349068.1 XP_021326993.1 52.326 258 123 0 58 315 107 364
## 5078 NP_001349068.1 XP_021326993.1 51.163 258 126 0 58 315 79 336
## 5079 NP_001349068.1 XP_021326993.1 46.043 278 149 1 39 315 31 308
## 5080 NP_001349068.1 XP_021330536.1 52.326 258 123 0 58 315 107 364
## 5081 NP_001349068.1 XP_021330536.1 51.163 258 126 0 58 315 79 336
## 5082 NP_001349068.1 XP_021330536.1 46.043 278 149 1 39 315 31 308
## 5083 NP_001349068.1 XP_021330534.1 52.326 258 123 0 58 315 107 364
## 5084 NP_001349068.1 XP_021330534.1 51.163 258 126 0 58 315 79 336
## 5085 NP_001349068.1 XP_021330534.1 46.043 278 149 1 39 315 31 308
## 5086 NP_001349068.1 XP_021330533.1 52.326 258 123 0 58 315 107 364
## 5087 NP_001349068.1 XP_021330533.1 51.163 258 126 0 58 315 79 336
## 5088 NP_001349068.1 XP_021330533.1 46.043 278 149 1 39 315 31 308
## 5089 NP_001349068.1 XP_021330532.1 52.326 258 123 0 58 315 107 364
## 5090 NP_001349068.1 XP_021330532.1 51.163 258 126 0 58 315 79 336
## 5091 NP_001349068.1 XP_021330532.1 46.043 278 149 1 39 315 31 308
## 5092 NP_001349068.1 XP_021330531.1 52.326 258 123 0 58 315 107 364
## 5093 NP_001349068.1 XP_021330531.1 51.163 258 126 0 58 315 79 336
## 5094 NP_001349068.1 XP_021330531.1 46.043 278 149 1 39 315 31 308
## 5095 NP_001349068.1 XP_021330530.1 52.326 258 123 0 58 315 107 364
## 5096 NP_001349068.1 XP_021330530.1 51.163 258 126 0 58 315 79 336
## 5097 NP_001349068.1 XP_021330530.1 46.043 278 149 1 39 315 31 308
## 5098 NP_001349068.1 XP_021331018.1 52.692 260 123 0 58 317 167 426
## 5099 NP_001349068.1 XP_021331018.1 51.639 244 118 0 76 319 157 400
## 5100 NP_001349068.1 XP_021331018.1 51.163 215 105 0 99 313 152 366
## 5101 NP_001349068.1 XP_021331018.1 47.664 214 105 2 127 333 146 359
## 5102 NP_001349068.1 XP_021329616.1 52.734 256 121 0 58 313 151 406
## 5103 NP_001349068.1 XP_021329616.1 50.781 256 126 0 58 313 123 378
## 5104 NP_001349068.1 XP_021329616.1 46.739 276 146 1 39 313 75 350
## 5105 NP_001349068.1 XP_021331217.1 52.734 256 121 0 60 315 245 500
## 5106 NP_001349068.1 XP_021331217.1 53.906 256 118 0 60 315 273 528
## 5107 NP_001349068.1 XP_021331217.1 52.326 258 123 0 56 313 325 582
## 5108 NP_001349068.1 XP_021331217.1 50.958 261 128 0 56 316 297 557
## 5109 NP_001349068.1 XP_021331217.1 47.670 279 145 1 56 333 213 491
## 5110 NP_001349068.1 XP_021331217.1 47.312 279 146 1 56 333 157 435
## 5111 NP_001349068.1 XP_021331217.1 47.308 260 137 0 56 315 129 388
## 5112 NP_001349068.1 XP_021331217.1 47.308 260 137 0 56 315 101 360
## 5113 NP_001349068.1 XP_021331217.1 46.245 253 136 0 63 315 52 304
## 5114 NP_001349068.1 XP_021331217.1 41.063 207 114 2 106 312 19 217
## 5115 NP_001349068.1 XP_021330854.1 52.326 258 123 0 58 315 70 327
## 5116 NP_001349068.1 XP_021330854.1 48.905 274 139 1 58 330 42 315
## 5117 NP_001349068.1 XP_021330854.1 54.043 235 108 0 81 315 9 243
## 5118 NP_001349068.1 XP_021330854.1 48.450 258 133 0 58 315 14 271

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## 5119 NP_001349068.1 XP_021330854.1 52.577 194 92 0 58 251 182 375
## 5120 NP_001349068.1 XP_021330854.1 44.828 58 31 1 277 333 9 66
## 5121 NP_001349068.1 XP_017209855.2 53.516 256 119 0 58 313 301 556
## 5122 NP_001349068.1 XP_017209855.2 50.181 277 137 1 58 333 329 605
## 5123 NP_001349068.1 XP_017209855.2 53.516 256 119 0 58 313 273 528
## 5124 NP_001349068.1 XP_017209855.2 52.326 258 123 0 58 315 385 642
## 5125 NP_001349068.1 XP_017209855.2 49.819 277 138 1 58 333 245 521
## 5126 NP_001349068.1 XP_017209855.2 52.124 259 124 0 58 316 413 671
## 5127 NP_001349068.1 XP_017209855.2 53.125 256 120 0 58 313 357 612
## 5128 NP_001349068.1 XP_017209855.2 50.781 256 126 0 58 313 189 444
## 5129 NP_001349068.1 XP_017209855.2 46.570 277 147 1 58 333 161 437
## 5130 NP_001349068.1 XP_017209855.2 46.209 277 148 1 58 333 133 409
## 5131 NP_001349068.1 XP_017209855.2 44.333 300 138 2 63 333 82 381
## 5132 NP_001349068.1 XP_017209855.2 44.643 168 93 0 146 313 81 248
## 5133 NP_001349068.1 XP_021331342.1 53.462 260 121 0 56 315 171 430
## 5134 NP_001349068.1 XP_021331342.1 53.077 260 122 0 56 315 31 290
## 5135 NP_001349068.1 XP_021331342.1 50.000 260 130 0 56 315 143 402
## 5136 NP_001349068.1 XP_021331342.1 50.385 260 129 0 56 315 59 318
## 5137 NP_001349068.1 XP_021331342.1 50.385 260 129 0 56 315 3 262
## 5138 NP_001349068.1 XP_021331342.1 49.231 260 132 0 56 315 115 374
## 5139 NP_001349068.1 XP_021331342.1 49.231 260 132 0 56 315 87 346
## 5140 NP_001349068.1 XP_021331342.1 50.196 255 126 1 56 309 227 481
## 5141 NP_001349068.1 XP_021331342.1 52.564 234 111 0 82 315 1 234
## 5142 NP_001349068.1 XP_021331342.1 44.681 94 48 2 251 340 2 95
## 5143 NP_001349068.1 XP_021331204.1 53.906 256 118 0 58 313 257 512
## 5144 NP_001349068.1 XP_021331204.1 50.545 275 135 1 60 333 147 421
## 5145 NP_001349068.1 XP_021331204.1 49.819 277 138 1 58 333 173 449
## 5146 NP_001349068.1 XP_021331204.1 52.510 259 123 0 58 316 229 487
## 5147 NP_001349068.1 XP_021331204.1 51.938 258 124 0 58 315 61 318
## 5148 NP_001349068.1 XP_021331204.1 53.125 256 120 0 58 313 201 456
## 5149 NP_001349068.1 XP_021331204.1 52.734 256 121 0 58 313 117 372
## 5150 NP_001349068.1 XP_021331204.1 51.953 256 123 0 58 313 33 288
## 5151 NP_001349068.1 XP_021331204.1 48.375 277 142 1 58 333 5 281
## 5152 NP_001349068.1 XP_021331204.1 50.988 253 123 1 82 333 1 253
## 5153 NP_001349068.1 XP_021331127.1 53.257 261 122 0 58 318 145 405
## 5154 NP_001349068.1 XP_021331127.1 54.264 258 118 0 58 315 5 262
## 5155 NP_001349068.1 XP_021331127.1 51.163 258 126 0 58 315 201 458
## 5156 NP_001349068.1 XP_021331127.1 51.953 256 123 0 60 315 231 486
## 5157 NP_001349068.1 XP_021331127.1 53.488 258 120 0 58 315 89 346
## 5158 NP_001349068.1 XP_021331127.1 51.163 258 126 0 58 315 61 318
## 5159 NP_001349068.1 XP_021331127.1 50.775 258 127 0 58 315 313 570
## 5160 NP_001349068.1 XP_021331127.1 49.225 258 131 0 58 315 285 542
## 5161 NP_001349068.1 XP_021331127.1 51.709 234 113 0 58 291 341 574
## 5162 NP_001349068.1 XP_021331127.1 52.564 234 111 0 82 315 1 234
## 5163 NP_001349068.1 XP_021331127.1 60.526 38 15 0 279 316 2 39
## 5164 NP_001349068.1 XP_021331419.1 52.190 274 130 1 58 330 129 402
## 5165 NP_001349068.1 XP_021331419.1 53.516 256 119 0 58 313 101 356
## 5166 NP_001349068.1 XP_021331419.1 53.125 256 120 0 58 313 73 328
## 5167 NP_001349068.1 XP_021331419.1 51.648 273 131 1 42 313 28 300
## 5168 NP_001349068.1 XP_021331419.1 50.781 256 126 0 58 313 157 412
## 5169 NP_001349068.1 XP_021331419.1 50.617 243 120 0 58 300 185 427
## 5170 NP_001349068.1 XP_021331264.1 51.737 259 125 0 58 316 40 298
## 5171 NP_001349068.1 XP_021331264.1 51.562 256 124 0 58 313 12 267
## 5172 NP_001349068.1 XP_021331264.1 52.917 240 113 0 76 315 2 241

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## 5173	NP_001349068.1	XP_021331264.1	53.704	216	100	0	104	319	2	217
## 5174	NP_001349068.1	XP_021331164.1	54.264	258	118	0	58	315	117	374
## 5175	NP_001349068.1	XP_021331164.1	53.101	258	121	0	58	315	173	430
## 5176	NP_001349068.1	XP_021331164.1	53.516	256	119	0	60	315	91	346
## 5177	NP_001349068.1	XP_021331164.1	51.145	262	128	0	58	319	33	294
## 5178	NP_001349068.1	XP_021331164.1	51.550	258	125	0	58	315	397	654
## 5179	NP_001349068.1	XP_021331164.1	53.101	258	121	0	58	315	677	934
## 5180	NP_001349068.1	XP_021331164.1	51.163	258	126	0	58	315	145	402
## 5181	NP_001349068.1	XP_021331164.1	49.635	274	137	1	58	330	257	530
## 5182	NP_001349068.1	XP_021331164.1	50.554	271	133	1	60	329	7	277
## 5183	NP_001349068.1	XP_021331164.1	51.550	258	125	0	58	315	201	458
## 5184	NP_001349068.1	XP_021331164.1	50.542	277	136	1	58	333	369	645
## 5185	NP_001349068.1	XP_021331164.1	51.938	258	124	0	58	315	481	738
## 5186	NP_001349068.1	XP_021331164.1	51.938	258	124	0	58	315	509	766
## 5187	NP_001349068.1	XP_021331164.1	50.000	274	136	1	58	330	453	726
## 5188	NP_001349068.1	XP_021331164.1	49.630	270	136	0	46	315	301	570
## 5189	NP_001349068.1	XP_021331164.1	51.163	258	126	0	58	315	593	850
## 5190	NP_001349068.1	XP_021331164.1	52.344	256	122	0	60	315	63	318
## 5191	NP_001349068.1	XP_021331164.1	49.635	274	137	1	58	330	621	894
## 5192	NP_001349068.1	XP_021331164.1	51.550	258	125	0	58	315	649	906
## 5193	NP_001349068.1	XP_021331164.1	50.388	258	128	0	58	315	341	598
## 5194	NP_001349068.1	XP_021331164.1	50.388	258	128	0	58	315	565	822
## 5195	NP_001349068.1	XP_021331164.1	50.000	258	129	0	58	315	229	486
## 5196	NP_001349068.1	XP_021331164.1	49.612	258	130	0	58	315	425	682
## 5197	NP_001349068.1	XP_021331164.1	49.219	256	130	0	58	313	537	792
## 5198	NP_001349068.1	XP_021331164.1	51.200	250	121	1	82	330	1	250
## 5199	NP_001349068.1	XP_021331164.1	51.931	233	112	0	58	290	705	937
## 5200	NP_001349068.1	XP_017211134.1	47.157	299	153	2	19	316	25	319
## 5201	NP_001349068.1	XP_017211134.1	47.257	237	125	0	49	285	136	372
## 5202	NP_001349068.1	XP_017211134.1	51.282	117	57	0	203	319	66	182
## 5203	NP_001349068.1	XP_009298896.2	48.148	297	152	1	19	315	25	319
## 5204	NP_001349068.1	XP_009298896.2	51.737	259	125	0	58	316	118	376
## 5205	NP_001349068.1	XP_009298896.2	51.562	256	124	0	58	313	90	345
## 5206	NP_001349068.1	XP_009298896.2	53.361	238	111	0	82	319	58	295
## 5207	NP_001349068.1	XP_003198540.5	55.426	258	115	0	58	315	394	651
## 5208	NP_001349068.1	XP_003198540.5	55.426	258	115	0	58	315	562	819
## 5209	NP_001349068.1	XP_003198540.5	53.876	258	119	0	58	315	310	567
## 5210	NP_001349068.1	XP_003198540.5	53.488	258	120	0	58	315	338	595
## 5211	NP_001349068.1	XP_003198540.5	48.639	294	150	1	38	330	262	555
## 5212	NP_001349068.1	XP_003198540.5	54.264	258	118	0	58	315	450	707
## 5213	NP_001349068.1	XP_003198540.5	50.000	280	134	1	42	315	204	483
## 5214	NP_001349068.1	XP_003198540.5	53.488	258	120	0	58	315	534	791
## 5215	NP_001349068.1	XP_003198540.5	52.555	274	129	1	58	330	506	779
## 5216	NP_001349068.1	XP_003198540.5	52.326	258	123	0	58	315	590	847
## 5217	NP_001349068.1	XP_003198540.5	52.326	258	123	0	58	315	478	735
## 5218	NP_001349068.1	XP_003198540.5	52.672	262	120	1	58	315	194	455
## 5219	NP_001349068.1	XP_003198540.5	51.550	258	125	0	58	315	254	511
## 5220	NP_001349068.1	XP_003198540.5	51.538	260	126	0	58	317	618	877
## 5221	NP_001349068.1	XP_003198540.5	46.809	282	146	1	38	315	146	427
## 5222	NP_001349068.1	XP_003198540.5	47.490	259	136	0	38	296	626	884
## 5223	NP_001349068.1	XP_003198540.5	46.181	288	123	1	60	315	56	343
## 5224	NP_001349068.1	XP_003198540.5	41.053	285	132	2	63	315	35	315
## 5225	NP_001349068.1	XP_003198540.5	42.262	168	93	1	146	313	34	197
## 5226	NP_001349068.1	XP_021331225.1	53.543	254	118	0	58	311	190	443

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## 5227 NP_001349068.1 XP_021331225.1 51.119 268 131 0 48 315 96 363
## 5228 NP_001349068.1 XP_021331225.1 50.973 257 126 0 59 315 51 307
## 5229 NP_001349068.1 XP_021331225.1 51.538 260 126 0 60 319 136 395
## 5230 NP_001349068.1 XP_021331225.1 50.775 258 127 0 58 315 78 335
## 5231 NP_001349068.1 XP_021331225.1 51.504 266 129 0 50 315 154 419
## 5232 NP_001349068.1 XP_021331225.1 50.193 259 129 0 58 316 218 476
## 5233 NP_001349068.1 XP_021331225.1 50.000 256 128 0 58 313 246 501
## 5234 NP_001349068.1 XP_021331225.1 49.593 246 124 0 70 315 34 279
## 5235 NP_001349068.1 XP_021331225.1 49.356 233 117 1 98 329 34 266
## 5236 NP_001349068.1 XP_021331133.1 51.969 254 122 0 60 313 91 344
## 5237 NP_001349068.1 XP_021331133.1 48.913 276 138 2 39 313 43 316
## 5238 NP_001349068.1 XP_021331133.1 49.372 239 121 0 58 296 117 355
## 5239 NP_001349068.1 XP_021331133.1 49.393 247 124 1 88 333 63 309
## 5240 NP_001349068.1 NP_001314815.1 53.184 267 124 1 50 315 52 318
## 5241 NP_001349068.1 NP_001314815.1 52.361 233 111 0 58 290 89 321
## 5242 NP_001349068.1 NP_001314815.1 52.991 117 55 0 203 319 66 182
## 5243 NP_001349068.1 XP_017211047.2 54.264 258 118 0 58 315 313 570
## 5244 NP_001349068.1 XP_017211047.2 53.876 258 119 0 58 315 425 682
## 5245 NP_001349068.1 XP_017211047.2 53.876 258 119 0 58 315 229 486
## 5246 NP_001349068.1 XP_017211047.2 49.828 291 143 2 41 330 102 390
## 5247 NP_001349068.1 XP_017211047.2 52.326 258 123 0 58 315 341 598
## 5248 NP_001349068.1 XP_017211047.2 48.772 285 144 1 33 315 230 514
## 5249 NP_001349068.1 XP_017211047.2 46.865 303 160 1 29 330 172 474
## 5250 NP_001349068.1 XP_017211047.2 49.442 269 136 0 47 315 386 654
## 5251 NP_001349068.1 XP_017211047.2 51.550 258 125 0 58 315 369 626
## 5252 NP_001349068.1 XP_017211047.2 48.592 284 145 1 33 315 119 402
## 5253 NP_001349068.1 XP_017211047.2 50.388 258 128 0 58 315 285 542
## 5254 NP_001349068.1 XP_017211047.2 50.775 258 127 0 58 315 89 346
## 5255 NP_001349068.1 XP_017211047.2 50.000 258 129 0 58 315 33 290
## 5256 NP_001349068.1 XP_017211047.2 50.000 258 129 0 58 315 5 262
## 5257 NP_001349068.1 XP_017211047.2 51.502 233 113 0 58 290 453 685
## 5258 NP_001349068.1 XP_017211047.2 49.573 234 118 0 82 315 1 234
## 5259 NP_001349068.1 XP_017211047.2 38.182 55 33 1 280 333 3 57
## 5260 NP_001349068.1 XP_017209999.1 46.823 299 154 2 19 316 25 319
## 5261 NP_001349068.1 XP_017209999.1 47.603 292 145 2 30 313 53 344
## 5262 NP_001349068.1 XP_017209999.1 53.757 173 80 0 147 319 66 238
## 5263 NP_001349068.1 XP_021331302.1 53.101 258 121 0 58 315 81 338
## 5264 NP_001349068.1 XP_021331302.1 53.937 254 117 0 62 315 1 254
## 5265 NP_001349068.1 XP_021331302.1 52.326 258 123 0 58 315 137 394
## 5266 NP_001349068.1 XP_021331302.1 52.713 258 122 0 58 315 249 506
## 5267 NP_001349068.1 XP_021331302.1 52.326 258 123 0 58 315 25 282
## 5268 NP_001349068.1 XP_021331302.1 52.326 258 123 0 58 315 277 534
## 5269 NP_001349068.1 XP_021331302.1 52.326 258 123 0 58 315 221 478
## 5270 NP_001349068.1 XP_021331302.1 52.326 258 123 0 58 315 193 450
## 5271 NP_001349068.1 XP_021331302.1 52.326 258 123 0 58 315 53 310
## 5272 NP_001349068.1 XP_021331302.1 52.326 258 123 0 58 315 109 366
## 5273 NP_001349068.1 XP_021331302.1 52.326 258 123 0 58 315 305 562
## 5274 NP_001349068.1 XP_021331302.1 51.938 258 124 0 58 315 165 422
## 5275 NP_001349068.1 XP_021331302.1 51.953 256 123 0 58 313 333 588
## 5276 NP_001349068.1 XP_021331302.1 49.782 229 115 0 58 286 361 589
## 5277 NP_001349068.1 XP_021331302.1 51.980 202 97 0 118 319 1 202
## 5278 NP_001349068.1 XP_021331302.1 50.340 147 73 0 58 204 445 591
## 5279 NP_001349068.1 XP_017211020.1 50.746 268 132 0 48 315 79 346
## 5280 NP_001349068.1 XP_017211020.1 51.172 256 125 0 60 315 119 374

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## 5281 NP_001349068.1 XP_017211020.1 48.057 283 145 2 50 330 52 334
## 5282 NP_001349068.1 XP_017211020.1 53.879 232 107 0 59 290 146 377
## 5283 NP_001349068.1 XP_017211020.1 48.780 246 122 1 70 315 49 290
## 5284 NP_001349068.1 XP_017211020.1 52.451 204 97 0 58 261 173 376
## 5285 NP_001349068.1 XP_017211020.1 49.664 149 75 0 58 206 229 377
## 5286 NP_001349068.1 XP_021331048.1 53.101 258 121 0 58 315 60 317
## 5287 NP_001349068.1 XP_021331048.1 52.713 258 122 0 56 313 2 259
## 5288 NP_001349068.1 XP_021331048.1 52.326 258 123 0 58 315 144 401
## 5289 NP_001349068.1 XP_021331048.1 50.388 258 128 0 58 315 32 289
## 5290 NP_001349068.1 XP_021331048.1 50.775 258 127 0 58 315 88 345
## 5291 NP_001349068.1 XP_021331048.1 48.375 277 142 1 58 333 228 504
## 5292 NP_001349068.1 XP_021331048.1 49.225 258 131 0 58 315 284 541
## 5293 NP_001349068.1 XP_021331048.1 48.519 270 139 0 46 315 300 569
## 5294 NP_001349068.1 XP_021331048.1 48.837 258 132 0 58 315 200 457
## 5295 NP_001349068.1 XP_021331048.1 49.225 258 131 0 58 315 172 429
## 5296 NP_001349068.1 XP_021331048.1 47.292 277 145 1 58 333 116 392
## 5297 NP_001349068.1 XP_021331048.1 49.356 233 118 0 58 290 340 572
## 5298 NP_001349068.1 XP_021331048.1 46.914 81 42 1 251 330 1 81
## 5299 NP_001349068.1 XP_021331048.1 50.000 66 33 0 56 121 506 571
## 5300 NP_001349068.1 XP_021327225.1 53.101 258 121 0 58 315 145 402
## 5301 NP_001349068.1 XP_021327225.1 51.550 258 125 0 58 315 229 486
## 5302 NP_001349068.1 XP_021327225.1 53.101 258 121 0 58 315 313 570
## 5303 NP_001349068.1 XP_021327225.1 50.775 258 127 0 58 315 61 318
## 5304 NP_001349068.1 XP_021327225.1 53.150 254 119 0 58 311 425 678
## 5305 NP_001349068.1 XP_021327225.1 49.458 277 139 1 58 333 397 673
## 5306 NP_001349068.1 XP_021327225.1 50.370 270 134 0 46 315 105 374
## 5307 NP_001349068.1 XP_021327225.1 50.373 268 133 0 48 315 23 290
## 5308 NP_001349068.1 XP_021327225.1 50.000 268 134 0 48 315 191 458
## 5309 NP_001349068.1 XP_021327225.1 50.775 258 127 0 58 315 257 514
## 5310 NP_001349068.1 XP_021327225.1 50.000 268 134 0 48 315 359 626
## 5311 NP_001349068.1 XP_021327225.1 50.388 258 128 0 58 315 89 346
## 5312 NP_001349068.1 XP_021327225.1 48.889 270 138 0 46 315 273 542
## 5313 NP_001349068.1 XP_021327225.1 48.828 256 131 0 58 313 5 260
## 5314 NP_001349068.1 XP_021327225.1 52.991 234 110 0 82 315 1 234
## 5315 NP_001349068.1 XP_021331201.1 53.876 258 119 0 58 315 257 514
## 5316 NP_001349068.1 XP_021331201.1 53.053 262 123 0 58 319 341 602
## 5317 NP_001349068.1 XP_021331201.1 52.713 258 122 0 58 315 61 318
## 5318 NP_001349068.1 XP_021331201.1 50.545 275 135 1 60 333 147 421
## 5319 NP_001349068.1 XP_021331201.1 49.819 277 138 1 58 333 173 449
## 5320 NP_001349068.1 XP_021331201.1 53.488 258 120 0 58 315 117 374
## 5321 NP_001349068.1 XP_021331201.1 52.326 258 123 0 58 315 229 486
## 5322 NP_001349068.1 XP_021331201.1 52.713 258 122 0 58 315 201 458
## 5323 NP_001349068.1 XP_021331201.1 50.181 277 137 1 58 333 89 365
## 5324 NP_001349068.1 XP_021331201.1 51.145 262 128 0 58 319 397 658
## 5325 NP_001349068.1 XP_021331201.1 51.550 258 125 0 58 315 33 290
## 5326 NP_001349068.1 XP_021331201.1 48.736 277 141 1 58 333 5 281
## 5327 NP_001349068.1 XP_021331201.1 50.000 258 129 0 58 315 313 570
## 5328 NP_001349068.1 XP_021331201.1 52.569 253 119 1 82 333 1 253
## 5329 NP_001349068.1 XP_021331201.1 48.837 258 132 0 58 315 425 682
## 5330 NP_001349068.1 XP_021331201.1 46.494 271 145 0 45 315 496 766
## 5331 NP_001349068.1 XP_021331201.1 47.266 256 135 0 58 313 537 792
## 5332 NP_001349068.1 XP_021331201.1 42.587 317 153 2 58 345 453 769
## 5333 NP_001349068.1 XP_021331201.1 46.124 258 139 0 58 315 593 850
## 5334 NP_001349068.1 XP_021331201.1 48.000 175 91 0 58 232 677 851

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## 5335 NP_001349068.1 XP_021331032.1 52.713 258 122 0 58 315 143 400
## 5336 NP_001349068.1 XP_021331032.1 48.881 268 137 0 48 315 77 344
## 5337 NP_001349068.1 XP_021331032.1 52.713 258 122 0 58 315 171 428
## 5338 NP_001349068.1 XP_021331032.1 49.248 266 135 0 50 315 107 372
## 5339 NP_001349068.1 XP_021331032.1 47.273 275 144 1 60 333 61 335
## 5340 NP_001349068.1 XP_021331032.1 46.853 286 124 1 58 315 255 540
## 5341 NP_001349068.1 XP_021331032.1 51.938 258 124 0 58 315 227 484
## 5342 NP_001349068.1 XP_021331032.1 46.205 303 116 2 58 313 339 641
## 5343 NP_001349068.1 XP_021331032.1 46.290 283 124 1 58 312 283 565
## 5344 NP_001349068.1 XP_021331032.1 47.727 220 96 1 58 258 423 642
## 5345 NP_001349068.1 XP_021331032.1 40.000 45 27 0 46 90 598 642
## 5346 NP_001349068.1 XP_021331392.1 49.827 289 144 1 46 333 49 337
## 5347 NP_001349068.1 XP_021331392.1 49.281 278 141 0 38 315 13 290
## 5348 NP_001349068.1 XP_021331392.1 51.938 258 124 0 58 315 5 262
## 5349 NP_001349068.1 XP_021331392.1 50.391 256 127 0 58 313 117 372
## 5350 NP_001349068.1 XP_021331392.1 52.991 234 110 0 82 315 1 234
## 5351 NP_001349068.1 XP_021331304.1 52.157 255 122 0 58 312 145 399
## 5352 NP_001349068.1 XP_021331304.1 50.730 274 134 1 58 330 117 390
## 5353 NP_001349068.1 XP_021331304.1 50.775 258 127 0 56 313 59 316
## 5354 NP_001349068.1 XP_021331304.1 48.462 260 134 0 56 315 31 290
## 5355 NP_001349068.1 XP_021331304.1 50.198 253 126 0 63 315 10 262
## 5356 NP_001349068.1 XP_021331304.1 48.188 276 142 1 56 330 87 362
## 5357 NP_001349068.1 XP_021331304.1 49.573 234 118 0 82 315 1 234
## 5358 NP_001349068.1 XP_021331304.1 45.082 122 67 0 195 316 2 123
## 5359 NP_001349068.1 XP_021331433.1 55.378 251 112 0 65 315 2 252
## 5360 NP_001349068.1 XP_021331433.1 53.488 258 120 0 58 315 23 280
## 5361 NP_001349068.1 XP_021331433.1 52.344 256 122 0 60 315 81 336
## 5362 NP_001349068.1 XP_021331433.1 46.326 313 164 2 46 354 95 407
## 5363 NP_001349068.1 XP_021331433.1 49.225 258 131 0 58 315 51 308
## 5364 NP_001349068.1 XP_021331433.1 52.381 84 40 0 232 315 1 84
## 5365 NP_001349068.1 NP_001307132.1 49.064 267 135 1 50 315 52 318
## 5366 NP_001349068.1 NP_001307132.1 49.793 241 121 0 48 288 79 319
## 5367 NP_001349068.1 NP_001307132.1 48.990 198 101 0 119 316 66 263
## 5368 NP_001349068.1 NP_001307132.1 54.286 175 80 0 61 235 148 322
## 5369 NP_001349068.1 NP_001307132.1 48.387 93 48 0 58 150 229 321
## 5370 NP_001349068.1 XP_017211286.1 52.434 267 126 1 50 315 52 318
## 5371 NP_001349068.1 XP_017211286.1 51.562 256 124 0 58 313 89 344
## 5372 NP_001349068.1 XP_017211286.1 53.712 229 106 0 58 286 117 345
## 5373 NP_001349068.1 XP_017211286.1 52.381 147 70 0 58 204 201 347
## 5374 NP_001349068.1 XP_021331331.1 51.460 274 132 1 58 330 201 474
## 5375 NP_001349068.1 XP_021331331.1 51.765 255 123 0 58 312 229 483
## 5376 NP_001349068.1 XP_021331331.1 48.872 266 136 0 50 315 137 402
## 5377 NP_001349068.1 XP_021331331.1 48.000 275 142 1 60 333 175 449
## 5378 NP_001349068.1 XP_021331331.1 50.388 258 128 0 58 315 61 318
## 5379 NP_001349068.1 XP_021331331.1 46.739 276 141 1 44 313 69 344
## 5380 NP_001349068.1 XP_021331331.1 47.940 267 139 0 49 315 108 374
## 5381 NP_001349068.1 XP_021331331.1 45.522 268 146 0 48 315 23 290
## 5382 NP_001349068.1 XP_021331331.1 45.312 256 140 0 60 315 7 262
## 5383 NP_001349068.1 XP_021331331.1 47.436 234 123 0 82 315 1 234
## 5384 NP_001349068.1 XP_021331166.1 54.688 256 116 0 60 315 147 402
## 5385 NP_001349068.1 XP_021331166.1 49.640 278 139 1 58 334 61 338
## 5386 NP_001349068.1 XP_021331166.1 55.039 258 116 0 58 315 369 626
## 5387 NP_001349068.1 XP_021331166.1 52.713 258 122 0 58 315 397 654
## 5388 NP_001349068.1 XP_021331166.1 52.713 258 122 0 58 315 117 374

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## 5389 NP_001349068.1 XP_021331166.1 52.510 259 123 0 58 316 481 739
## 5390 NP_001349068.1 XP_021331166.1 51.625 277 133 1 58 333 341 617
## 5391 NP_001349068.1 XP_021331166.1 53.125 256 120 0 58 313 509 764
## 5392 NP_001349068.1 XP_021331166.1 50.182 275 136 1 60 333 427 701
## 5393 NP_001349068.1 XP_021331166.1 52.326 258 123 0 58 315 89 346
## 5394 NP_001349068.1 XP_021331166.1 52.326 258 123 0 58 315 313 570
## 5395 NP_001349068.1 XP_021331166.1 51.625 277 133 1 58 333 229 505
## 5396 NP_001349068.1 XP_021331166.1 53.101 258 121 0 58 315 453 710
## 5397 NP_001349068.1 XP_021331166.1 50.958 261 128 0 58 318 33 293
## 5398 NP_001349068.1 XP_021331166.1 52.713 258 122 0 58 315 285 542
## 5399 NP_001349068.1 XP_021331166.1 49.819 277 138 1 58 333 257 533
## 5400 NP_001349068.1 XP_021331166.1 48.727 275 140 1 58 331 5 279
## 5401 NP_001349068.1 XP_021331166.1 47.797 295 152 2 40 333 184 477
## 5402 NP_001349068.1 XP_021331166.1 51.779 253 121 1 82 333 1 253
## 5403 NP_001349068.1 XP_021331253.1 51.362 257 125 0 59 315 112 368
## 5404 NP_001349068.1 XP_021331253.1 50.000 256 128 0 58 313 55 310
## 5405 NP_001349068.1 XP_021331253.1 52.344 256 122 0 58 313 27 282
## 5406 NP_001349068.1 XP_021331253.1 49.609 256 129 0 58 313 83 338
## 5407 NP_001349068.1 XP_021331253.1 50.198 253 126 0 59 311 140 392
## 5408 NP_001349068.1 XP_021331253.1 47.232 271 143 0 46 316 155 425
## 5409 NP_001349068.1 XP_021331253.1 48.699 269 137 1 63 330 4 272
## 5410 NP_001349068.1 XP_017211261.1 47.826 299 151 2 19 316 25 319
## 5411 NP_001349068.1 XP_017211261.1 51.953 256 123 0 58 313 117 372
## 5412 NP_001349068.1 XP_017211261.1 49.064 267 136 0 50 316 81 347
## 5413 NP_001349068.1 XP_017211261.1 50.289 173 86 0 147 319 66 238
## 5414 NP_001349068.1 XP_021331366.1 55.242 248 111 0 68 315 3 250
## 5415 NP_001349068.1 XP_021331366.1 50.373 268 133 0 48 315 11 278
## 5416 NP_001349068.1 XP_021331366.1 51.953 256 123 0 58 313 77 332
## 5417 NP_001349068.1 XP_021331366.1 51.163 258 126 0 58 315 49 306
## 5418 NP_001349068.1 XP_021331366.1 49.818 275 136 2 58 330 133 407
## 5419 NP_001349068.1 XP_021331366.1 52.252 222 106 0 94 315 1 222
## 5420 NP_001349068.1 XP_021331366.1 51.000 200 97 1 58 256 217 416
## 5421 NP_001349068.1 XP_021331366.1 46.000 150 80 1 60 208 275 424
## 5422 NP_001349068.1 XP_021331366.1 37.778 45 27 1 290 333 1 45
## 5423 NP_001349068.1 XP_009298780.3 51.550 258 125 0 58 315 25 282
## 5424 NP_001349068.1 XP_009298780.3 51.550 258 125 0 58 315 81 338
## 5425 NP_001349068.1 XP_009298780.3 50.388 258 128 0 58 315 137 394
## 5426 NP_001349068.1 XP_009298780.3 52.362 254 121 0 62 315 1 254
## 5427 NP_001349068.1 XP_009298780.3 50.965 259 127 0 58 316 109 367
## 5428 NP_001349068.1 XP_009298780.3 50.400 250 124 0 58 307 165 414
## 5429 NP_001349068.1 XP_009298780.3 50.661 227 112 0 90 316 1 227
## 5430 NP_001349068.1 XP_009298780.3 49.505 202 102 0 118 319 1 202
## 5431 NP_001349068.1 XP_021331165.1 54.264 258 118 0 58 315 173 430
## 5432 NP_001349068.1 XP_021331165.1 51.880 266 128 0 50 315 137 402
## 5433 NP_001349068.1 XP_021331165.1 53.543 254 118 0 58 311 538 791
## 5434 NP_001349068.1 XP_021331165.1 50.388 258 128 0 58 315 89 346
## 5435 NP_001349068.1 XP_021331165.1 50.965 259 127 0 58 316 229 487
## 5436 NP_001349068.1 XP_021331165.1 47.653 277 144 1 58 333 61 337
## 5437 NP_001349068.1 XP_021331165.1 49.810 263 131 1 58 319 481 743
## 5438 NP_001349068.1 XP_021331165.1 49.225 258 131 0 58 315 33 290
## 5439 NP_001349068.1 XP_021331165.1 49.807 259 130 0 58 316 566 824
## 5440 NP_001349068.1 XP_021331165.1 51.779 253 122 0 63 315 515 767
## 5441 NP_001349068.1 XP_021331165.1 50.391 256 127 0 58 313 257 512
## 5442 NP_001349068.1 XP_021331165.1 50.000 256 128 0 58 313 594 849

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## 5443	NP_001349068.1	XP_021331165.1	48.438	256	132	0	60	315	7	262
## 5444	NP_001349068.1	XP_021331165.1	48.718	234	120	0	82	315	1	234
## 5445	NP_001349068.1	XP_021331323.1	50.775	258	127	0	58	315	8	265
## 5446	NP_001349068.1	XP_021331323.1	52.016	248	119	0	58	305	36	283
## 5447	NP_001349068.1	XP_021331323.1	51.489	235	114	0	81	315	3	237
## 5448	NP_001349068.1	XP_021331323.1	49.091	110	56	0	58	167	176	285
## 5449	NP_001349068.1	XP_017211176.1	51.145	262	122	1	58	313	88	349
## 5450	NP_001349068.1	XP_017211176.1	44.408	304	159	3	19	316	25	324
## 5451	NP_001349068.1	XP_017211176.1	52.423	227	108	0	93	319	67	293
## 5452	NP_001349068.1	XP_017211176.1	44.118	170	89	1	38	201	180	349
## 5453	NP_001349068.1	XP_021330537.1	52.734	256	121	0	60	315	109	364
## 5454	NP_001349068.1	XP_021330537.1	48.134	268	139	0	48	315	69	336
## 5455	NP_001349068.1	XP_021330537.1	50.187	267	132	1	50	315	42	308
## 5456	NP_001349068.1	XP_021330537.1	51.948	231	111	0	60	290	137	367
## 5457	NP_001349068.1	XP_021330537.1	48.529	204	105	0	58	261	163	366
## 5458	NP_001349068.1	XP_021330537.1	46.203	158	85	0	49	206	210	367
## 5459	NP_001349068.1	XP_021330537.1	47.863	117	61	0	200	316	53	169
## 5460	NP_001349068.1	XP_021326474.1	52.734	256	121	0	58	313	5	260
## 5461	NP_001349068.1	XP_021326474.1	50.769	260	128	0	58	317	33	292
## 5462	NP_001349068.1	XP_021326474.1	56.034	232	102	0	82	313	1	232
## 5463	NP_001349068.1	XP_021331239.1	49.635	274	137	1	58	330	4	277
## 5464	NP_001349068.1	XP_021331239.1	51.550	258	125	0	58	315	32	289
## 5465	NP_001349068.1	XP_021331239.1	51.550	258	125	0	58	315	60	317
## 5466	NP_001349068.1	XP_021331239.1	52.381	231	110	0	85	315	3	233
## 5467	NP_001349068.1	XP_021331239.1	51.724	232	112	0	58	289	88	319
## 5468	NP_001349068.1	XP_021331239.1	50.490	204	101	0	112	315	2	205
## 5469	NP_001349068.1	XP_021331239.1	50.000	74	37	0	49	122	247	320
## 5470	NP_001349068.1	XP_021331239.1	49.231	65	33	0	251	315	1	65
## 5471	NP_001349068.1	XP_021331041.1	49.814	269	134	1	63	330	122	390
## 5472	NP_001349068.1	XP_021331041.1	50.000	254	127	0	58	311	145	398
## 5473	NP_001349068.1	XP_021331041.1	48.954	239	122	0	58	296	173	411
## 5474	NP_001349068.1	XP_021331266.1	51.986	277	132	1	58	333	576	852
## 5475	NP_001349068.1	XP_021331266.1	52.708	277	130	1	58	333	604	880
## 5476	NP_001349068.1	XP_021331266.1	53.876	258	119	0	58	315	1444	1701
## 5477	NP_001349068.1	XP_021331266.1	52.434	267	127	0	49	315	679	945
## 5478	NP_001349068.1	XP_021331266.1	52.555	274	129	1	58	330	520	793
## 5479	NP_001349068.1	XP_021331266.1	53.876	258	119	0	58	315	1416	1673
## 5480	NP_001349068.1	XP_021331266.1	53.876	258	119	0	58	315	492	749
## 5481	NP_001349068.1	XP_021331266.1	50.903	277	135	1	58	333	632	908
## 5482	NP_001349068.1	XP_021331266.1	53.101	258	121	0	58	315	660	917
## 5483	NP_001349068.1	XP_021331266.1	53.876	258	119	0	58	315	2312	2569
## 5484	NP_001349068.1	XP_021331266.1	51.825	274	131	1	58	330	2116	2389
## 5485	NP_001349068.1	XP_021331266.1	53.101	258	121	0	58	315	2424	2681
## 5486	NP_001349068.1	XP_021331266.1	51.311	267	130	0	49	315	763	1029
## 5487	NP_001349068.1	XP_021331266.1	51.625	277	133	1	58	333	716	992
## 5488	NP_001349068.1	XP_021331266.1	53.101	258	121	0	58	315	2340	2597
## 5489	NP_001349068.1	XP_021331266.1	52.713	258	122	0	58	315	548	805
## 5490	NP_001349068.1	XP_021331266.1	53.101	258	121	0	58	315	2452	2709
## 5491	NP_001349068.1	XP_021331266.1	48.951	286	145	1	49	333	791	1076
## 5492	NP_001349068.1	XP_021331266.1	53.101	258	121	0	58	315	436	693
## 5493	NP_001349068.1	XP_021331266.1	51.737	259	125	0	58	316	1360	1618
## 5494	NP_001349068.1	XP_021331266.1	53.876	258	119	0	58	315	464	721
## 5495	NP_001349068.1	XP_021331266.1	53.101	258	121	0	58	315	2228	2485
## 5496	NP_001349068.1	XP_021331266.1	53.876	258	119	0	58	315	744	1001

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## 5497 NP_001349068.1 XP_021331266.1 53.101 258 121 0 58 315 2256 2513
## 5498 NP_001349068.1 XP_021331266.1 52.344 256 122 0 60 315 2202 2457
## 5499 NP_001349068.1 XP_021331266.1 51.938 258 124 0 58 315 1388 1645
## 5500 NP_001349068.1 XP_021331266.1 53.125 256 120 0 58 313 884 1139
## 5501 NP_001349068.1 XP_021331266.1 51.880 266 128 0 50 315 372 637
## 5502 NP_001349068.1 XP_021331266.1 53.125 256 120 0 58 313 1808 2063
## 5503 NP_001349068.1 XP_021331266.1 51.938 258 124 0 58 315 2396 2653
## 5504 NP_001349068.1 XP_021331266.1 52.344 256 122 0 58 313 1864 2119
## 5505 NP_001349068.1 XP_021331266.1 50.181 277 137 1 58 333 856 1132
## 5506 NP_001349068.1 XP_021331266.1 49.807 259 130 0 58 316 1192 1450
## 5507 NP_001349068.1 XP_021331266.1 51.953 256 123 0 58 313 1836 2091
## 5508 NP_001349068.1 XP_021331266.1 50.360 278 137 1 58 334 408 685
## 5509 NP_001349068.1 XP_021331266.1 53.101 258 121 0 58 315 828 1085
## 5510 NP_001349068.1 XP_021331266.1 52.734 256 121 0 60 315 2510 2765
## 5511 NP_001349068.1 XP_021331266.1 51.938 258 124 0 58 315 2368 2625
## 5512 NP_001349068.1 XP_021331266.1 50.347 288 139 2 58 341 2592 2879
## 5513 NP_001349068.1 XP_021331266.1 52.326 258 123 0 58 315 1500 1757
## 5514 NP_001349068.1 XP_021331266.1 50.775 258 127 0 58 315 2284 2541
## 5515 NP_001349068.1 XP_021331266.1 50.719 278 136 1 58 334 1780 2057
## 5516 NP_001349068.1 XP_021331266.1 51.562 256 124 0 60 315 1530 1785
## 5517 NP_001349068.1 XP_021331266.1 51.163 258 126 0 58 315 2172 2429
## 5518 NP_001349068.1 XP_021331266.1 50.781 256 126 0 58 313 1892 2147
## 5519 NP_001349068.1 XP_021331266.1 50.000 258 129 0 58 315 2144 2401
## 5520 NP_001349068.1 XP_021331266.1 49.225 258 131 0 58 315 1276 1533
## 5521 NP_001349068.1 XP_021331266.1 48.507 268 138 0 48 315 1238 1505
## 5522 NP_001349068.1 XP_021331266.1 50.388 258 128 0 58 315 2480 2737
## 5523 NP_001349068.1 XP_021331266.1 51.938 258 124 0 58 315 2564 2821
## 5524 NP_001349068.1 XP_021331266.1 51.550 258 125 0 58 315 352 609
## 5525 NP_001349068.1 XP_021331266.1 51.938 258 124 0 58 315 2536 2793
## 5526 NP_001349068.1 XP_021331266.1 50.775 258 127 0 58 315 1332 1589
## 5527 NP_001349068.1 XP_021331266.1 51.172 256 125 0 58 313 968 1223
## 5528 NP_001349068.1 XP_021331266.1 49.612 258 130 0 58 315 912 1169
## 5529 NP_001349068.1 XP_021331266.1 50.752 266 131 0 50 315 1744 2009
## 5530 NP_001349068.1 XP_021331266.1 49.640 278 139 1 58 334 324 601
## 5531 NP_001349068.1 XP_021331266.1 48.450 258 133 0 58 315 1304 1561
## 5532 NP_001349068.1 XP_021331266.1 51.550 258 125 0 58 315 268 525
## 5533 NP_001349068.1 XP_021331266.1 48.828 256 131 0 58 313 1080 1335
## 5534 NP_001349068.1 XP_021331266.1 47.080 274 144 1 58 330 2060 2333
## 5535 NP_001349068.1 XP_021331266.1 45.455 319 165 3 21 330 1567 1885
## 5536 NP_001349068.1 XP_021331266.1 48.828 256 131 0 58 313 1920 2175
## 5537 NP_001349068.1 XP_021331266.1 46.154 286 126 1 58 315 1948 2233
## 5538 NP_001349068.1 XP_021331266.1 48.837 258 132 0 58 315 2032 2289
## 5539 NP_001349068.1 XP_021331266.1 50.000 258 129 0 58 315 296 553
## 5540 NP_001349068.1 XP_021331266.1 47.674 258 135 0 58 315 2088 2345
## 5541 NP_001349068.1 XP_021331266.1 46.763 278 142 1 44 315 1004 1281
## 5542 NP_001349068.1 XP_021331266.1 51.163 258 126 0 58 315 1724 1981
## 5543 NP_001349068.1 XP_021331266.1 50.775 258 127 0 58 315 240 497
## 5544 NP_001349068.1 XP_021331266.1 49.035 259 132 0 58 316 1108 1366
## 5545 NP_001349068.1 XP_021331266.1 48.450 258 133 0 58 315 184 441
## 5546 NP_001349068.1 XP_021331266.1 48.062 258 134 0 58 315 2004 2261
## 5547 NP_001349068.1 XP_021331266.1 49.225 258 131 0 58 315 1668 1925
## 5548 NP_001349068.1 XP_021331266.1 48.062 258 134 0 58 315 128 385
## 5549 NP_001349068.1 XP_021331266.1 44.403 268 149 0 48 315 1154 1421
## 5550 NP_001349068.1 XP_021331266.1 49.281 278 140 1 58 334 1696 1973

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## 5551	NP_001349068.1	XP_021331266.1	48.047	256	133	0	58	313	996	1251
## 5552	NP_001349068.1	XP_021331266.1	44.922	256	141	0	60	315	102	357
## 5553	NP_001349068.1	XP_021331266.1	43.015	272	154	1	63	333	77	348
## 5554	NP_001349068.1	XP_017211125.2	53.150	254	119	0	62	315	1	254
## 5555	NP_001349068.1	XP_017211125.2	50.000	262	131	0	58	319	25	286
## 5556	NP_001349068.1	XP_017211125.2	49.200	250	127	0	58	307	53	302
## 5557	NP_001349068.1	XP_021331140.1	49.826	287	115	2	58	315	17	303
## 5558	NP_001349068.1	XP_021331140.1	51.362	257	125	0	59	315	103	359
## 5559	NP_001349068.1	XP_021331140.1	51.163	258	126	0	58	315	130	387
## 5560	NP_001349068.1	XP_021331140.1	51.012	247	120	1	70	315	1	247
## 5561	NP_001349068.1	XP_021331140.1	51.948	231	111	0	60	290	160	390
## 5562	NP_001349068.1	XP_021331140.1	53.202	203	95	0	59	261	187	389
## 5563	NP_001349068.1	XP_021331140.1	52.841	176	83	0	58	233	214	389
## 5564	NP_001349068.1	XP_021331140.1	50.336	149	74	0	58	206	242	390
## 5565	NP_001349068.1	XP_021331425.1	50.388	258	128	0	58	315	30	287
## 5566	NP_001349068.1	XP_021331425.1	51.562	256	124	0	58	313	86	341
## 5567	NP_001349068.1	XP_021331425.1	51.550	258	125	0	58	315	58	315
## 5568	NP_001349068.1	XP_021331425.1	51.362	257	125	0	63	319	7	263
## 5569	NP_001349068.1	XP_021331425.1	48.276	232	120	0	58	289	114	345
## 5570	NP_001349068.1	XP_021331425.1	47.619	63	33	0	60	122	284	346
## 5571	NP_001349068.1	XP_021331110.1	54.264	258	118	0	58	315	583	840
## 5572	NP_001349068.1	XP_021331110.1	53.817	262	121	0	58	319	555	816
## 5573	NP_001349068.1	XP_021331110.1	46.535	303	154	2	21	315	370	672
## 5574	NP_001349068.1	XP_021331110.1	47.492	299	149	2	21	311	594	892
## 5575	NP_001349068.1	XP_021331110.1	50.903	277	135	1	58	333	471	747
## 5576	NP_001349068.1	XP_021331110.1	52.734	256	121	0	58	313	331	586
## 5577	NP_001349068.1	XP_021331110.1	52.290	262	125	0	58	319	527	788
## 5578	NP_001349068.1	XP_021331110.1	44.839	310	164	2	6	315	202	504
## 5579	NP_001349068.1	XP_021331110.1	49.458	277	139	1	58	333	443	719
## 5580	NP_001349068.1	XP_021331110.1	50.388	258	128	0	58	315	163	420
## 5581	NP_001349068.1	XP_021331110.1	51.163	258	126	0	58	315	135	392
## 5582	NP_001349068.1	XP_021331110.1	50.000	258	129	0	58	315	275	532
## 5583	NP_001349068.1	XP_021331110.1	47.445	274	144	0	46	319	487	760
## 5584	NP_001349068.1	XP_021331110.1	50.584	257	127	0	60	316	669	925
## 5585	NP_001349068.1	XP_021331110.1	50.000	260	130	0	56	315	301	560
## 5586	NP_001349068.1	XP_021331110.1	50.781	256	126	0	58	313	107	362
## 5587	NP_001349068.1	XP_021331110.1	51.172	256	125	0	58	313	695	950
## 5588	NP_001349068.1	XP_021331110.1	50.988	253	124	0	63	315	56	308
## 5589	NP_001349068.1	XP_021331110.1	49.027	257	131	0	59	315	80	336
## 5590	NP_001349068.1	XP_021331413.1	52.222	270	129	0	46	315	504	773
## 5591	NP_001349068.1	XP_021331413.1	54.651	258	117	0	58	315	348	605
## 5592	NP_001349068.1	XP_021331413.1	55.039	258	116	0	58	315	208	465
## 5593	NP_001349068.1	XP_021331413.1	51.481	270	131	0	46	315	532	801
## 5594	NP_001349068.1	XP_021331413.1	53.876	258	119	0	58	315	600	857
## 5595	NP_001349068.1	XP_021331413.1	52.060	267	128	0	49	315	423	689
## 5596	NP_001349068.1	XP_021331413.1	52.713	258	122	0	58	315	292	549
## 5597	NP_001349068.1	XP_021331413.1	53.876	258	119	0	58	315	180	437
## 5598	NP_001349068.1	XP_021331413.1	53.516	256	119	0	58	313	404	659
## 5599	NP_001349068.1	XP_021331413.1	53.488	258	120	0	58	315	124	381
## 5600	NP_001349068.1	XP_021331413.1	52.713	258	122	0	58	315	320	577
## 5601	NP_001349068.1	XP_021331413.1	53.101	258	121	0	58	315	376	633
## 5602	NP_001349068.1	XP_021331413.1	49.477	287	145	0	29	315	123	409
## 5603	NP_001349068.1	XP_021331413.1	51.481	270	131	0	46	315	28	297
## 5604	NP_001349068.1	XP_021331413.1	52.713	258	122	0	58	315	236	493

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## 5605 NP_001349068.1 XP_021331413.1 53.101 258 121 0 58 315 68 325
## 5606 NP_001349068.1 XP_021331413.1 49.630 270 136 0 46 315 84 353
## 5607 NP_001349068.1 XP_021331413.1 52.326 258 123 0 58 315 12 269
## 5608 NP_001349068.1 XP_021331413.1 50.542 277 134 1 58 334 628 901
## 5609 NP_001349068.1 XP_021331413.1 51.938 258 124 0 58 315 460 717
## 5610 NP_001349068.1 XP_021331413.1 47.735 287 150 0 29 315 459 745
## 5611 NP_001349068.1 XP_021331413.1 52.713 258 122 0 58 315 264 521
## 5612 NP_001349068.1 XP_021331413.1 52.941 238 112 0 76 313 2 239
## 5613 NP_001349068.1 XP_021331413.1 47.429 175 91 1 160 333 2 176
## 5614 NP_001349068.1 XP_021329626.1 52.734 256 121 0 60 315 109 364
## 5615 NP_001349068.1 XP_021329626.1 48.134 268 139 0 48 315 69 336
## 5616 NP_001349068.1 XP_021329626.1 49.813 267 133 1 50 315 42 308
## 5617 NP_001349068.1 XP_021329626.1 51.724 232 112 0 60 291 137 368
## 5618 NP_001349068.1 XP_021329626.1 48.529 204 105 0 58 261 163 366
## 5619 NP_001349068.1 XP_021329626.1 46.203 158 85 0 49 206 210 367
## 5620 NP_001349068.1 XP_021329626.1 46.721 122 65 0 58 179 247 368
## 5621 NP_001349068.1 XP_021329626.1 47.863 117 61 0 200 316 53 169
## 5622 NP_001349068.1 XP_021329625.1 52.734 256 121 0 60 315 109 364
## 5623 NP_001349068.1 XP_021329625.1 48.134 268 139 0 48 315 69 336
## 5624 NP_001349068.1 XP_021329625.1 49.813 267 133 1 50 315 42 308
## 5625 NP_001349068.1 XP_021329625.1 51.724 232 112 0 60 291 137 368
## 5626 NP_001349068.1 XP_021329625.1 48.529 204 105 0 58 261 163 366
## 5627 NP_001349068.1 XP_021329625.1 46.203 158 85 0 49 206 210 367
## 5628 NP_001349068.1 XP_021329625.1 46.721 122 65 0 58 179 247 368
## 5629 NP_001349068.1 XP_021329625.1 47.863 117 61 0 200 316 53 169
## 5630 NP_001349068.1 XP_021329624.1 52.734 256 121 0 60 315 109 364
## 5631 NP_001349068.1 XP_021329624.1 48.134 268 139 0 48 315 69 336
## 5632 NP_001349068.1 XP_021329624.1 49.813 267 133 1 50 315 42 308
## 5633 NP_001349068.1 XP_021329624.1 51.724 232 112 0 60 291 137 368
## 5634 NP_001349068.1 XP_021329624.1 48.529 204 105 0 58 261 163 366
## 5635 NP_001349068.1 XP_021329624.1 46.203 158 85 0 49 206 210 367
## 5636 NP_001349068.1 XP_021329624.1 46.721 122 65 0 58 179 247 368
## 5637 NP_001349068.1 XP_021329624.1 47.863 117 61 0 200 316 53 169
## 5638 NP_001349068.1 XP_021329623.1 52.734 256 121 0 60 315 109 364
## 5639 NP_001349068.1 XP_021329623.1 48.134 268 139 0 48 315 69 336
## 5640 NP_001349068.1 XP_021329623.1 49.813 267 133 1 50 315 42 308
## 5641 NP_001349068.1 XP_021329623.1 51.724 232 112 0 60 291 137 368
## 5642 NP_001349068.1 XP_021329623.1 48.529 204 105 0 58 261 163 366
## 5643 NP_001349068.1 XP_021329623.1 46.203 158 85 0 49 206 210 367
## 5644 NP_001349068.1 XP_021329623.1 46.721 122 65 0 58 179 247 368
## 5645 NP_001349068.1 XP_021329623.1 47.863 117 61 0 200 316 53 169
## 5646 NP_001349068.1 XP_005157357.4 53.125 256 120 0 60 315 136 391
## 5647 NP_001349068.1 XP_005157357.4 51.264 277 134 1 58 333 22 298
## 5648 NP_001349068.1 XP_005157357.4 53.876 258 119 0 58 315 162 419
## 5649 NP_001349068.1 XP_005157357.4 53.101 258 121 0 58 315 330 587
## 5650 NP_001349068.1 XP_005157357.4 51.550 258 125 0 58 315 218 475
## 5651 NP_001349068.1 XP_005157357.4 52.734 256 121 0 60 315 80 335
## 5652 NP_001349068.1 XP_005157357.4 45.752 306 158 2 18 315 198 503
## 5653 NP_001349068.1 XP_005157357.4 50.730 274 134 1 58 330 106 379
## 5654 NP_001349068.1 XP_005157357.4 51.163 258 126 0 58 315 274 531
## 5655 NP_001349068.1 XP_005157357.4 50.187 267 133 0 49 315 293 559
## 5656 NP_001349068.1 XP_005157357.4 51.394 251 122 0 65 315 1 251
## 5657 NP_001349068.1 XP_005157357.4 51.931 233 112 0 58 290 358 590
## 5658 NP_001349068.1 XP_005157357.4 47.867 211 109 1 121 330 1 211

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## 5659 NP_001349068.1 XP_009299203.2 50.000 270 135 0 46 315 255 524
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## 5662 NP_001349068.1 XP_009299203.2 48.905 274 139 1 40 313 138 410
## 5663 NP_001349068.1 XP_009299203.2 51.550 258 125 0 58 315 183 440
## 5664 NP_001349068.1 XP_009299203.2 51.550 258 125 0 58 315 239 496
## 5665 NP_001349068.1 XP_009299203.2 55.365 233 104 0 58 290 295 527
## 5666 NP_001349068.1 XP_009299203.2 50.000 256 128 0 60 315 101 356
## 5667 NP_001349068.1 XP_009299203.2 43.493 292 160 1 24 315 42 328
## 5668 NP_001349068.1 XP_021327017.1 50.000 268 134 0 48 315 120 387
## 5669 NP_001349068.1 XP_021327017.1 47.703 283 148 0 28 310 128 410
## 5670 NP_001349068.1 XP_021327017.1 50.000 258 129 0 58 315 74 331
## 5671 NP_001349068.1 XP_021327017.1 49.219 256 130 0 60 315 104 359
## 5672 NP_001349068.1 XP_021327017.1 48.649 259 132 1 58 315 45 303
## 5673 NP_001349068.1 XP_021327017.1 47.234 235 124 0 81 315 41 275
## 5674 NP_001349068.1 XP_021327016.1 50.000 268 134 0 48 315 120 387
## 5675 NP_001349068.1 XP_021327016.1 47.703 283 148 0 28 310 128 410
## 5676 NP_001349068.1 XP_021327016.1 50.000 258 129 0 58 315 74 331
## 5677 NP_001349068.1 XP_021327016.1 49.219 256 130 0 60 315 104 359
## 5678 NP_001349068.1 XP_021327016.1 48.649 259 132 1 58 315 45 303
## 5679 NP_001349068.1 XP_021327016.1 47.234 235 124 0 81 315 41 275
## 5680 NP_001349068.1 XP_021327015.1 50.000 268 134 0 48 315 120 387
## 5681 NP_001349068.1 XP_021327015.1 47.703 283 148 0 28 310 128 410
## 5682 NP_001349068.1 XP_021327015.1 50.000 258 129 0 58 315 74 331
## 5683 NP_001349068.1 XP_021327015.1 49.219 256 130 0 60 315 104 359
## 5684 NP_001349068.1 XP_021327015.1 48.649 259 132 1 58 315 45 303
## 5685 NP_001349068.1 XP_021327015.1 47.234 235 124 0 81 315 41 275
## 5686 NP_001349068.1 XP_021327014.1 50.000 268 134 0 48 315 120 387
## 5687 NP_001349068.1 XP_021327014.1 47.703 283 148 0 28 310 128 410
## 5688 NP_001349068.1 XP_021327014.1 50.000 258 129 0 58 315 74 331
## 5689 NP_001349068.1 XP_021327014.1 49.219 256 130 0 60 315 104 359
## 5690 NP_001349068.1 XP_021327014.1 48.649 259 132 1 58 315 45 303
## 5691 NP_001349068.1 XP_021327014.1 47.234 235 124 0 81 315 41 275
## 5692 NP_001349068.1 XP_021327013.1 50.000 268 134 0 48 315 120 387
## 5693 NP_001349068.1 XP_021327013.1 47.703 283 148 0 28 310 128 410
## 5694 NP_001349068.1 XP_021327013.1 50.000 258 129 0 58 315 74 331
## 5695 NP_001349068.1 XP_021327013.1 49.219 256 130 0 60 315 104 359
## 5696 NP_001349068.1 XP_021327013.1 48.649 259 132 1 58 315 45 303
## 5697 NP_001349068.1 XP_021327013.1 47.234 235 124 0 81 315 41 275
## 5698 NP_001349068.1 XP_021330522.1 50.000 268 134 0 48 315 120 387
## 5699 NP_001349068.1 XP_021330522.1 47.703 283 148 0 28 310 128 410
## 5700 NP_001349068.1 XP_021330522.1 50.000 258 129 0 58 315 74 331
## 5701 NP_001349068.1 XP_021330522.1 49.219 256 130 0 60 315 104 359
## 5702 NP_001349068.1 XP_021330522.1 48.649 259 132 1 58 315 45 303
## 5703 NP_001349068.1 XP_021330522.1 47.234 235 124 0 81 315 41 275
## 5704 NP_001349068.1 XP_021330519.1 50.000 268 134 0 48 315 120 387
## 5705 NP_001349068.1 XP_021330519.1 47.703 283 148 0 28 310 128 410
## 5706 NP_001349068.1 XP_021330519.1 50.000 258 129 0 58 315 74 331
## 5707 NP_001349068.1 XP_021330519.1 49.219 256 130 0 60 315 104 359
## 5708 NP_001349068.1 XP_021330519.1 48.649 259 132 1 58 315 45 303
## 5709 NP_001349068.1 XP_021330519.1 47.234 235 124 0 81 315 41 275
## 5710 NP_001349068.1 XP_021330517.1 50.000 268 134 0 48 315 120 387
## 5711 NP_001349068.1 XP_021330517.1 47.703 283 148 0 28 310 128 410
## 5712 NP_001349068.1 XP_021330517.1 50.000 258 129 0 58 315 74 331

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## 5713	NP_001349068.1	XP_021330517.1	49.219	256	130	0	60	315	104	359
## 5714	NP_001349068.1	XP_021330517.1	48.649	259	132	1	58	315	45	303
## 5715	NP_001349068.1	XP_021330517.1	47.234	235	124	0	81	315	41	275
## 5716	NP_001349068.1	XP_021330516.1	50.000	268	134	0	48	315	120	387
## 5717	NP_001349068.1	XP_021330516.1	47.703	283	148	0	28	310	128	410
## 5718	NP_001349068.1	XP_021330516.1	50.000	258	129	0	58	315	74	331
## 5719	NP_001349068.1	XP_021330516.1	49.219	256	130	0	60	315	104	359
## 5720	NP_001349068.1	XP_021330516.1	48.649	259	132	1	58	315	45	303
## 5721	NP_001349068.1	XP_021330516.1	47.234	235	124	0	81	315	41	275
## 5722	NP_001349068.1	XP_021330515.1	50.000	268	134	0	48	315	120	387
## 5723	NP_001349068.1	XP_021330515.1	47.703	283	148	0	28	310	128	410
## 5724	NP_001349068.1	XP_021330515.1	50.000	258	129	0	58	315	74	331
## 5725	NP_001349068.1	XP_021330515.1	49.219	256	130	0	60	315	104	359
## 5726	NP_001349068.1	XP_021330515.1	48.649	259	132	1	58	315	45	303
## 5727	NP_001349068.1	XP_021330515.1	47.234	235	124	0	81	315	41	275
## 5728	NP_001349068.1	XP_021330514.1	50.000	268	134	0	48	315	120	387
## 5729	NP_001349068.1	XP_021330514.1	47.703	283	148	0	28	310	128	410
## 5730	NP_001349068.1	XP_021330514.1	50.000	258	129	0	58	315	74	331
## 5731	NP_001349068.1	XP_021330514.1	49.219	256	130	0	60	315	104	359
## 5732	NP_001349068.1	XP_021330514.1	48.649	259	132	1	58	315	45	303
## 5733	NP_001349068.1	XP_021330514.1	47.234	235	124	0	81	315	41	275
## 5734	NP_001349068.1	XP_017211227.1	48.485	297	148	3	50	341	52	348
## 5735	NP_001349068.1	XP_021330521.1	50.000	268	134	0	48	315	120	387
## 5736	NP_001349068.1	XP_021330521.1	47.703	283	148	0	28	310	128	410
## 5737	NP_001349068.1	XP_021330521.1	50.000	258	129	0	58	315	74	331
## 5738	NP_001349068.1	XP_021330521.1	49.219	256	130	0	60	315	104	359
## 5739	NP_001349068.1	XP_021330521.1	48.649	259	132	1	58	315	45	303
## 5740	NP_001349068.1	XP_021330521.1	47.234	235	124	0	81	315	41	275
## 5741	NP_001349068.1	XP_021330520.1	50.000	268	134	0	48	315	120	387
## 5742	NP_001349068.1	XP_021330520.1	47.703	283	148	0	28	310	128	410
## 5743	NP_001349068.1	XP_021330520.1	50.000	258	129	0	58	315	74	331
## 5744	NP_001349068.1	XP_021330520.1	49.219	256	130	0	60	315	104	359
## 5745	NP_001349068.1	XP_021330520.1	48.649	259	132	1	58	315	45	303
## 5746	NP_001349068.1	XP_021330520.1	47.234	235	124	0	81	315	41	275
## 5747	NP_001349068.1	XP_021330518.1	50.000	268	134	0	48	315	120	387
## 5748	NP_001349068.1	XP_021330518.1	47.703	283	148	0	28	310	128	410
## 5749	NP_001349068.1	XP_021330518.1	50.000	258	129	0	58	315	74	331
## 5750	NP_001349068.1	XP_021330518.1	49.219	256	130	0	60	315	104	359
## 5751	NP_001349068.1	XP_021330518.1	48.649	259	132	1	58	315	45	303
## 5752	NP_001349068.1	XP_021330518.1	47.234	235	124	0	81	315	41	275
## 5753	NP_001349068.1	XP_021327003.1	55.039	258	116	0	58	315	266	523
## 5754	NP_001349068.1	XP_021327003.1	55.212	259	116	0	58	316	574	832
## 5755	NP_001349068.1	XP_021327003.1	53.488	258	120	0	58	315	518	775
## 5756	NP_001349068.1	XP_021327003.1	52.256	266	127	0	50	315	174	439
## 5757	NP_001349068.1	XP_021327003.1	51.880	266	128	0	50	315	650	915
## 5758	NP_001349068.1	XP_021327003.1	53.488	258	120	0	58	315	238	495
## 5759	NP_001349068.1	XP_021327003.1	45.317	331	160	4	6	315	137	467
## 5760	NP_001349068.1	XP_021327003.1	52.326	258	123	0	58	315	126	383
## 5761	NP_001349068.1	XP_021327003.1	53.125	256	120	0	58	313	630	885
## 5762	NP_001349068.1	XP_021327003.1	48.951	286	118	1	58	315	994	1279
## 5763	NP_001349068.1	XP_021327003.1	52.713	258	122	0	58	315	742	999
## 5764	NP_001349068.1	XP_021327003.1	50.388	258	128	0	58	315	350	607
## 5765	NP_001349068.1	XP_021327003.1	51.938	258	124	0	58	315	770	1027
## 5766	NP_001349068.1	XP_021327003.1	50.775	258	127	0	58	315	882	1139

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## 5767 NP_001349068.1 XP_021327003.1 51.163 258 126 0 58 315 854 1111
## 5768 NP_001349068.1 XP_021327003.1 51.562 256 124 0 58 313 378 633
## 5769 NP_001349068.1 XP_021327003.1 52.734 256 121 0 60 315 1164 1419
## 5770 NP_001349068.1 XP_021327003.1 48.339 271 140 0 49 319 425 695
## 5771 NP_001349068.1 XP_021327003.1 51.953 256 123 0 60 315 1108 1363
## 5772 NP_001349068.1 XP_021327003.1 51.172 256 125 0 60 315 324 579
## 5773 NP_001349068.1 XP_021327003.1 51.953 256 123 0 58 313 406 661
## 5774 NP_001349068.1 XP_021327003.1 49.438 267 135 0 49 315 817 1083
## 5775 NP_001349068.1 XP_021327003.1 52.326 258 123 0 58 315 910 1167
## 5776 NP_001349068.1 XP_021327003.1 51.550 258 125 0 58 315 490 747
## 5777 NP_001349068.1 XP_021327003.1 51.351 259 126 0 58 316 714 972
## 5778 NP_001349068.1 XP_021327003.1 48.540 274 140 1 58 330 462 735
## 5779 NP_001349068.1 XP_021327003.1 51.163 258 126 0 58 315 98 355
## 5780 NP_001349068.1 XP_021327003.1 50.000 258 129 0 58 315 1078 1335
## 5781 NP_001349068.1 XP_021327003.1 50.781 256 126 0 58 313 798 1053
## 5782 NP_001349068.1 XP_021327003.1 48.837 258 132 0 58 315 938 1195
## 5783 NP_001349068.1 XP_021327003.1 49.612 258 130 0 58 315 1134 1391
## 5784 NP_001349068.1 XP_021327003.1 48.638 257 132 0 60 316 968 1224
## 5785 NP_001349068.1 XP_021327003.1 51.948 231 111 0 60 290 1192 1422
## 5786 NP_001349068.1 XP_021327003.1 46.043 278 149 1 39 315 50 327
## 5787 NP_001349068.1 XP_021327003.1 48.529 204 105 0 58 261 1218 1421
## 5788 NP_001349068.1 XP_021327003.1 46.203 158 85 0 49 206 1265 1422
## 5789 NP_001349068.1 XP_021330542.1 55.039 258 116 0 58 315 266 523
## 5790 NP_001349068.1 XP_021330542.1 55.212 259 116 0 58 316 574 832
## 5791 NP_001349068.1 XP_021330542.1 53.488 258 120 0 58 315 518 775
## 5792 NP_001349068.1 XP_021330542.1 52.256 266 127 0 50 315 174 439
## 5793 NP_001349068.1 XP_021330542.1 51.880 266 128 0 50 315 650 915
## 5794 NP_001349068.1 XP_021330542.1 53.488 258 120 0 58 315 238 495
## 5795 NP_001349068.1 XP_021330542.1 45.317 331 160 4 6 315 137 467
## 5796 NP_001349068.1 XP_021330542.1 52.326 258 123 0 58 315 126 383
## 5797 NP_001349068.1 XP_021330542.1 53.125 256 120 0 58 313 630 885
## 5798 NP_001349068.1 XP_021330542.1 48.951 286 118 1 58 315 994 1279
## 5799 NP_001349068.1 XP_021330542.1 52.713 258 122 0 58 315 742 999
## 5800 NP_001349068.1 XP_021330542.1 50.388 258 128 0 58 315 350 607
## 5801 NP_001349068.1 XP_021330542.1 51.938 258 124 0 58 315 770 1027
## 5802 NP_001349068.1 XP_021330542.1 50.775 258 127 0 58 315 882 1139
## 5803 NP_001349068.1 XP_021330542.1 51.163 258 126 0 58 315 854 1111
## 5804 NP_001349068.1 XP_021330542.1 51.562 256 124 0 58 313 378 633
## 5805 NP_001349068.1 XP_021330542.1 52.734 256 121 0 60 315 1164 1419
## 5806 NP_001349068.1 XP_021330542.1 48.339 271 140 0 49 319 425 695
## 5807 NP_001349068.1 XP_021330542.1 51.953 256 123 0 60 315 1108 1363
## 5808 NP_001349068.1 XP_021330542.1 51.172 256 125 0 60 315 324 579
## 5809 NP_001349068.1 XP_021330542.1 51.953 256 123 0 58 313 406 661
## 5810 NP_001349068.1 XP_021330542.1 49.438 267 135 0 49 315 817 1083
## 5811 NP_001349068.1 XP_021330542.1 52.326 258 123 0 58 315 910 1167
## 5812 NP_001349068.1 XP_021330542.1 51.550 258 125 0 58 315 490 747
## 5813 NP_001349068.1 XP_021330542.1 51.351 259 126 0 58 316 714 972
## 5814 NP_001349068.1 XP_021330542.1 48.540 274 140 1 58 330 462 735
## 5815 NP_001349068.1 XP_021330542.1 51.163 258 126 0 58 315 98 355
## 5816 NP_001349068.1 XP_021330542.1 50.000 258 129 0 58 315 1078 1335
## 5817 NP_001349068.1 XP_021330542.1 50.781 256 126 0 58 313 798 1053
## 5818 NP_001349068.1 XP_021330542.1 48.837 258 132 0 58 315 938 1195
## 5819 NP_001349068.1 XP_021330542.1 49.612 258 130 0 58 315 1134 1391
## 5820 NP_001349068.1 XP_021330542.1 48.638 257 132 0 60 316 968 1224

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## 5821 NP_001349068.1 XP_021330542.1 51.948 231 111 0 60 290 1192 1422
## 5822 NP_001349068.1 XP_021330542.1 46.043 278 149 1 39 315 50 327
## 5823 NP_001349068.1 XP_021330542.1 48.529 204 105 0 58 261 1218 1421
## 5824 NP_001349068.1 XP_021330542.1 46.203 158 85 0 49 206 1265 1422
## 5825 NP_001349068.1 XP_017211012.2 53.668 259 120 0 58 316 117 375
## 5826 NP_001349068.1 XP_017211012.2 52.326 258 123 0 58 315 621 878
## 5827 NP_001349068.1 XP_017211012.2 52.326 258 123 0 58 315 369 626
## 5828 NP_001349068.1 XP_017211012.2 52.734 256 121 0 60 315 651 906
## 5829 NP_001349068.1 XP_017211012.2 49.807 259 130 0 58 316 565 823
## 5830 NP_001349068.1 XP_017211012.2 46.205 303 155 2 21 315 492 794
## 5831 NP_001349068.1 XP_017211012.2 52.326 258 123 0 58 315 341 598
## 5832 NP_001349068.1 XP_017211012.2 51.938 258 124 0 58 315 173 430
## 5833 NP_001349068.1 XP_017211012.2 52.326 258 123 0 58 315 593 850
## 5834 NP_001349068.1 XP_017211012.2 52.713 258 122 0 58 315 257 514
## 5835 NP_001349068.1 XP_017211012.2 49.064 267 136 0 50 316 81 347
## 5836 NP_001349068.1 XP_017211012.2 50.775 258 127 0 58 315 313 570
## 5837 NP_001349068.1 XP_017211012.2 50.579 259 128 0 58 316 425 683
## 5838 NP_001349068.1 XP_017211012.2 50.775 258 127 0 58 315 229 486
## 5839 NP_001349068.1 XP_017211012.2 49.219 256 130 0 60 315 455 710
## 5840 NP_001349068.1 XP_017211012.2 49.035 259 132 0 58 316 509 767
## 5841 NP_001349068.1 XP_017211012.2 49.612 258 130 0 58 315 481 738
## 5842 NP_001349068.1 XP_017211012.2 50.781 256 126 0 60 315 203 458
## 5843 NP_001349068.1 XP_017211012.2 48.837 258 132 0 58 315 1009 1266
## 5844 NP_001349068.1 XP_017211012.2 47.183 284 126 1 60 319 707 990
## 5845 NP_001349068.1 XP_017211012.2 46.403 278 149 0 38 315 1017 1294
## 5846 NP_001349068.1 XP_017211012.2 44.127 315 171 3 21 330 884 1198
## 5847 NP_001349068.1 XP_017211012.2 50.558 269 132 1 51 318 53 321
## 5848 NP_001349068.1 XP_017211012.2 48.062 258 134 0 58 315 953 1210
## 5849 NP_001349068.1 XP_017211012.2 47.566 267 136 1 49 315 752 1014
## 5850 NP_001349068.1 XP_017211012.2 49.200 250 127 0 58 307 677 926
## 5851 NP_001349068.1 XP_017211012.2 48.473 262 135 0 58 319 1065 1326
## 5852 NP_001349068.1 XP_017211012.2 48.221 253 131 0 58 310 981 1233
## 5853 NP_001349068.1 XP_017211012.2 42.258 310 127 2 58 315 845 1154
## 5854 NP_001349068.1 XP_017211012.2 48.963 241 122 1 91 330 66 306
## 5855 NP_001349068.1 XP_021331400.1 51.625 277 133 1 58 333 1216 1492
## 5856 NP_001349068.1 XP_021331400.1 53.125 256 120 0 60 315 148 403
## 5857 NP_001349068.1 XP_021331400.1 50.542 277 136 1 58 333 174 450
## 5858 NP_001349068.1 XP_021331400.1 45.875 303 163 1 28 329 60 362
## 5859 NP_001349068.1 XP_021331400.1 53.053 262 123 0 58 319 594 855
## 5860 NP_001349068.1 XP_021331400.1 52.290 262 125 0 58 319 202 463
## 5861 NP_001349068.1 XP_021331400.1 47.973 296 147 2 45 333 631 926
## 5862 NP_001349068.1 XP_021331400.1 51.938 258 124 0 58 315 566 823
## 5863 NP_001349068.1 XP_021331400.1 52.344 256 122 0 58 313 230 485
## 5864 NP_001349068.1 XP_021331400.1 52.964 253 119 0 58 310 622 874
## 5865 NP_001349068.1 XP_021331400.1 52.713 258 122 0 58 315 538 795
## 5866 NP_001349068.1 XP_021331400.1 46.326 313 154 3 21 319 1137 1449
## 5867 NP_001349068.1 XP_021331400.1 52.326 258 123 0 58 315 1272 1529
## 5868 NP_001349068.1 XP_021331400.1 52.326 258 123 0 58 315 1244 1501
## 5869 NP_001349068.1 XP_021331400.1 53.053 262 123 0 58 319 902 1163
## 5870 NP_001349068.1 XP_021331400.1 46.602 309 136 2 50 329 278 586
## 5871 NP_001349068.1 XP_021331400.1 51.550 258 125 0 58 315 510 767
## 5872 NP_001349068.1 XP_021331400.1 52.713 258 122 0 58 315 846 1103
## 5873 NP_001349068.1 XP_021331400.1 47.552 286 149 1 46 330 414 699
## 5874 NP_001349068.1 XP_021331400.1 50.388 258 128 0 58 315 1468 1725

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## 5875 NP_001349068.1 XP_021331400.1 50.763 262 129 0 58 319 734 995
## 5876 NP_001349068.1 XP_021331400.1 50.965 259 127 0 58 316 1300 1558
## 5877 NP_001349068.1 XP_021331400.1 51.550 258 125 0 58 315 818 1075
## 5878 NP_001349068.1 XP_021331400.1 52.157 255 122 0 61 315 877 1131
## 5879 NP_001349068.1 XP_021331400.1 44.295 298 165 1 19 315 22 319
## 5880 NP_001349068.1 XP_021331400.1 46.302 311 132 2 58 333 1126 1436
## 5881 NP_001349068.1 XP_021331400.1 53.125 256 120 0 58 313 370 625
## 5882 NP_001349068.1 XP_021331400.1 48.736 277 141 1 58 333 790 1066
## 5883 NP_001349068.1 XP_021331400.1 48.029 279 139 1 44 316 238 516
## 5884 NP_001349068.1 XP_021331400.1 49.643 280 134 2 58 330 1014 1293
## 5885 NP_001349068.1 XP_021331400.1 46.205 303 134 2 58 331 678 980
## 5886 NP_001349068.1 XP_021331400.1 50.388 258 128 0 58 315 1328 1585
## 5887 NP_001349068.1 XP_021331400.1 49.804 255 128 0 61 315 485 739
## 5888 NP_001349068.1 XP_021331400.1 51.163 258 126 0 58 315 1440 1697
## 5889 NP_001349068.1 XP_021331400.1 48.837 258 132 0 58 315 342 599
## 5890 NP_001349068.1 XP_021331400.1 48.718 273 134 1 49 315 921 1193
## 5891 NP_001349068.1 XP_021331400.1 47.674 258 135 0 58 315 1412 1669
## 5892 NP_001349068.1 XP_021331400.1 46.899 258 137 0 58 315 1384 1641
## 5893 NP_001349068.1 XP_021331400.1 50.667 150 74 0 58 207 1608 1757
## 5894 NP_001349068.1 XP_021331158.1 51.737 259 125 0 58 316 32 290
## 5895 NP_001349068.1 XP_021331158.1 49.826 287 144 0 29 315 115 401
## 5896 NP_001349068.1 XP_021331158.1 48.601 286 119 1 58 315 200 485
## 5897 NP_001349068.1 XP_021331158.1 51.163 258 126 0 58 315 88 345
## 5898 NP_001349068.1 XP_021331158.1 51.351 259 125 1 58 316 5 262
## 5899 NP_001349068.1 XP_021331158.1 50.388 258 128 0 58 315 60 317
## 5900 NP_001349068.1 XP_021331158.1 51.004 249 120 2 82 329 1 248
## 5901 NP_001349068.1 XP_021326773.1 52.326 258 123 0 58 315 133 390
## 5902 NP_001349068.1 XP_021326773.1 52.326 258 123 0 58 315 21 278
## 5903 NP_001349068.1 XP_021326773.1 52.941 255 120 0 58 312 217 471
## 5904 NP_001349068.1 XP_021326773.1 51.953 256 123 0 60 315 107 362
## 5905 NP_001349068.1 XP_021326773.1 51.163 258 126 0 58 315 77 334
## 5906 NP_001349068.1 XP_021326773.1 51.163 258 126 0 58 315 49 306
## 5907 NP_001349068.1 XP_021326773.1 50.391 256 127 0 60 315 191 446
## 5908 NP_001349068.1 XP_021326773.1 50.806 248 122 0 68 315 3 250
## 5909 NP_001349068.1 XP_021326773.1 51.802 222 107 0 94 315 1 222
## 5910 NP_001349068.1 XP_021331338.1 50.923 271 133 0 46 316 385 655
## 5911 NP_001349068.1 XP_021331338.1 50.181 277 137 1 58 333 313 589
## 5912 NP_001349068.1 XP_021331338.1 51.550 258 125 0 58 315 145 402
## 5913 NP_001349068.1 XP_021331338.1 51.938 258 124 0 58 315 229 486
## 5914 NP_001349068.1 XP_021331338.1 51.351 259 124 2 58 315 285 542
## 5915 NP_001349068.1 XP_021331338.1 50.000 258 129 0 58 315 369 626
## 5916 NP_001349068.1 XP_021331338.1 51.163 258 126 0 58 315 89 346
## 5917 NP_001349068.1 XP_021331338.1 49.097 277 140 1 58 333 201 477
## 5918 NP_001349068.1 XP_021331338.1 51.562 256 124 0 58 313 173 428
## 5919 NP_001349068.1 XP_021331338.1 50.775 258 127 0 58 315 117 374
## 5920 NP_001349068.1 XP_021331338.1 49.225 258 131 0 58 315 257 514
## 5921 NP_001349068.1 XP_021331338.1 49.012 253 129 0 63 315 66 318
## 5922 NP_001349068.1 XP_021331338.1 44.840 281 149 2 40 315 408 687
## 5923 NP_001349068.1 XP_021331338.1 44.144 111 56 2 49 158 584 689
## 5924 NP_001349068.1 XP_017211225.1 49.451 273 132 1 50 316 81 353
## 5925 NP_001349068.1 XP_017211225.1 45.246 305 156 3 19 316 25 325
## 5926 NP_001349068.1 XP_017211225.1 49.145 234 113 1 58 285 145 378
## 5927 NP_001349068.1 XP_017211225.1 50.661 227 112 0 93 319 68 294
## 5928 NP_001349068.1 XP_021327156.1 50.181 277 137 1 58 333 79 355

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## 5929 NP_001349068.1 XP_021327156.1 51.163 258 126 0 58 315 135 392
## 5930 NP_001349068.1 XP_021327156.1 51.938 258 124 0 58 315 163 420
## 5931 NP_001349068.1 XP_021327156.1 50.388 258 128 0 58 315 219 476
## 5932 NP_001349068.1 XP_021327156.1 48.679 265 136 0 49 313 182 446
## 5933 NP_001349068.1 XP_021327156.1 50.855 234 115 0 58 291 247 480
## 5934 NP_001349068.1 XP_021327156.1 48.469 196 101 0 120 315 57 252
## 5935 NP_001349068.1 XP_021327156.1 51.748 143 69 0 171 313 52 194
## 5936 NP_001349068.1 XP_021327156.1 44.643 56 31 0 261 316 58 113
## 5937 NP_001349068.1 XP_021331020.1 50.526 285 139 1 33 315 230 514
## 5938 NP_001349068.1 XP_021331020.1 53.817 262 121 0 58 319 4000 4261
## 5939 NP_001349068.1 XP_021331020.1 55.039 258 116 0 58 315 1490 1747
## 5940 NP_001349068.1 XP_021331020.1 54.651 258 117 0 58 315 1266 1523
## 5941 NP_001349068.1 XP_021331020.1 54.651 258 117 0 58 315 1350 1607
## 5942 NP_001349068.1 XP_021331020.1 52.364 275 128 2 58 329 3914 4188
## 5943 NP_001349068.1 XP_021331020.1 53.462 260 119 1 58 315 3970 4229
## 5944 NP_001349068.1 XP_021331020.1 50.903 277 135 1 58 333 341 617
## 5945 NP_001349068.1 XP_021331020.1 54.264 258 118 0 58 315 397 654
## 5946 NP_001349068.1 XP_021331020.1 52.713 258 122 0 58 315 313 570
## 5947 NP_001349068.1 XP_021331020.1 53.101 258 121 0 58 315 3047 3304
## 5948 NP_001349068.1 XP_021331020.1 49.827 289 143 1 33 319 3300 3588
## 5949 NP_001349068.1 XP_021331020.1 53.488 258 120 0 58 315 2851 3108
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## 5951 NP_001349068.1 XP_021331020.1 50.730 274 134 1 58 330 229 502
## 5952 NP_001349068.1 XP_021331020.1 52.713 258 122 0 58 315 3299 3556
## 5953 NP_001349068.1 XP_021331020.1 51.311 267 130 0 49 315 2646 2912
## 5954 NP_001349068.1 XP_021331020.1 53.053 262 123 0 58 319 2543 2804
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## 5956 NP_001349068.1 XP_021331020.1 52.326 258 123 0 58 315 481 738
## 5957 NP_001349068.1 XP_021331020.1 53.101 258 121 0 58 315 3243 3500
## 5958 NP_001349068.1 XP_021331020.1 52.672 262 124 0 58 319 3103 3364
## 5959 NP_001349068.1 XP_021331020.1 52.713 258 122 0 58 315 453 710
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## 5961 NP_001349068.1 XP_021331020.1 52.713 258 122 0 58 315 1182 1439
## 5962 NP_001349068.1 XP_021331020.1 51.550 258 125 0 58 315 5088 5345
## 5963 NP_001349068.1 XP_021331020.1 52.713 258 122 0 58 315 1462 1719
## 5964 NP_001349068.1 XP_021331020.1 53.516 256 119 0 58 313 3131 3386
## 5965 NP_001349068.1 XP_021331020.1 53.488 258 120 0 58 315 425 682
## 5966 NP_001349068.1 XP_021331020.1 52.713 258 122 0 58 315 2963 3220
## 5967 NP_001349068.1 XP_021331020.1 53.101 258 121 0 58 315 3187 3444
## 5968 NP_001349068.1 XP_021331020.1 54.054 259 119 0 58 316 3159 3417
## 5969 NP_001349068.1 XP_021331020.1 52.326 258 123 0 58 315 1406 1663
## 5970 NP_001349068.1 XP_021331020.1 51.128 266 130 0 50 315 529 794
## 5971 NP_001349068.1 XP_021331020.1 51.550 258 125 0 58 315 2347 2604
## 5972 NP_001349068.1 XP_021331020.1 51.527 262 127 0 58 319 3019 3280
## 5973 NP_001349068.1 XP_021331020.1 51.938 258 124 0 58 315 2487 2744
## 5974 NP_001349068.1 XP_021331020.1 48.443 289 148 1 46 333 3259 3547
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## 5977 NP_001349068.1 XP_021331020.1 51.953 256 123 0 58 313 5172 5427
## 5978 NP_001349068.1 XP_021331020.1 52.326 258 123 0 58 315 5004 5261
## 5979 NP_001349068.1 XP_021331020.1 52.326 258 123 0 58 315 2571 2828
## 5980 NP_001349068.1 XP_021331020.1 51.550 258 125 0 58 315 2403 2660
## 5981 NP_001349068.1 XP_021331020.1 51.163 258 126 0 58 315 2991 3248
## 5982 NP_001349068.1 XP_021331020.1 51.938 258 124 0 58 315 2375 2632

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## 5983 NP_001349068.1 XP_021331020.1 48.201 278 144 0 38 315 1554 1831
## 5984 NP_001349068.1 XP_021331020.1 47.059 289 153 0 27 315 2596 2884
## 5985 NP_001349068.1 XP_021331020.1 52.124 259 124 0 58 316 4948 5206
## 5986 NP_001349068.1 XP_021331020.1 48.601 286 119 1 58 315 4224 4509
## 5987 NP_001349068.1 XP_021331020.1 49.635 274 137 1 58 330 1238 1511
## 5988 NP_001349068.1 XP_021331020.1 51.550 258 125 0 58 315 1322 1579
## 5989 NP_001349068.1 XP_021331020.1 52.326 258 123 0 58 315 565 822
## 5990 NP_001349068.1 XP_021331020.1 46.358 302 133 2 58 330 117 418
## 5991 NP_001349068.1 XP_021331020.1 51.172 256 125 0 60 315 2937 3192
## 5992 NP_001349068.1 XP_021331020.1 50.187 267 133 0 49 315 1201 1467
## 5993 NP_001349068.1 XP_021331020.1 51.362 257 125 0 60 316 4058 4314
## 5994 NP_001349068.1 XP_021331020.1 51.163 258 126 0 58 315 173 430
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## 6001 NP_001349068.1 XP_021331020.1 50.000 258 129 0 58 315 201 458
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## 6003 NP_001349068.1 XP_021331020.1 50.181 277 137 1 58 333 5060 5336
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## 6007 NP_001349068.1 XP_021331020.1 51.172 256 125 0 60 315 4922 5177
## 6008 NP_001349068.1 XP_021331020.1 48.507 268 138 0 48 315 2253 2520
## 6009 NP_001349068.1 XP_021331020.1 50.388 258 128 0 58 315 2711 2968
## 6010 NP_001349068.1 XP_021331020.1 48.014 277 143 1 58 333 2151 2427
## 6011 NP_001349068.1 XP_021331020.1 50.000 256 128 0 60 315 2321 2576
## 6012 NP_001349068.1 XP_021331020.1 48.611 288 120 2 56 315 4778 5065
## 6013 NP_001349068.1 XP_021331020.1 50.388 258 128 0 58 315 2123 2380
## 6014 NP_001349068.1 XP_021331020.1 49.627 268 135 0 48 315 2281 2548
## 6015 NP_001349068.1 XP_021331020.1 45.645 287 156 0 29 315 5255 5541
## 6016 NP_001349068.1 XP_021331020.1 49.117 283 118 2 58 315 4504 4785
## 6017 NP_001349068.1 XP_021331020.1 51.145 262 123 2 58 315 649 909
## 6018 NP_001349068.1 XP_021331020.1 50.775 258 127 0 58 315 593 850
## 6019 NP_001349068.1 XP_021331020.1 48.763 283 144 1 49 330 2422 2704
## 6020 NP_001349068.1 XP_021331020.1 50.775 258 127 0 58 315 2459 2716
## 6021 NP_001349068.1 XP_021331020.1 52.756 254 119 1 58 311 3355 3607
## 6022 NP_001349068.1 XP_021331020.1 51.562 256 124 0 58 313 5144 5399
## 6023 NP_001349068.1 XP_021331020.1 50.000 266 133 0 50 315 2199 2464
## 6024 NP_001349068.1 XP_021331020.1 50.781 256 126 0 58 313 5200 5455
## 6025 NP_001349068.1 XP_021331020.1 50.775 258 127 0 58 315 33 290
## 6026 NP_001349068.1 XP_021331020.1 49.225 258 131 0 58 315 5228 5485
## 6027 NP_001349068.1 XP_021331020.1 47.872 282 146 1 50 330 2227 2508
## 6028 NP_001349068.1 XP_021331020.1 43.533 317 121 2 58 316 817 1133
## 6029 NP_001349068.1 XP_021331020.1 49.225 258 131 0 58 315 3718 3975
## 6030 NP_001349068.1 XP_021331020.1 49.042 261 131 1 58 316 3746 4006
## 6031 NP_001349068.1 XP_021331020.1 47.203 286 123 1 58 315 4168 4453
## 6032 NP_001349068.1 XP_021331020.1 45.918 294 131 1 50 315 4104 4397
## 6033 NP_001349068.1 XP_021331020.1 43.161 329 166 3 6 313 4011 4339
## 6034 NP_001349068.1 XP_021331020.1 49.248 266 135 0 50 315 3598 3863
## 6035 NP_001349068.1 XP_021331020.1 49.807 259 128 2 58 315 89 346
## 6036 NP_001349068.1 XP_021331020.1 47.018 285 124 1 58 315 1099 1383

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## 6037 NP_001349068.1 XP_021331020.1 45.230 283 155 0 29 311 5283 5565
## 6038 NP_001349068.1 XP_021331020.1 49.219 256 130 0 58 313 1546 1801
## 6039 NP_001349068.1 XP_021331020.1 45.361 291 158 1 29 319 3466 3755
## 6040 NP_001349068.1 XP_021331020.1 48.047 256 133 0 58 313 1630 1885
## 6041 NP_001349068.1 XP_021331020.1 44.755 286 141 1 48 316 2012 2297
## 6042 NP_001349068.1 XP_021331020.1 46.442 267 143 0 49 315 3653 3919
## 6043 NP_001349068.1 XP_021331020.1 47.368 266 140 0 50 315 1146 1411
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## 6045 NP_001349068.1 XP_021331020.1 43.750 304 143 2 58 333 3551 3854
## 6046 NP_001349068.1 XP_021331020.1 50.000 258 126 1 58 315 4308 4562
## 6047 NP_001349068.1 XP_021331020.1 47.287 258 136 0 58 315 2095 2352
## 6048 NP_001349068.1 XP_021331020.1 46.899 258 137 0 58 315 5 262
## 6049 NP_001349068.1 XP_021331020.1 43.492 315 149 2 29 315 1014 1327
## 6050 NP_001349068.1 XP_021331020.1 50.391 256 125 2 56 311 902 1155
## 6051 NP_001349068.1 XP_021331020.1 43.151 292 157 2 33 315 2033 2324
## 6052 NP_001349068.1 XP_021331020.1 43.682 277 155 1 58 333 1714 1990
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## 6055 NP_001349068.1 XP_021331020.1 48.438 256 132 0 58 313 1658 1913
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## 6059 NP_001349068.1 XP_021331020.1 45.312 256 140 0 60 315 1772 2027
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## 6062 NP_001349068.1 XP_021331020.1 43.191 257 146 0 58 314 5368 5624
## 6063 NP_001349068.1 XP_021326985.1 49.618 262 132 0 58 319 138 399
## 6064 NP_001349068.1 XP_021326985.1 52.157 255 122 0 58 312 194 448
## 6065 NP_001349068.1 XP_021326985.1 50.391 256 127 0 58 313 166 421
## 6066 NP_001349068.1 XP_021326985.1 52.174 253 121 0 61 313 113 365
## 6067 NP_001349068.1 XP_021326985.1 50.885 226 111 0 88 313 112 337
## 6068 NP_001349068.1 XP_021330513.1 49.618 262 132 0 58 319 138 399
## 6069 NP_001349068.1 XP_021330513.1 52.157 255 122 0 58 312 194 448
## 6070 NP_001349068.1 XP_021330513.1 50.391 256 127 0 58 313 166 421
## 6071 NP_001349068.1 XP_021330513.1 52.174 253 121 0 61 313 113 365
## 6072 NP_001349068.1 XP_021330513.1 50.885 226 111 0 88 313 112 337
## 6073 NP_001349068.1 NP_001120944.1 53.101 258 121 0 58 315 79 336
## 6074 NP_001349068.1 NP_001120944.1 51.562 256 124 0 58 313 107 362
## 6075 NP_001349068.1 NP_001120944.1 51.504 266 126 3 50 313 42 306
## 6076 NP_001349068.1 NP_001120944.1 47.909 263 137 0 49 311 126 388
## 6077 NP_001349068.1 NP_001120944.1 51.269 197 96 0 119 315 56 252
## 6078 NP_001349068.1 NP_001120944.1 48.980 147 75 0 58 204 247 393
## 6079 NP_001349068.1 XP_017211215.2 54.264 258 118 0 58 315 399 656
## 6080 NP_001349068.1 XP_017211215.2 53.876 258 119 0 58 315 455 712
## 6081 NP_001349068.1 XP_017211215.2 53.488 258 120 0 58 315 735 992
## 6082 NP_001349068.1 XP_017211215.2 54.264 258 118 0 58 315 595 852
## 6083 NP_001349068.1 XP_017211215.2 54.264 258 118 0 58 315 539 796
## 6084 NP_001349068.1 XP_017211215.2 53.488 258 120 0 58 315 567 824
## 6085 NP_001349068.1 XP_017211215.2 48.264 288 149 0 28 315 649 936
## 6086 NP_001349068.1 XP_017211215.2 48.264 288 149 0 28 315 313 600
## 6087 NP_001349068.1 XP_017211215.2 54.264 258 118 0 58 315 483 740
## 6088 NP_001349068.1 XP_017211215.2 52.713 258 122 0 58 315 623 880
## 6089 NP_001349068.1 XP_017211215.2 52.326 258 123 0 58 315 287 544
## 6090 NP_001349068.1 XP_017211215.2 52.713 258 122 0 58 315 259 516

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## 6091	NP_001349068.1	XP_017211215.2	53.077	260	120	1	58	315	145	404
## 6092	NP_001349068.1	XP_017211215.2	52.326	258	121	1	58	313	5	262
## 6093	NP_001349068.1	XP_017211215.2	49.231	260	130	1	58	315	229	488
## 6094	NP_001349068.1	XP_017211215.2	49.219	256	130	0	58	313	819	1074
## 6095	NP_001349068.1	XP_017211215.2	54.622	238	108	0	82	319	1	238
## 6096	NP_001349068.1	XP_017211215.2	47.490	259	136	0	58	316	791	1049
## 6097	NP_001349068.1	XP_021326475.1	46.154	299	149	2	18	315	10	297
## 6098	NP_001349068.1	XP_021326475.1	50.622	241	119	0	48	288	58	298
## 6099	NP_001349068.1	XP_021331199.1	52.399	271	129	0	45	315	76	346
## 6100	NP_001349068.1	XP_021331199.1	52.713	258	122	0	58	315	229	486
## 6101	NP_001349068.1	XP_021331199.1	54.264	258	118	0	58	315	397	654
## 6102	NP_001349068.1	XP_021331199.1	52.713	258	122	0	58	315	201	458
## 6103	NP_001349068.1	XP_021331199.1	54.264	258	118	0	58	315	341	598
## 6104	NP_001349068.1	XP_021331199.1	53.876	258	119	0	58	315	285	542
## 6105	NP_001349068.1	XP_021331199.1	50.936	267	131	0	49	315	164	430
## 6106	NP_001349068.1	XP_021331199.1	53.101	258	121	0	58	315	313	570
## 6107	NP_001349068.1	XP_021331199.1	49.147	293	142	2	45	330	14	306
## 6108	NP_001349068.1	XP_021331199.1	52.326	258	123	0	58	315	117	374
## 6109	NP_001349068.1	XP_021331199.1	52.326	258	123	0	58	315	145	402
## 6110	NP_001349068.1	XP_021331199.1	52.326	258	123	0	58	315	5	262
## 6111	NP_001349068.1	XP_021331199.1	51.938	258	124	0	58	315	61	318
## 6112	NP_001349068.1	XP_021331199.1	49.650	286	116	1	58	315	453	738
## 6113	NP_001349068.1	XP_021331199.1	51.550	258	125	0	58	315	369	626
## 6114	NP_001349068.1	XP_021331199.1	51.953	256	123	0	58	313	425	680
## 6115	NP_001349068.1	XP_021331199.1	50.579	259	127	1	58	316	705	962
## 6116	NP_001349068.1	XP_021331199.1	45.139	288	157	1	29	316	508	794
## 6117	NP_001349068.1	XP_021331199.1	49.618	262	130	2	50	311	725	984
## 6118	NP_001349068.1	XP_021331199.1	51.709	234	113	0	82	315	1	234
## 6119	NP_001349068.1	XP_021331199.1	48.828	256	130	1	58	313	816	1070
## 6120	NP_001349068.1	XP_021331199.1	45.415	229	124	1	29	257	843	1070
## 6121	NP_001349068.1	XP_021331199.1	53.012	166	77	1	166	330	1	166
## 6122	NP_001349068.1	XP_021331200.1	51.079	278	136	0	38	315	303	580
## 6123	NP_001349068.1	XP_021331200.1	52.434	267	127	0	49	315	230	496
## 6124	NP_001349068.1	XP_021331200.1	52.713	258	122	0	58	315	351	608
## 6125	NP_001349068.1	XP_021331200.1	50.181	277	132	1	45	315	248	524
## 6126	NP_001349068.1	XP_021331200.1	52.326	258	123	0	58	315	295	552
## 6127	NP_001349068.1	XP_021331200.1	50.775	258	127	0	58	315	211	468
## 6128	NP_001349068.1	XP_021331200.1	50.769	260	126	1	58	315	379	638
## 6129	NP_001349068.1	XP_021331200.1	52.124	259	124	0	58	316	717	975
## 6130	NP_001349068.1	XP_021331200.1	49.270	274	138	1	58	330	183	456
## 6131	NP_001349068.1	XP_021331200.1	50.000	268	134	0	48	315	791	1058
## 6132	NP_001349068.1	XP_021331200.1	49.064	267	136	0	49	315	118	384
## 6133	NP_001349068.1	XP_021331200.1	47.101	276	145	1	40	315	138	412
## 6134	NP_001349068.1	XP_021331200.1	49.306	288	116	2	58	315	519	806
## 6135	NP_001349068.1	XP_021331200.1	52.308	260	122	1	58	315	603	862
## 6136	NP_001349068.1	XP_021331200.1	46.853	286	124	1	58	315	745	1030
## 6137	NP_001349068.1	XP_021331200.1	49.609	256	129	0	60	315	101	356
## 6138	NP_001349068.1	XP_021331200.1	50.388	258	128	0	58	315	661	918
## 6139	NP_001349068.1	XP_021331200.1	49.612	258	130	0	58	315	689	946
## 6140	NP_001349068.1	XP_021331200.1	50.215	233	116	0	58	290	829	1061
## 6141	NP_001349068.1	XP_021331200.1	43.836	292	159	1	24	315	42	328
## 6142	NP_001349068.1	XP_021331200.1	41.627	209	114	2	108	316	45	245
## 6143	NP_001349068.1	XP_017211133.2	51.321	265	129	0	49	313	247	511
## 6144	NP_001349068.1	XP_017211133.2	48.134	268	139	0	48	315	330	597

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## 6145 NP_001349068.1 XP_017211133.2 51.172 256 125 0 60 315 230 485
## 6146 NP_001349068.1 XP_017211133.2 49.213 254 129 0 58 311 368 621
## 6147 NP_001349068.1 XP_017211133.2 49.438 267 135 0 49 315 163 429
## 6148 NP_001349068.1 XP_017211133.2 49.231 260 132 0 56 315 114 373
## 6149 NP_001349068.1 XP_017211133.2 50.192 261 130 0 56 316 282 542
## 6150 NP_001349068.1 XP_017211133.2 49.027 257 131 0 60 316 314 570
## 6151 NP_001349068.1 XP_017211133.2 48.872 266 136 0 50 315 192 457
## 6152 NP_001349068.1 XP_017211133.2 48.881 268 137 0 48 315 78 345
## 6153 NP_001349068.1 XP_017211133.2 48.846 260 133 0 56 315 142 401
## 6154 NP_001349068.1 XP_017211133.2 47.842 278 144 1 39 315 40 317
## 6155 NP_001349068.1 XP_017211133.2 44.565 276 153 0 58 333 396 671
## 6156 NP_001349068.1 XP_017211133.2 44.304 237 131 1 49 285 443 678
## 6157 NP_001349068.1 XP_017211133.2 50.000 142 71 0 175 316 65 206
## 6158 NP_001349068.1 XP_017211133.2 41.304 46 26 1 287 331 65 110
## 6159 NP_001349068.1 XP_021331033.1 53.876 258 119 0 58 315 204 461
## 6160 NP_001349068.1 XP_021331033.1 53.640 261 119 1 58 316 146 406
## 6161 NP_001349068.1 XP_021331033.1 53.101 258 121 0 58 315 176 433
## 6162 NP_001349068.1 XP_021331033.1 50.725 276 133 2 58 330 6 281
## 6163 NP_001349068.1 XP_021331033.1 51.351 259 126 0 58 316 232 490
## 6164 NP_001349068.1 XP_021331033.1 50.775 258 127 0 58 315 514 771
## 6165 NP_001349068.1 XP_021331033.1 50.385 260 127 1 58 315 260 519
## 6166 NP_001349068.1 XP_021331033.1 47.426 272 141 1 46 315 472 743
## 6167 NP_001349068.1 XP_021331033.1 52.321 237 111 1 81 315 1 237
## 6168 NP_001349068.1 XP_021331033.1 49.802 253 121 1 44 290 522 774
## 6169 NP_001349068.1 XP_021331067.1 52.549 255 121 0 58 312 121 375
## 6170 NP_001349068.1 XP_021331067.1 50.391 256 127 0 58 313 93 348
## 6171 NP_001349068.1 XP_021331067.1 46.622 296 156 2 19 313 26 320
## 6172 NP_001349068.1 XP_021331067.1 46.970 198 105 0 119 316 70 267
## 6173 NP_001349068.1 XP_021331163.1 51.938 258 124 0 58 315 116 373
## 6174 NP_001349068.1 XP_021331163.1 49.813 267 134 0 49 315 51 317
## 6175 NP_001349068.1 XP_021331163.1 53.101 258 121 0 58 315 564 821
## 6176 NP_001349068.1 XP_021331163.1 48.410 283 145 1 49 330 23 305
## 6177 NP_001349068.1 XP_021331163.1 52.713 258 122 0 58 315 592 849
## 6178 NP_001349068.1 XP_021331163.1 49.474 285 142 1 33 315 621 905
## 6179 NP_001349068.1 XP_021331163.1 49.270 274 138 1 58 330 144 417
## 6180 NP_001349068.1 XP_021331163.1 49.097 277 140 1 58 333 172 448
## 6181 NP_001349068.1 XP_021331163.1 53.101 258 121 0 58 315 676 933
## 6182 NP_001349068.1 XP_021331163.1 51.095 274 133 1 58 330 536 809
## 6183 NP_001349068.1 XP_021331163.1 47.297 296 149 2 45 333 601 896
## 6184 NP_001349068.1 XP_021331163.1 49.270 274 138 1 58 330 4 277
## 6185 NP_001349068.1 XP_021331163.1 51.938 258 124 0 58 315 508 765
## 6186 NP_001349068.1 XP_021331163.1 50.000 266 133 0 50 315 248 513
## 6187 NP_001349068.1 XP_021331163.1 51.351 259 126 0 58 316 480 738
## 6188 NP_001349068.1 XP_021331163.1 50.775 258 127 0 58 315 200 457
## 6189 NP_001349068.1 XP_021331163.1 49.813 267 134 0 49 315 275 541
## 6190 NP_001349068.1 XP_021331163.1 48.315 267 138 0 49 315 79 345
## 6191 NP_001349068.1 XP_021331163.1 45.819 299 155 2 42 333 430 728
## 6192 NP_001349068.1 XP_021331163.1 49.438 267 135 0 49 315 359 625
## 6193 NP_001349068.1 XP_021331163.1 49.434 265 134 0 49 313 219 483
## 6194 NP_001349068.1 XP_021331163.1 49.813 267 134 0 49 315 415 681
## 6195 NP_001349068.1 XP_021331163.1 51.515 231 112 0 85 315 3 233
## 6196 NP_001349068.1 XP_021331163.1 45.936 283 126 1 58 313 732 1014
## 6197 NP_001349068.1 XP_021331163.1 46.332 259 112 1 58 289 760 1018
## 6198 NP_001349068.1 XP_021331163.1 51.961 204 98 0 112 315 2 205

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## 6199 NP_001349068.1 XP_021331163.1 48.148 81 41 1 251 330 1 81
## 6200 NP_001349068.1 XP_021331163.1 46.032 63 33 1 60 122 958 1019
## 6201 NP_001349068.1 XP_017211168.1 50.373 268 131 2 50 315 52 319
## 6202 NP_001349068.1 XP_017211168.1 51.293 232 112 1 58 288 89 320
## 6203 NP_001349068.1 XP_017211168.1 44.245 278 146 4 70 342 49 322
## 6204 NP_001349068.1 XP_017211168.1 52.514 179 84 1 58 235 145 323
## 6205 NP_001349068.1 XP_021331159.1 49.813 267 134 0 50 316 81 347
## 6206 NP_001349068.1 XP_021331159.1 48.438 256 132 0 58 313 117 372
## 6207 NP_001349068.1 XP_021331159.1 42.475 299 169 2 18 316 24 319
## 6208 NP_001349068.1 XP_021331159.1 44.792 192 106 0 38 229 181 372
## 6209 NP_001349068.1 XP_017211166.1 51.953 256 123 0 58 313 89 344
## 6210 NP_001349068.1 XP_017211166.1 49.811 265 132 1 50 313 52 316
## 6211 NP_001349068.1 XP_017211166.1 46.473 241 129 0 46 286 105 345
## 6212 NP_001349068.1 XP_017211166.1 47.872 188 97 1 144 330 63 250
## 6213 NP_001349068.1 XP_021329615.1 50.000 268 134 0 48 315 120 387
## 6214 NP_001349068.1 XP_021329615.1 46.996 283 150 0 28 310 128 410
## 6215 NP_001349068.1 XP_021329615.1 48.828 256 131 0 60 315 104 359
## 6216 NP_001349068.1 XP_021329615.1 49.225 258 131 0 58 315 74 331
## 6217 NP_001349068.1 XP_021329615.1 47.287 258 136 0 59 316 47 304
## 6218 NP_001349068.1 XP_021329615.1 47.234 235 124 0 81 315 41 275
## 6219 NP_001349068.1 XP_021329615.1 42.500 40 23 0 276 315 40 79
## 6220 NP_001349068.1 XP_021331282.1 54.297 256 117 0 58 313 173 428
## 6221 NP_001349068.1 XP_021331282.1 55.078 256 115 0 58 313 313 568
## 6222 NP_001349068.1 XP_021331282.1 51.880 266 128 0 48 313 247 512
## 6223 NP_001349068.1 XP_021331282.1 51.562 256 124 0 58 313 117 372
## 6224 NP_001349068.1 XP_021331282.1 50.769 260 128 0 58 317 369 628
## 6225 NP_001349068.1 XP_021331282.1 48.039 306 145 3 9 313 24 316
## 6226 NP_001349068.1 XP_021331282.1 51.172 256 125 0 58 313 145 400
## 6227 NP_001349068.1 XP_021331282.1 43.218 317 151 2 46 333 189 505
## 6228 NP_001349068.1 XP_021331282.1 49.621 264 133 0 50 313 81 344
## 6229 NP_001349068.1 XP_021331282.1 49.500 200 101 0 116 315 63 262
## 6230 NP_001349068.1 NP_001116087.1 46.284 296 154 2 19 313 25 316
## 6231 NP_001349068.1 NP_001116087.1 50.758 264 130 0 50 313 81 344
## 6232 NP_001349068.1 NP_001116087.1 51.383 253 123 0 58 310 117 369
## 6233 NP_001349068.1 NP_001116087.1 44.574 258 116 1 58 288 145 402
## 6234 NP_001349068.1 XP_017210844.2 51.953 256 123 0 58 313 76 331
## 6235 NP_001349068.1 XP_017210844.2 50.373 268 133 0 48 315 10 277
## 6236 NP_001349068.1 XP_017210844.2 50.545 275 134 2 58 330 132 406
## 6237 NP_001349068.1 XP_017210844.2 53.629 248 115 0 68 315 2 249
## 6238 NP_001349068.1 XP_017210844.2 50.775 258 127 0 58 315 48 305
## 6239 NP_001349068.1 XP_017210844.2 51.575 254 122 1 60 312 162 415
## 6240 NP_001349068.1 XP_017210844.2 52.036 221 106 0 95 315 1 221
## 6241 NP_001349068.1 XP_017210844.2 52.261 199 94 1 59 256 217 415
## 6242 NP_001349068.1 XP_017210844.2 54.651 172 77 1 58 228 244 415
## 6243 NP_001349068.1 XP_017210844.2 47.333 150 78 1 60 208 274 423
## 6244 NP_001349068.1 XP_017210844.2 55.224 67 30 0 58 124 357 423
## 6245 NP_001349068.1 XP_017210844.2 43.056 72 40 1 263 333 1 72
## 6246 NP_001349068.1 XP_021330829.1 52.174 253 121 0 63 315 19 271
## 6247 NP_001349068.1 XP_021330829.1 46.484 256 133 2 91 342 19 274
## 6248 NP_001349068.1 XP_021330829.1 49.438 178 90 0 58 235 98 275
## 6249 NP_001349068.1 XP_021330829.1 46.739 184 98 0 133 316 5 188
## 6250 NP_001349068.1 XP_021331198.1 51.636 275 132 1 60 333 32 306
## 6251 NP_001349068.1 XP_021331198.1 54.264 258 118 0 58 315 562 819
## 6252 NP_001349068.1 XP_021331198.1 53.101 258 121 0 58 315 114 371

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## 6253	NP_001349068.1	XP_021331198.1	49.819	277	138	1	58	333	58	334
## 6254	NP_001349068.1	XP_021331198.1	52.326	258	123	0	58	315	310	567
## 6255	NP_001349068.1	XP_021331198.1	52.713	258	122	0	58	315	86	343
## 6256	NP_001349068.1	XP_021331198.1	52.896	259	122	0	58	316	142	400
## 6257	NP_001349068.1	XP_021331198.1	52.326	258	123	0	58	315	394	651
## 6258	NP_001349068.1	XP_021331198.1	50.936	267	131	0	49	315	469	735
## 6259	NP_001349068.1	XP_021331198.1	52.326	258	123	0	58	315	590	847
## 6260	NP_001349068.1	XP_021331198.1	52.713	258	122	0	58	315	534	791
## 6261	NP_001349068.1	XP_021331198.1	53.488	258	120	0	58	315	450	707
## 6262	NP_001349068.1	XP_021331198.1	53.101	258	121	0	58	315	618	875
## 6263	NP_001349068.1	XP_021331198.1	53.101	258	121	0	58	315	786	1043
## 6264	NP_001349068.1	XP_021331198.1	53.333	255	119	0	58	312	646	900
## 6265	NP_001349068.1	XP_021331198.1	51.938	258	124	0	58	315	814	1071
## 6266	NP_001349068.1	XP_021331198.1	52.326	258	123	0	58	315	506	763
## 6267	NP_001349068.1	XP_021331198.1	51.079	278	135	1	58	334	758	1035
## 6268	NP_001349068.1	XP_021331198.1	52.778	252	119	0	58	309	842	1093
## 6269	NP_001349068.1	XP_021331198.1	50.000	274	136	1	58	330	674	947
## 6270	NP_001349068.1	XP_021331198.1	51.163	258	126	0	58	315	366	623
## 6271	NP_001349068.1	XP_021331198.1	48.944	284	117	2	58	313	226	509
## 6272	NP_001349068.1	XP_021331198.1	50.579	259	128	0	57	315	1	259
## 6273	NP_001349068.1	XP_021331198.1	46.853	286	124	1	58	315	702	987
## 6274	NP_001349068.1	XP_021331198.1	47.902	286	121	1	58	315	198	483
## 6275	NP_001349068.1	XP_021331198.1	48.201	278	138	1	44	315	262	539
## 6276	NP_001349068.1	XP_021331198.1	49.798	247	123	1	88	333	4	250
## 6277	NP_001349068.1	XP_017210643.2	51.953	256	123	0	58	313	95	350
## 6278	NP_001349068.1	XP_017210643.2	51.172	256	125	0	58	313	67	322
## 6279	NP_001349068.1	XP_017210643.2	45.238	294	159	2	21	313	2	294
## 6280	NP_001349068.1	XP_017210643.2	46.914	243	129	0	58	300	123	365
## 6281	NP_001349068.1	XP_017211121.2	47.883	307	153	4	40	341	33	337
## 6282	NP_001349068.1	XP_021330462.1	51.765	255	123	0	60	314	143	397
## 6283	NP_001349068.1	XP_021330462.1	49.270	274	139	0	42	315	69	342
## 6284	NP_001349068.1	XP_021330462.1	52.344	256	122	0	60	315	115	370
## 6285	NP_001349068.1	XP_021330462.1	48.659	261	134	0	58	318	169	429
## 6286	NP_001349068.1	XP_021330462.1	45.965	285	126	1	60	316	227	511
## 6287	NP_001349068.1	XP_021330462.1	48.413	252	130	0	60	311	199	450
## 6288	NP_001349068.1	XP_021330462.1	40.909	44	26	0	46	89	493	536
## 6289	NP_001349068.1	XP_021330461.1	51.765	255	123	0	60	314	143	397
## 6290	NP_001349068.1	XP_021330461.1	49.270	274	139	0	42	315	69	342
## 6291	NP_001349068.1	XP_021330461.1	52.344	256	122	0	60	315	115	370
## 6292	NP_001349068.1	XP_021330461.1	48.659	261	134	0	58	318	169	429
## 6293	NP_001349068.1	XP_021330461.1	45.965	285	126	1	60	316	227	511
## 6294	NP_001349068.1	XP_021330461.1	48.413	252	130	0	60	311	199	450
## 6295	NP_001349068.1	XP_021330461.1	40.909	44	26	0	46	89	493	536
## 6296	NP_001349068.1	XP_021330460.1	51.765	255	123	0	60	314	143	397
## 6297	NP_001349068.1	XP_021330460.1	49.270	274	139	0	42	315	69	342
## 6298	NP_001349068.1	XP_021330460.1	52.344	256	122	0	60	315	115	370
## 6299	NP_001349068.1	XP_021330460.1	48.659	261	134	0	58	318	169	429
## 6300	NP_001349068.1	XP_021330460.1	45.965	285	126	1	60	316	227	511
## 6301	NP_001349068.1	XP_021330460.1	48.413	252	130	0	60	311	199	450
## 6302	NP_001349068.1	XP_021330460.1	40.909	44	26	0	46	89	493	536
## 6303	NP_001349068.1	XP_021331104.1	48.026	304	155	2	33	333	1074	1377
## 6304	NP_001349068.1	XP_021331104.1	53.282	259	121	0	58	316	933	1191
## 6305	NP_001349068.1	XP_021331104.1	52.290	262	125	0	58	319	1045	1306
## 6306	NP_001349068.1	XP_021331104.1	50.526	285	137	2	49	329	361	645

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## 6307 NP_001349068.1 XP_021331104.1 48.299 294 152 0 22 315 869 1162
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## 6309 NP_001349068.1 XP_021331104.1 51.938 258 124 0 58 315 1129 1386
## 6310 NP_001349068.1 XP_021331104.1 52.510 259 123 0 58 316 961 1219
## 6311 NP_001349068.1 XP_021331104.1 50.763 262 129 0 58 319 1017 1278
## 6312 NP_001349068.1 XP_021331104.1 54.264 258 118 0 58 315 793 1050
## 6313 NP_001349068.1 XP_021331104.1 51.351 259 126 0 58 316 877 1135
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## 6317 NP_001349068.1 XP_021331104.1 51.724 261 123 1 58 315 342 602
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## 6323 NP_001349068.1 XP_021331104.1 49.225 258 131 0 58 315 625 882
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## 6325 NP_001349068.1 XP_021331104.1 49.612 258 130 0 58 315 765 1022
## 6326 NP_001349068.1 XP_021331446.1 52.713 258 122 0 58 315 173 430
## 6327 NP_001349068.1 XP_021331446.1 53.101 258 121 0 58 315 229 486
## 6328 NP_001349068.1 XP_021331446.1 52.734 256 121 0 58 313 257 512
## 6329 NP_001349068.1 XP_021331446.1 52.713 258 122 0 58 315 285 542
## 6330 NP_001349068.1 XP_021331446.1 52.713 258 122 0 58 315 89 346
## 6331 NP_001349068.1 XP_021331446.1 50.775 258 127 0 58 315 117 374
## 6332 NP_001349068.1 XP_021331446.1 50.775 258 127 0 58 315 313 570
## 6333 NP_001349068.1 XP_021331446.1 51.938 258 124 0 58 315 145 402
## 6334 NP_001349068.1 XP_021331446.1 45.806 310 154 2 20 315 9 318
## 6335 NP_001349068.1 XP_021331446.1 48.070 285 146 1 33 315 174 458
## 6336 NP_001349068.1 XP_021331446.1 53.648 233 108 0 58 290 341 573
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## 6338 NP_001349068.1 XP_021331029.1 51.172 256 125 0 58 313 81 336
## 6339 NP_001349068.1 XP_021331029.1 46.622 296 156 2 19 313 14 308
## 6340 NP_001349068.1 XP_021331029.1 46.970 198 105 0 119 316 58 255
## 6341 NP_001349068.1 XP_021330458.1 51.172 256 125 0 58 313 79 334
## 6342 NP_001349068.1 XP_021330458.1 52.191 251 120 0 63 313 56 306
## 6343 NP_001349068.1 XP_021330458.1 47.636 275 138 1 45 313 116 390
## 6344 NP_001349068.1 XP_021330458.1 49.219 256 130 0 58 313 107 362
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## 6346 NP_001349068.1 XP_021330458.1 45.550 191 98 1 45 229 228 418
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## 6354 NP_001349068.1 XP_021331115.1 51.550 258 125 0 58 315 385 642
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## 6358 NP_001349068.1 XP_021331115.1 47.015 268 142 0 48 315 207 474
## 6359 NP_001349068.1 XP_021331115.1 47.794 272 141 1 60 330 275 546
## 6360 NP_001349068.1 XP_021331115.1 49.600 250 126 0 58 307 469 718

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## 6369 NP_001349068.1 XP_021331401.1 52.713 258 122 0 58 315 621 878
## 6370 NP_001349068.1 XP_021331401.1 53.101 258 121 0 58 315 565 822
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## 6381 NP_001349068.1 XP_021331401.1 50.752 266 131 0 50 315 1143 1408
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## 6391 NP_001349068.1 XP_021331401.1 44.586 314 147 1 29 315 1011 1324
## 6392 NP_001349068.1 XP_021331401.1 46.853 286 124 1 58 315 1403 1688
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## 6394 NP_001349068.1 XP_021331401.1 45.690 232 98 1 58 261 1459 1690
## 6395 NP_001349068.1 XP_021331401.1 50.289 173 86 0 147 319 66 238
## 6396 NP_001349068.1 XP_021331401.1 48.993 149 76 0 58 206 1543 1691
## 6397 NP_001349068.1 XP_017211055.1 50.996 251 123 0 63 313 82 332
## 6398 NP_001349068.1 XP_017211055.1 44.765 277 152 1 58 333 161 437
## 6399 NP_001349068.1 XP_017211055.1 43.478 276 150 1 45 314 170 445
## 6400 NP_001349068.1 XP_017211055.1 45.669 254 138 0 58 311 133 386
## 6401 NP_001349068.1 XP_017211055.1 46.429 168 90 0 146 313 81 248
## 6402 NP_001349068.1 XP_017211055.1 49.296 142 72 0 172 313 79 220
## 6403 NP_001349068.1 XP_021330858.1 50.360 278 132 1 44 315 210 487
## 6404 NP_001349068.1 XP_021330858.1 51.737 259 125 0 58 316 174 432
## 6405 NP_001349068.1 XP_021330858.1 51.145 262 128 0 58 319 118 379
## 6406 NP_001349068.1 XP_021330858.1 51.562 256 124 0 58 313 398 653
## 6407 NP_001349068.1 XP_021330858.1 49.813 267 134 0 49 315 193 459
## 6408 NP_001349068.1 XP_021330858.1 52.174 253 121 0 60 312 316 568
## 6409 NP_001349068.1 XP_021330858.1 49.458 277 139 1 58 333 370 646
## 6410 NP_001349068.1 XP_021330858.1 48.450 258 133 0 58 315 90 347
## 6411 NP_001349068.1 XP_021330858.1 50.988 253 124 0 63 315 39 291
## 6412 NP_001349068.1 XP_021330858.1 49.612 258 130 0 58 315 62 319
## 6413 NP_001349068.1 XP_021330858.1 50.403 248 123 0 58 305 426 673
## 6414 NP_001349068.1 XP_021330858.1 48.689 267 136 1 50 315 727 993

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## 6415 NP_001349068.1 XP_021330858.1 48.473 262 135 0 58 319 764 1025
## 6416 NP_001349068.1 XP_021330858.1 42.215 289 137 2 58 316 594 882
## 6417 NP_001349068.1 XP_021330858.1 38.535 314 162 4 49 331 473 786
## 6418 NP_001349068.1 XP_021330858.1 45.455 198 108 0 119 316 39 236
## 6419 NP_001349068.1 XP_021330858.1 47.586 145 76 0 175 319 39 183
## 6420 NP_001349068.1 XP_021330858.1 35.849 106 40 1 58 135 960 1065
## 6421 NP_001349068.1 XP_021329622.1 53.488 258 120 0 58 315 191 448
## 6422 NP_001349068.1 XP_021329622.1 51.550 258 125 0 58 315 527 784
## 6423 NP_001349068.1 XP_021329622.1 52.713 258 122 0 58 315 499 756
## 6424 NP_001349068.1 XP_021329622.1 52.734 256 121 0 58 313 303 558
## 6425 NP_001349068.1 XP_021329622.1 48.708 271 139 0 49 319 98 368
## 6426 NP_001349068.1 XP_021329622.1 49.612 258 130 0 58 315 387 644
## 6427 NP_001349068.1 XP_021329622.1 50.752 266 131 0 48 313 69 334
## 6428 NP_001349068.1 XP_021329622.1 52.734 256 121 0 60 315 669 924
## 6429 NP_001349068.1 XP_021329622.1 50.391 256 127 0 58 313 135 390
## 6430 NP_001349068.1 XP_021329622.1 49.225 258 131 0 58 315 443 700
## 6431 NP_001349068.1 XP_021329622.1 51.550 258 125 0 58 315 247 504
## 6432 NP_001349068.1 XP_021329622.1 50.388 258 128 0 58 315 583 840
## 6433 NP_001349068.1 XP_021329622.1 50.775 258 127 0 58 315 555 812
## 6434 NP_001349068.1 XP_021329622.1 50.781 256 126 0 60 315 613 868
## 6435 NP_001349068.1 XP_021329622.1 50.965 259 127 0 58 316 219 477
## 6436 NP_001349068.1 XP_021329622.1 51.550 258 125 0 58 315 163 420
## 6437 NP_001349068.1 XP_021329622.1 49.416 257 130 0 60 316 473 729
## 6438 NP_001349068.1 XP_021329622.1 49.225 258 131 0 58 315 275 532
## 6439 NP_001349068.1 XP_021329622.1 49.612 258 130 0 58 315 639 896
## 6440 NP_001349068.1 XP_021329622.1 48.837 258 132 0 58 315 359 616
## 6441 NP_001349068.1 XP_021329622.1 50.000 256 128 0 60 315 53 308
## 6442 NP_001349068.1 XP_021329622.1 51.724 232 112 0 60 291 697 928
## 6443 NP_001349068.1 XP_021329622.1 48.529 204 105 0 58 261 723 926
## 6444 NP_001349068.1 XP_021329622.1 46.203 158 85 0 49 206 770 927
## 6445 NP_001349068.1 XP_021329622.1 46.721 122 65 0 58 179 807 928
## 6446 NP_001349068.1 NP_001314932.1 50.787 254 125 0 60 313 91 344
## 6447 NP_001349068.1 NP_001314932.1 49.057 265 134 1 50 313 52 316
## 6448 NP_001349068.1 NP_001314932.1 51.012 247 117 2 69 315 48 290
## 6449 NP_001349068.1 NP_001314932.1 50.877 228 112 0 58 285 117 344
## 6450 NP_001349068.1 XP_021329720.1 51.953 256 123 0 58 313 149 404
## 6451 NP_001349068.1 XP_021329720.1 50.391 256 127 0 58 313 177 432
## 6452 NP_001349068.1 XP_021329720.1 51.172 256 125 0 58 313 121 376
## 6453 NP_001349068.1 XP_021329720.1 49.805 257 129 0 58 314 205 461
## 6454 NP_001349068.1 XP_021329720.1 50.000 256 128 0 58 313 93 348
## 6455 NP_001349068.1 XP_021329720.1 48.819 254 130 0 58 311 261 514
## 6456 NP_001349068.1 XP_021329720.1 47.368 266 140 0 48 313 55 320
## 6457 NP_001349068.1 XP_021329720.1 48.302 265 137 0 49 313 224 488
## 6458 NP_001349068.1 XP_021329720.1 48.606 251 129 0 63 313 42 292
## 6459 NP_001349068.1 XP_021329720.1 43.494 269 148 1 38 306 273 537
## 6460 NP_001349068.1 XP_021329720.1 48.241 199 103 0 115 313 38 236
## 6461 NP_001349068.1 XP_021329720.1 45.324 139 76 0 58 196 401 539
## 6462 NP_001349068.1 XP_021329720.1 47.656 128 66 1 204 330 43 170
## 6463 NP_001349068.1 XP_021331332.1 49.819 277 138 1 56 331 619 895
## 6464 NP_001349068.1 XP_021331332.1 48.029 279 139 1 44 316 657 935
## 6465 NP_001349068.1 XP_021331332.1 51.163 258 126 0 58 315 593 850
## 6466 NP_001349068.1 XP_021331332.1 53.101 258 121 0 58 315 201 458
## 6467 NP_001349068.1 XP_021331332.1 51.562 256 124 0 58 313 733 988
## 6468 NP_001349068.1 XP_021331332.1 51.163 258 126 0 58 315 565 822

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## 6469	NP_001349068.1	XP_021331332.1	50.181	277	137	1	58	333	789	1065
## 6470	NP_001349068.1	XP_021331332.1	50.000	258	129	0	58	315	817	1074
## 6471	NP_001349068.1	XP_021331332.1	50.000	258	129	0	58	315	649	906
## 6472	NP_001349068.1	XP_021331332.1	44.586	314	167	1	6	319	324	630
## 6473	NP_001349068.1	XP_021331332.1	51.938	258	124	0	58	315	285	542
## 6474	NP_001349068.1	XP_021331332.1	51.562	256	124	0	60	315	707	962
## 6475	NP_001349068.1	XP_021331332.1	50.562	267	132	0	49	315	248	514
## 6476	NP_001349068.1	XP_021331332.1	50.000	258	129	0	58	315	761	1018
## 6477	NP_001349068.1	XP_021331332.1	50.388	258	128	0	58	315	509	766
## 6478	NP_001349068.1	XP_021331332.1	51.145	262	128	0	58	319	845	1106
## 6479	NP_001349068.1	XP_021331332.1	50.775	258	127	0	58	315	229	486
## 6480	NP_001349068.1	XP_021331332.1	51.938	258	124	0	58	315	313	570
## 6481	NP_001349068.1	XP_021331332.1	50.000	258	129	0	58	315	537	794
## 6482	NP_001349068.1	XP_021331332.1	46.358	302	133	2	58	330	397	698
## 6483	NP_001349068.1	XP_021331332.1	48.364	275	141	1	60	333	175	449
## 6484	NP_001349068.1	XP_021331332.1	47.518	282	147	1	50	330	137	418
## 6485	NP_001349068.1	XP_021331332.1	48.432	287	147	1	29	315	984	1269
## 6486	NP_001349068.1	XP_021331332.1	49.225	258	131	0	58	315	453	710
## 6487	NP_001349068.1	XP_021331332.1	47.101	276	140	1	44	313	69	344
## 6488	NP_001349068.1	XP_021331332.1	50.000	258	129	0	58	315	61	318
## 6489	NP_001349068.1	XP_021331332.1	48.315	267	138	0	49	315	108	374
## 6490	NP_001349068.1	XP_021331332.1	51.181	254	123	1	58	311	873	1125
## 6491	NP_001349068.1	XP_021331332.1	45.522	268	146	0	48	315	23	290
## 6492	NP_001349068.1	XP_021331332.1	45.312	256	140	0	60	315	7	262
## 6493	NP_001349068.1	XP_021331332.1	47.436	234	123	0	82	315	1	234
## 6494	NP_001349068.1	XP_021331332.1	48.529	204	104	1	58	261	1069	1271
## 6495	NP_001349068.1	XP_021331332.1	47.134	157	83	0	50	206	1116	1272
## 6496	NP_001349068.1	XP_021331509.1	49.811	265	132	1	50	313	43	307
## 6497	NP_001349068.1	XP_021331509.1	48.617	253	130	0	58	310	80	332
## 6498	NP_001349068.1	XP_021331509.1	50.000	200	100	0	58	257	136	335
## 6499	NP_001349068.1	XP_017211183.1	49.811	265	132	1	50	313	52	316
## 6500	NP_001349068.1	XP_017211183.1	49.174	242	123	0	49	290	80	321
## 6501	NP_001349068.1	XP_017211183.1	52.482	141	67	0	175	315	66	206
## 6502	NP_001349068.1	XP_021331157.1	45.714	315	142	2	29	315	115	428
## 6503	NP_001349068.1	XP_021331157.1	49.301	286	116	2	58	315	200	484
## 6504	NP_001349068.1	XP_021331157.1	50.000	266	133	0	50	315	247	512
## 6505	NP_001349068.1	XP_021331157.1	51.351	259	124	2	58	316	5	261
## 6506	NP_001349068.1	XP_021331157.1	51.681	238	114	1	82	319	1	237
## 6507	NP_001349068.1	XP_021331157.1	47.107	242	128	0	49	290	274	515
## 6508	NP_001349068.1	XP_009300324.1	51.953	256	123	0	58	313	132	387
## 6509	NP_001349068.1	XP_009300324.1	50.391	256	127	0	58	313	160	415
## 6510	NP_001349068.1	XP_009300324.1	51.172	256	125	0	58	313	104	359
## 6511	NP_001349068.1	XP_009300324.1	49.805	257	129	0	58	314	188	444
## 6512	NP_001349068.1	XP_009300324.1	50.000	256	128	0	58	313	76	331
## 6513	NP_001349068.1	XP_009300324.1	48.819	254	130	0	58	311	244	497
## 6514	NP_001349068.1	XP_009300324.1	47.368	266	140	0	48	313	38	303
## 6515	NP_001349068.1	XP_009300324.1	48.302	265	137	0	49	313	207	471
## 6516	NP_001349068.1	XP_009300324.1	48.606	251	129	0	63	313	25	275
## 6517	NP_001349068.1	XP_009300324.1	43.494	269	148	1	38	306	256	520
## 6518	NP_001349068.1	XP_009300324.1	48.241	199	103	0	115	313	21	219
## 6519	NP_001349068.1	XP_009300324.1	45.324	139	76	0	58	196	384	522
## 6520	NP_001349068.1	XP_009300324.1	47.656	128	66	1	204	330	26	153
## 6521	NP_001349068.1	NP_001315634.1	51.383	253	123	0	63	315	57	309
## 6522	NP_001349068.1	NP_001315634.1	51.953	256	123	0	58	313	80	335

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## 6523 NP_001349068.1 NP_001315634.1 48.908 229 117 0 58 286 108 336
## 6524 NP_001349068.1 NP_001315634.1 43.678 174 96 1 33 204 165 338
## 6525 NP_001349068.1 NP_001314792.1 48.364 275 141 1 42 315 44 318
## 6526 NP_001349068.1 NP_001314792.1 53.879 232 107 0 58 289 89 320
## 6527 NP_001349068.1 NP_001314792.1 48.035 229 119 0 91 319 66 294
## 6528 NP_001349068.1 XP_021331405.1 52.434 267 127 0 49 315 192 458
## 6529 NP_001349068.1 XP_021331405.1 53.488 258 120 0 58 315 229 486
## 6530 NP_001349068.1 XP_021331405.1 51.163 258 126 0 58 315 369 626
## 6531 NP_001349068.1 XP_021331405.1 51.550 258 125 0 58 315 313 570
## 6532 NP_001349068.1 XP_021331405.1 52.434 267 127 0 49 315 80 346
## 6533 NP_001349068.1 XP_021331405.1 51.550 258 125 0 58 315 285 542
## 6534 NP_001349068.1 XP_021331405.1 51.685 267 129 0 49 315 108 374
## 6535 NP_001349068.1 XP_021331405.1 50.775 258 126 1 58 315 397 653
## 6536 NP_001349068.1 XP_021331405.1 51.908 262 126 0 58 319 5 266
## 6537 NP_001349068.1 XP_021331405.1 51.550 258 125 0 58 315 257 514
## 6538 NP_001349068.1 XP_021331405.1 50.562 267 132 0 49 315 136 402
## 6539 NP_001349068.1 XP_021331405.1 48.014 277 143 1 58 333 341 617
## 6540 NP_001349068.1 XP_021331405.1 51.163 258 126 0 58 315 173 430
## 6541 NP_001349068.1 XP_021331405.1 49.813 267 133 1 50 316 585 850
## 6542 NP_001349068.1 XP_021331405.1 51.163 258 126 0 58 315 61 318
## 6543 NP_001349068.1 XP_021331405.1 50.000 268 134 0 48 315 23 290
## 6544 NP_001349068.1 XP_021331405.1 52.564 234 111 0 82 315 1 234
## 6545 NP_001349068.1 XP_021331405.1 51.181 254 122 2 58 311 621 872
## 6546 NP_001349068.1 XP_021331405.1 48.828 256 130 1 58 313 704 958
## 6547 NP_001349068.1 XP_021331405.1 45.217 230 125 1 28 257 730 958
## 6548 NP_001349068.1 XP_021331047.1 52.852 263 120 1 58 316 309 571
## 6549 NP_001349068.1 XP_021331047.1 51.362 257 121 1 58 310 337 593
## 6550 NP_001349068.1 XP_021331047.1 48.921 278 137 2 58 330 281 558
## 6551 NP_001349068.1 XP_021331047.1 50.000 258 129 0 58 315 253 510
## 6552 NP_001349068.1 XP_021331047.1 44.194 310 121 2 58 315 173 482
## 6553 NP_001349068.1 XP_021331047.1 50.382 262 126 1 58 319 5 262
## 6554 NP_001349068.1 XP_021331047.1 48.718 234 120 0 82 315 1 234
## 6555 NP_001349068.1 XP_021331047.1 50.216 231 111 2 112 338 3 233
## 6556 NP_001349068.1 XP_021331047.1 46.988 166 87 1 166 330 1 166
## 6557 NP_001349068.1 XP_021331108.1 50.000 276 137 1 40 315 353 627
## 6558 NP_001349068.1 XP_021331108.1 53.668 259 119 1 58 315 61 319
## 6559 NP_001349068.1 XP_021331108.1 51.460 274 132 1 58 330 426 699
## 6560 NP_001349068.1 XP_021331108.1 53.101 258 121 0 58 315 342 599
## 6561 NP_001349068.1 XP_021331108.1 51.254 279 135 1 56 333 480 758
## 6562 NP_001349068.1 XP_021331108.1 54.688 256 116 0 58 313 538 793
## 6563 NP_001349068.1 XP_021331108.1 53.101 258 121 0 58 315 566 823
## 6564 NP_001349068.1 XP_021331108.1 51.111 270 132 0 46 315 582 851
## 6565 NP_001349068.1 XP_021331108.1 53.282 259 121 0 58 316 202 460
## 6566 NP_001349068.1 XP_021331108.1 52.896 259 122 0 58 316 314 572
## 6567 NP_001349068.1 XP_021331108.1 52.326 258 123 0 58 315 258 515
## 6568 NP_001349068.1 XP_021331108.1 52.326 258 123 0 58 315 622 879
## 6569 NP_001349068.1 XP_021331108.1 51.550 258 125 0 58 315 650 907
## 6570 NP_001349068.1 XP_021331108.1 51.938 258 124 0 58 315 230 487
## 6571 NP_001349068.1 XP_021331108.1 51.550 258 125 0 58 315 678 935
## 6572 NP_001349068.1 XP_021331108.1 53.307 257 119 1 58 313 173 429
## 6573 NP_001349068.1 XP_021331108.1 51.938 258 124 0 58 315 734 991
## 6574 NP_001349068.1 XP_021331108.1 48.727 275 137 1 41 315 385 655
## 6575 NP_001349068.1 XP_021331108.1 51.163 258 126 0 58 315 510 767
## 6576 NP_001349068.1 XP_021331108.1 52.326 258 123 0 58 315 286 543

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## 6577 NP_001349068.1 XP_021331108.1 51.550 258 125 0 58 315 762 1019
## 6578 NP_001349068.1 XP_021331108.1 50.193 259 128 1 58 315 5 263
## 6579 NP_001349068.1 XP_021331108.1 48.689 267 137 0 49 315 697 963
## 6580 NP_001349068.1 XP_021331108.1 54.468 235 106 1 82 315 1 235
## 6581 NP_001349068.1 XP_021331108.1 49.356 233 118 0 58 290 790 1022
## 6582 NP_001349068.1 XP_021331195.1 54.688 256 116 0 58 313 1155 1410
## 6583 NP_001349068.1 XP_021331195.1 53.101 258 121 0 58 315 1099 1356
## 6584 NP_001349068.1 XP_021331195.1 52.713 258 122 0 58 315 959 1216
## 6585 NP_001349068.1 XP_021331195.1 47.039 304 131 1 46 319 553 856
## 6586 NP_001349068.1 XP_021331195.1 52.920 274 128 1 58 330 89 362
## 6587 NP_001349068.1 XP_021331195.1 52.713 258 122 0 58 315 791 1048
## 6588 NP_001349068.1 XP_021331195.1 51.938 258 124 0 58 315 987 1244
## 6589 NP_001349068.1 XP_021331195.1 53.516 256 119 0 58 313 651 906
## 6590 NP_001349068.1 XP_021331195.1 50.181 277 137 1 58 333 1127 1403
## 6591 NP_001349068.1 XP_021331195.1 52.326 258 123 0 58 315 679 936
## 6592 NP_001349068.1 XP_021331195.1 52.569 253 120 0 63 315 628 880
## 6593 NP_001349068.1 XP_021331195.1 51.953 256 123 0 58 313 1183 1438
## 6594 NP_001349068.1 XP_021331195.1 51.163 258 126 0 58 315 903 1160
## 6595 NP_001349068.1 XP_021331195.1 52.326 258 123 0 58 315 313 570
## 6596 NP_001349068.1 XP_021331195.1 52.809 267 125 1 50 315 52 318
## 6597 NP_001349068.1 XP_021331195.1 52.222 270 129 0 46 315 189 458
## 6598 NP_001349068.1 XP_021331195.1 51.163 258 126 0 58 315 257 514
## 6599 NP_001349068.1 XP_021331195.1 51.550 258 125 0 58 315 1015 1272
## 6600 NP_001349068.1 XP_021331195.1 53.906 256 118 0 60 315 175 430
## 6601 NP_001349068.1 XP_021331195.1 51.550 258 125 0 58 315 229 486
## 6602 NP_001349068.1 XP_021331195.1 51.163 258 126 0 58 315 1071 1328
## 6603 NP_001349068.1 XP_021331195.1 50.775 258 127 0 58 315 931 1188
## 6604 NP_001349068.1 XP_021331195.1 46.154 286 152 1 33 316 1016 1301
## 6605 NP_001349068.1 XP_021331195.1 51.938 258 124 0 58 315 145 402
## 6606 NP_001349068.1 XP_021331195.1 48.252 286 118 1 60 315 539 824
## 6607 NP_001349068.1 XP_021331195.1 52.713 258 122 0 58 315 117 374
## 6608 NP_001349068.1 XP_021331195.1 50.000 256 128 0 58 313 1211 1466
## 6609 NP_001349068.1 XP_021331195.1 50.579 259 128 0 58 316 341 599
## 6610 NP_001349068.1 XP_021331195.1 49.807 259 130 0 58 316 735 993
## 6611 NP_001349068.1 XP_021331195.1 51.163 258 126 0 58 315 847 1104
## 6612 NP_001349068.1 XP_021331195.1 50.000 258 129 0 58 315 1267 1524
## 6613 NP_001349068.1 XP_021331195.1 49.813 267 134 0 49 315 754 1020
## 6614 NP_001349068.1 XP_021331195.1 50.000 258 129 0 58 315 707 964
## 6615 NP_001349068.1 XP_021331195.1 49.807 259 130 0 58 316 875 1133
## 6616 NP_001349068.1 XP_021331195.1 49.618 262 132 0 49 310 360 621
## 6617 NP_001349068.1 XP_021331195.1 49.219 256 130 0 58 313 1239 1494
## 6618 NP_001349068.1 XP_021331195.1 38.264 311 140 1 58 316 1323 1633
## 6619 NP_001349068.1 XP_021331195.1 39.146 281 147 1 58 314 1379 1659
## 6620 NP_001349068.1 XP_021331376.1 49.259 270 137 0 46 315 357 626
## 6621 NP_001349068.1 XP_021331376.1 50.775 258 127 0 58 315 285 542
## 6622 NP_001349068.1 XP_021331376.1 50.741 270 133 0 46 315 441 710
## 6623 NP_001349068.1 XP_021331376.1 53.488 258 120 0 58 315 509 766
## 6624 NP_001349068.1 XP_021331376.1 49.458 277 139 1 58 333 397 673
## 6625 NP_001349068.1 XP_021331376.1 51.938 258 124 0 58 315 425 682
## 6626 NP_001349068.1 XP_021331376.1 53.725 255 118 0 58 312 593 847
## 6627 NP_001349068.1 XP_021331376.1 50.775 258 127 0 58 315 173 430
## 6628 NP_001349068.1 XP_021331376.1 50.752 266 131 0 50 315 109 374
## 6629 NP_001349068.1 XP_021331376.1 51.953 256 123 0 60 315 231 486
## 6630 NP_001349068.1 XP_021331376.1 49.225 258 131 0 58 315 5 262

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## 6631	NP_001349068.1	XP_021331376.1	49.630	270	136	0	46	315	245	514
## 6632	NP_001349068.1	XP_021331376.1	49.612	258	130	0	58	315	201	458
## 6633	NP_001349068.1	XP_021331376.1	48.561	278	137	1	44	315	13	290
## 6634	NP_001349068.1	XP_021331376.1	50.973	257	126	0	59	315	566	822
## 6635	NP_001349068.1	XP_021331376.1	45.896	268	145	0	48	315	79	346
## 6636	NP_001349068.1	XP_021331376.1	47.436	234	123	0	82	315	1	234
## 6637	NP_001349068.1	XP_021331131.1	50.198	253	126	0	63	315	52	304
## 6638	NP_001349068.1	XP_021331131.1	42.642	265	152	0	50	314	123	387
## 6639	NP_001349068.1	XP_021331131.1	42.751	269	154	0	48	316	93	361
## 6640	NP_001349068.1	XP_021331106.1	53.077	260	122	0	56	315	339	598
## 6641	NP_001349068.1	XP_021331106.1	53.846	260	120	0	56	315	423	682
## 6642	NP_001349068.1	XP_021331106.1	51.550	258	125	0	58	315	313	570
## 6643	NP_001349068.1	XP_021331106.1	51.938	258	124	0	58	315	397	654
## 6644	NP_001349068.1	XP_021331106.1	51.341	261	127	0	56	316	563	823
## 6645	NP_001349068.1	XP_021331106.1	50.385	260	129	0	56	315	283	542
## 6646	NP_001349068.1	XP_021331106.1	51.154	260	127	0	56	315	171	430
## 6647	NP_001349068.1	XP_021331106.1	50.000	260	130	0	56	315	3	262
## 6648	NP_001349068.1	XP_021331106.1	52.344	256	122	0	60	315	231	486
## 6649	NP_001349068.1	XP_021331106.1	48.746	279	142	1	56	333	479	757
## 6650	NP_001349068.1	XP_021331106.1	48.746	279	142	1	56	333	87	365
## 6651	NP_001349068.1	XP_021331106.1	50.958	261	128	0	56	316	507	767
## 6652	NP_001349068.1	XP_021331106.1	51.172	256	125	0	60	315	259	514
## 6653	NP_001349068.1	XP_021331106.1	50.000	260	130	0	56	315	59	318
## 6654	NP_001349068.1	XP_021331106.1	48.864	264	135	0	56	319	143	406
## 6655	NP_001349068.1	XP_021331106.1	48.519	270	139	0	46	315	525	794
## 6656	NP_001349068.1	XP_021331106.1	48.339	271	140	0	45	315	608	878
## 6657	NP_001349068.1	XP_021331106.1	47.635	296	121	1	56	317	843	1138
## 6658	NP_001349068.1	XP_021331106.1	52.137	234	112	0	82	315	1	234
## 6659	NP_001349068.1	XP_021331106.1	45.578	294	126	1	56	315	647	940
## 6660	NP_001349068.1	XP_021331106.1	52.486	181	86	0	139	319	2	182
## 6661	NP_001349068.1	XP_021327005.1	50.000	270	134	1	42	310	34	303
## 6662	NP_001349068.1	XP_021327005.1	49.561	228	115	0	88	315	53	280
## 6663	NP_001349068.1	XP_021327005.1	38.644	295	145	3	58	316	247	541
## 6664	NP_001349068.1	XP_021327005.1	38.961	308	148	3	49	318	210	515
## 6665	NP_001349068.1	XP_021327005.1	54.335	173	79	0	144	316	53	225
## 6666	NP_001349068.1	XP_021327005.1	38.721	297	134	3	56	310	273	563
## 6667	NP_001349068.1	XP_021327005.1	48.544	206	105	1	50	254	358	563
## 6668	NP_001349068.1	XP_021330544.1	50.000	270	134	1	42	310	34	303
## 6669	NP_001349068.1	XP_021330544.1	49.561	228	115	0	88	315	53	280
## 6670	NP_001349068.1	XP_021330544.1	38.644	295	145	3	58	316	247	541
## 6671	NP_001349068.1	XP_021330544.1	38.961	308	148	3	49	318	210	515
## 6672	NP_001349068.1	XP_021330544.1	54.335	173	79	0	144	316	53	225
## 6673	NP_001349068.1	XP_021330544.1	38.721	297	134	3	56	310	273	563
## 6674	NP_001349068.1	XP_021330544.1	48.544	206	105	1	50	254	358	563
## 6675	NP_001349068.1	XP_021331254.1	49.612	258	130	0	58	315	134	391
## 6676	NP_001349068.1	XP_021331254.1	46.367	289	154	1	46	333	94	382
## 6677	NP_001349068.1	XP_021331254.1	48.375	277	142	1	58	333	78	354
## 6678	NP_001349068.1	XP_021331254.1	48.837	258	132	0	58	315	22	279
## 6679	NP_001349068.1	XP_021331254.1	50.996	251	123	0	65	315	1	251
## 6680	NP_001349068.1	XP_021331254.1	48.519	270	139	0	46	315	150	419
## 6681	NP_001349068.1	XP_021331254.1	48.927	233	119	0	58	290	190	422
## 6682	NP_001349068.1	XP_021331254.1	45.977	87	47	0	233	319	1	87
## 6683	NP_001349068.1	XP_017209942.1	51.953	256	123	0	58	313	60	315
## 6684	NP_001349068.1	XP_017209942.1	49.813	267	133	1	50	315	23	289

## 6685	NP_001349068.1	XP_017209942.1	49.782	229	115	0	58	286	88	316
## 6686	NP_001349068.1	XP_017209942.1	43.678	174	96	1	33	204	145	318
## 6687	NP_001349068.1	XP_001923745.2	51.163	258	126	0	58	315	425	682
## 6688	NP_001349068.1	XP_001923745.2	50.388	258	128	0	58	315	397	654
## 6689	NP_001349068.1	XP_001923745.2	49.627	268	135	0	46	313	217	484
## 6690	NP_001349068.1	XP_001923745.2	49.612	258	130	0	58	315	313	570
## 6691	NP_001349068.1	XP_001923745.2	50.388	258	128	0	58	315	369	626
## 6692	NP_001349068.1	XP_001923745.2	48.175	274	141	1	58	330	341	614
## 6693	NP_001349068.1	XP_001923745.2	49.618	262	132	0	58	319	145	406
## 6694	NP_001349068.1	XP_001923745.2	49.813	267	134	0	47	313	274	540
## 6695	NP_001349068.1	XP_001923745.2	50.376	266	132	0	50	315	81	346
## 6696	NP_001349068.1	XP_001923745.2	46.341	287	150	2	58	340	257	543
## 6697	NP_001349068.1	XP_001923745.2	50.198	253	126	0	58	310	481	733
## 6698	NP_001349068.1	XP_001923745.2	50.388	258	128	0	58	315	201	458
## 6699	NP_001349068.1	XP_001923745.2	48.881	268	137	0	46	313	161	428
## 6700	NP_001349068.1	XP_001923745.2	48.828	256	131	0	58	313	509	764
## 6701	NP_001349068.1	XP_001923745.2	49.434	265	133	1	50	313	52	316
## 6702	NP_001349068.1	XP_001923745.2	48.908	229	117	0	58	286	537	765
## 6703	NP_001349068.1	XP_001923745.2	48.404	188	96	1	144	330	63	250
## 6704	NP_001349068.1	XP_021331276.1	51.181	254	124	0	60	313	245	498
## 6705	NP_001349068.1	XP_021331276.1	48.689	267	137	0	49	315	318	584
## 6706	NP_001349068.1	XP_021331276.1	51.172	256	125	0	58	313	523	778
## 6707	NP_001349068.1	XP_021331276.1	48.828	256	131	0	60	315	105	360
## 6708	NP_001349068.1	XP_021331276.1	50.391	256	127	0	58	313	215	470
## 6709	NP_001349068.1	XP_021331276.1	49.603	252	127	0	60	311	469	720
## 6710	NP_001349068.1	XP_021331276.1	44.590	305	135	2	45	315	336	640
## 6711	NP_001349068.1	XP_021331276.1	48.496	266	137	0	48	313	121	386
## 6712	NP_001349068.1	XP_021331276.1	48.855	262	134	0	50	311	431	692
## 6713	NP_001349068.1	XP_021331276.1	49.225	258	131	0	58	315	495	752
## 6714	NP_001349068.1	XP_021331276.1	49.225	258	131	0	58	315	271	528
## 6715	NP_001349068.1	XP_021331276.1	48.062	258	134	0	58	315	299	556
## 6716	NP_001349068.1	XP_021331276.1	45.896	268	145	0	48	315	401	668
## 6717	NP_001349068.1	XP_021331276.1	48.837	258	132	0	58	315	187	444
## 6718	NP_001349068.1	XP_021331276.1	50.000	200	100	0	58	257	607	806
## 6719	NP_001349068.1	XP_021331276.1	47.619	168	88	0	146	313	79	246
## 6720	NP_001349068.1	XP_021331276.1	45.223	157	78	1	167	315	64	220
## 6721	NP_001349068.1	XP_021331276.1	41.667	132	76	1	203	333	80	211
## 6722	NP_001349068.1	XP_021330441.1	54.321	243	111	0	69	311	14	256
## 6723	NP_001349068.1	XP_021330441.1	50.781	256	126	0	58	313	59	314
## 6724	NP_001349068.1	XP_021330441.1	48.908	229	117	0	58	286	87	315
## 6725	NP_001349068.1	XP_021330441.1	51.323	189	92	0	125	313	14	202
## 6726	NP_001349068.1	XP_021330441.1	51.240	121	58	1	211	330	16	136
## 6727	NP_001349068.1	XP_021330441.1	48.000	50	26	0	266	315	15	64
## 6728	NP_001349068.1	XP_021330455.1	48.881	268	137	0	48	315	92	359
## 6729	NP_001349068.1	XP_021330455.1	47.955	269	140	0	45	313	117	385
## 6730	NP_001349068.1	XP_021330455.1	47.126	261	138	0	58	318	158	418
## 6731	NP_001349068.1	XP_021330455.1	47.638	254	133	0	58	311	186	439
## 6732	NP_001349068.1	XP_021330455.1	46.792	265	140	1	50	313	65	329
## 6733	NP_001349068.1	XP_021330455.1	46.332	259	139	0	58	316	242	500
## 6734	NP_001349068.1	XP_021330455.1	42.230	296	143	1	46	313	258	553
## 6735	NP_001349068.1	XP_021330455.1	39.860	286	170	1	33	316	187	472
## 6736	NP_001349068.1	XP_021330455.1	48.000	200	104	0	120	319	80	279
## 6737	NP_001349068.1	XP_021330454.1	48.881	268	137	0	48	315	92	359
## 6738	NP_001349068.1	XP_021330454.1	47.955	269	140	0	45	313	117	385

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## 6739 NP_001349068.1 XP_021330454.1 47.126 261 138 0 58 318 158 418
## 6740 NP_001349068.1 XP_021330454.1 47.638 254 133 0 58 311 186 439
## 6741 NP_001349068.1 XP_021330454.1 46.792 265 140 1 50 313 65 329
## 6742 NP_001349068.1 XP_021330454.1 46.332 259 139 0 58 316 242 500
## 6743 NP_001349068.1 XP_021330454.1 42.230 296 143 1 46 313 258 553
## 6744 NP_001349068.1 XP_021330454.1 39.860 286 170 1 33 316 187 472
## 6745 NP_001349068.1 XP_021330454.1 48.000 200 104 0 120 319 80 279
## 6746 NP_001349068.1 XP_021331458.1 50.187 267 132 1 50 315 21 287
## 6747 NP_001349068.1 XP_021331458.1 51.172 256 125 0 58 313 58 313
## 6748 NP_001349068.1 XP_021331458.1 49.345 229 116 0 58 286 86 314
## 6749 NP_001349068.1 XP_021331458.1 43.678 174 96 1 33 204 143 316
## 6750 NP_001349068.1 XP_021331156.1 51.071 280 132 1 40 319 1091 1365
## 6751 NP_001349068.1 XP_021331156.1 51.163 258 126 0 58 315 1076 1333
## 6752 NP_001349068.1 XP_021331156.1 52.510 259 122 1 58 316 321 578
## 6753 NP_001349068.1 XP_021331156.1 50.781 256 126 0 58 313 992 1247
## 6754 NP_001349068.1 XP_021331156.1 50.370 270 134 0 46 315 952 1221
## 6755 NP_001349068.1 XP_021331156.1 50.775 258 126 1 58 315 293 549
## 6756 NP_001349068.1 XP_021331156.1 47.653 277 144 1 58 333 181 457
## 6757 NP_001349068.1 XP_021331156.1 48.736 277 141 1 58 333 237 513
## 6758 NP_001349068.1 XP_021331156.1 51.163 258 126 0 58 315 209 466
## 6759 NP_001349068.1 XP_021331156.1 47.059 289 152 1 46 333 1036 1324
## 6760 NP_001349068.1 XP_021331156.1 50.388 258 128 0 58 315 1020 1277
## 6761 NP_001349068.1 XP_021331156.1 50.000 258 129 0 58 315 684 941
## 6762 NP_001349068.1 XP_021331156.1 49.813 267 133 1 50 315 1375 1641
## 6763 NP_001349068.1 XP_021331156.1 50.775 258 127 0 58 315 628 885
## 6764 NP_001349068.1 XP_021331156.1 50.965 259 126 1 58 315 1411 1669
## 6765 NP_001349068.1 XP_021331156.1 50.388 258 128 0 58 315 153 410
## 6766 NP_001349068.1 XP_021331156.1 49.104 279 137 1 38 316 921 1194
## 6767 NP_001349068.1 XP_021331156.1 42.442 344 140 3 29 315 1243 1585
## 6768 NP_001349068.1 XP_021331156.1 49.225 258 131 0 58 315 600 857
## 6769 NP_001349068.1 XP_021331156.1 50.000 256 128 0 60 315 267 522
## 6770 NP_001349068.1 XP_021331156.1 51.575 254 122 1 58 311 1132 1384
## 6771 NP_001349068.1 XP_021331156.1 50.000 258 129 0 58 315 544 801
## 6772 NP_001349068.1 XP_021331156.1 47.407 270 142 0 46 315 812 1081
## 6773 NP_001349068.1 XP_021331156.1 44.599 287 159 0 29 315 627 913
## 6774 NP_001349068.1 XP_021331156.1 47.368 266 140 0 50 315 900 1165
## 6775 NP_001349068.1 XP_021331156.1 45.487 277 150 1 58 333 125 401
## 6776 NP_001349068.1 XP_021331156.1 48.450 258 133 0 58 315 768 1025
## 6777 NP_001349068.1 XP_021331156.1 48.450 258 133 0 58 315 572 829
## 6778 NP_001349068.1 XP_021331156.1 45.865 266 144 0 50 315 732 997
## 6779 NP_001349068.1 XP_021331156.1 48.062 258 134 0 58 315 880 1137
## 6780 NP_001349068.1 XP_021331156.1 47.287 258 136 0 58 315 97 354
## 6781 NP_001349068.1 XP_021331156.1 48.263 259 133 1 58 316 517 774
## 6782 NP_001349068.1 XP_021331156.1 45.312 256 140 0 60 315 71 326
## 6783 NP_001349068.1 XP_021331156.1 44.664 253 140 0 63 315 46 298
## 6784 NP_001349068.1 XP_021331156.1 46.502 243 129 1 49 290 1430 1672
## 6785 NP_001349068.1 XP_021331156.1 37.864 206 119 2 108 313 16 212
## 6786 NP_001349068.1 XP_021331333.1 50.746 268 132 0 48 315 532 799
## 6787 NP_001349068.1 XP_021331333.1 50.350 286 141 1 46 330 614 899
## 6788 NP_001349068.1 XP_021331333.1 52.692 260 123 0 56 315 568 827
## 6789 NP_001349068.1 XP_021331333.1 51.311 267 130 0 49 315 673 939
## 6790 NP_001349068.1 XP_021331333.1 53.077 260 122 0 56 315 764 1023
## 6791 NP_001349068.1 XP_021331333.1 52.692 260 123 0 56 315 456 715
## 6792 NP_001349068.1 XP_021331333.1 51.938 258 124 0 58 315 262 519

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## 6793	NP_001349068.1	XP_021331333.1	51.095	274	133	1	58	330	234	507
## 6794	NP_001349068.1	XP_021331333.1	51.538	260	126	0	56	315	428	687
## 6795	NP_001349068.1	XP_021331333.1	52.713	258	122	0	58	315	598	855
## 6796	NP_001349068.1	XP_021331333.1	51.923	260	125	0	56	315	708	967
## 6797	NP_001349068.1	XP_021331333.1	51.923	260	125	0	56	315	316	575
## 6798	NP_001349068.1	XP_021331333.1	51.923	260	125	0	56	315	288	547
## 6799	NP_001349068.1	XP_021331333.1	51.923	260	125	0	56	315	736	995
## 6800	NP_001349068.1	XP_021331333.1	51.163	258	126	0	56	313	176	433
## 6801	NP_001349068.1	XP_021331333.1	50.385	260	129	0	56	315	512	771
## 6802	NP_001349068.1	XP_021331333.1	50.385	260	129	0	56	315	344	603
## 6803	NP_001349068.1	XP_021331333.1	51.538	260	126	0	56	315	400	659
## 6804	NP_001349068.1	XP_021331333.1	49.231	260	132	0	56	315	148	407
## 6805	NP_001349068.1	XP_021331333.1	48.913	276	140	1	56	330	204	479
## 6806	NP_001349068.1	XP_021331333.1	50.000	260	130	0	56	315	372	631
## 6807	NP_001349068.1	XP_021331333.1	50.000	260	130	0	56	315	792	1051
## 6808	NP_001349068.1	XP_021331333.1	50.198	253	126	0	63	315	127	379
## 6809	NP_001349068.1	XP_021331333.1	49.027	257	131	0	59	315	95	351
## 6810	NP_001349068.1	XP_021331333.1	49.603	252	127	0	56	307	820	1071
## 6811	NP_001349068.1	XP_021331333.1	45.703	256	139	0	60	315	68	323
## 6812	NP_001349068.1	XP_021331333.1	41.077	297	148	3	39	315	6	295
## 6813	NP_001349068.1	XP_021331333.1	43.523	193	105	1	124	316	52	240
## 6814	NP_001349068.1	XP_021330715.1	51.311	267	130	0	49	315	947	1213
## 6815	NP_001349068.1	XP_021330715.1	53.846	260	120	0	56	315	786	1045
## 6816	NP_001349068.1	XP_021330715.1	54.724	254	115	0	60	313	286	539
## 6817	NP_001349068.1	XP_021330715.1	46.104	308	165	1	27	333	897	1204
## 6818	NP_001349068.1	XP_021330715.1	52.692	260	123	0	56	315	870	1129
## 6819	NP_001349068.1	XP_021330715.1	52.107	261	125	0	56	316	982	1242
## 6820	NP_001349068.1	XP_021330715.1	52.692	260	123	0	56	315	842	1101
## 6821	NP_001349068.1	XP_021330715.1	47.195	303	152	2	21	315	43	345
## 6822	NP_001349068.1	XP_021330715.1	52.308	260	124	0	56	315	674	933
## 6823	NP_001349068.1	XP_021330715.1	52.692	260	123	0	56	315	142	401
## 6824	NP_001349068.1	XP_021330715.1	50.187	267	133	0	49	315	891	1157
## 6825	NP_001349068.1	XP_021330715.1	52.326	258	123	0	58	315	648	905
## 6826	NP_001349068.1	XP_021330715.1	52.490	261	124	0	56	316	814	1074
## 6827	NP_001349068.1	XP_021330715.1	51.311	267	130	0	49	315	695	961
## 6828	NP_001349068.1	XP_021330715.1	50.192	261	130	0	56	316	30	290
## 6829	NP_001349068.1	XP_021330715.1	52.652	264	125	0	56	319	226	489
## 6830	NP_001349068.1	XP_021330715.1	50.769	260	128	0	56	315	758	1017
## 6831	NP_001349068.1	XP_021330715.1	50.562	267	132	0	49	315	611	877
## 6832	NP_001349068.1	XP_021330715.1	48.936	282	143	1	50	330	724	1005
## 6833	NP_001349068.1	XP_021330715.1	51.538	260	126	0	56	315	198	457
## 6834	NP_001349068.1	XP_021330715.1	50.000	260	130	0	56	315	170	429
## 6835	NP_001349068.1	XP_021330715.1	48.302	265	137	0	50	314	332	596
## 6836	NP_001349068.1	XP_021330715.1	48.364	275	141	1	56	329	366	640
## 6837	NP_001349068.1	XP_021330715.1	49.231	260	132	0	56	315	590	849
## 6838	NP_001349068.1	XP_021330715.1	49.270	274	138	1	58	330	564	837
## 6839	NP_001349068.1	XP_021330715.1	50.781	256	125	1	56	311	1010	1264
## 6840	NP_001349068.1	XP_021330715.1	47.670	279	145	1	56	333	422	700
## 6841	NP_001349068.1	XP_021330715.1	48.077	260	135	0	56	315	450	709
## 6842	NP_001349068.1	XP_021330715.1	47.826	276	143	1	56	330	534	809
## 6843	NP_001349068.1	XP_021330715.1	48.846	260	133	0	56	315	2	261
## 6844	NP_001349068.1	XP_021330715.1	48.846	260	133	0	56	315	394	653
## 6845	NP_001349068.1	XP_021330715.1	46.377	276	147	1	56	330	506	781
## 6846	NP_001349068.1	XP_021330715.1	47.287	258	135	1	56	313	1094	1350

## 6847	NP_001349068.1	XP_021330715.1	44.105	229	127	1	29	257	1123	1350
## 6848	NP_001349068.1	XP_021330715.1	50.769	65	32	0	251	315	1	65
## 6849	NP_001349068.1	XP_017211108.2	49.609	256	129	0	58	313	101	356
## 6850	NP_001349068.1	XP_017211108.2	47.410	251	132	0	63	313	78	328
## 6851	NP_001349068.1	XP_017211108.2	46.850	254	135	0	58	311	129	382
## 6852	NP_001349068.1	XP_017211108.2	44.531	256	138	2	58	313	185	436
## 6853	NP_001349068.1	XP_017211108.2	48.444	225	116	0	91	315	78	302
## 6854	NP_001349068.1	XP_017211108.2	48.214	168	87	0	146	313	77	244
## 6855	NP_001349068.1	XP_017211108.2	47.183	142	75	0	172	313	75	216
## 6856	NP_001349068.1	XP_021331415.1	52.326	258	123	0	58	315	121	378
## 6857	NP_001349068.1	XP_021331415.1	51.550	258	125	0	58	315	65	322
## 6858	NP_001349068.1	XP_021331415.1	51.550	258	125	0	58	315	9	266
## 6859	NP_001349068.1	XP_021331415.1	49.813	267	134	0	49	315	252	518
## 6860	NP_001349068.1	XP_021331415.1	51.550	258	125	0	58	315	149	406
## 6861	NP_001349068.1	XP_021331415.1	52.918	257	121	0	60	316	39	295
## 6862	NP_001349068.1	XP_021331415.1	52.344	256	122	0	60	315	319	574
## 6863	NP_001349068.1	XP_021331415.1	46.667	285	150	1	33	315	262	546
## 6864	NP_001349068.1	XP_021331415.1	47.292	277	145	1	58	333	205	481
## 6865	NP_001349068.1	XP_021331415.1	49.612	258	130	0	58	315	233	490
## 6866	NP_001349068.1	XP_021331415.1	51.562	256	124	0	60	315	403	658
## 6867	NP_001349068.1	XP_021331415.1	52.941	238	112	0	78	315	1	238
## 6868	NP_001349068.1	XP_021331415.1	46.809	282	122	1	59	312	430	711
## 6869	NP_001349068.1	XP_021331415.1	44.884	303	120	2	58	313	485	787
## 6870	NP_001349068.1	XP_021331415.1	45.909	220	100	1	58	258	569	788
## 6871	NP_001349068.1	XP_021331415.1	42.222	45	26	0	46	90	744	788
## 6872	NP_001349068.1	XP_021329614.1	50.368	272	134	1	42	312	457	728
## 6873	NP_001349068.1	XP_021329614.1	50.000	268	134	0	48	315	120	387
## 6874	NP_001349068.1	XP_021329614.1	46.996	283	150	0	28	310	128	410
## 6875	NP_001349068.1	XP_021329614.1	48.828	256	131	0	60	315	104	359
## 6876	NP_001349068.1	XP_021329614.1	48.120	266	138	0	50	315	66	331
## 6877	NP_001349068.1	XP_021329614.1	47.287	258	136	0	59	316	47	304
## 6878	NP_001349068.1	XP_021329614.1	42.244	303	139	3	50	316	346	648
## 6879	NP_001349068.1	XP_021329614.1	50.000	228	114	0	88	315	476	703
## 6880	NP_001349068.1	XP_021329614.1	47.234	235	124	0	81	315	41	275
## 6881	NP_001349068.1	XP_021329614.1	50.000	98	49	0	49	146	633	730
## 6882	NP_001349068.1	XP_021329614.1	42.500	40	23	0	276	315	40	79
## 6883	NP_001349068.1	XP_021331370.1	49.618	262	132	0	58	319	2	263
## 6884	NP_001349068.1	XP_021331370.1	49.600	250	126	0	58	307	30	279
## 6885	NP_001349068.1	XP_021331370.1	54.113	231	106	0	85	315	1	231
## 6886	NP_001349068.1	XP_017210945.1	47.766	291	150	2	42	330	44	334
## 6887	NP_001349068.1	XP_017210945.1	49.603	252	127	0	58	309	89	340
## 6888	NP_001349068.1	XP_021330459.1	51.341	261	123	1	60	316	386	646
## 6889	NP_001349068.1	XP_021330459.1	48.227	282	146	0	34	315	332	613
## 6890	NP_001349068.1	XP_021330459.1	50.566	265	127	1	56	316	410	674
## 6891	NP_001349068.1	XP_021330459.1	48.718	273	136	2	47	315	313	585
## 6892	NP_001349068.1	XP_021330459.1	50.579	259	124	1	60	314	442	700
## 6893	NP_001349068.1	XP_021330459.1	44.656	262	141	1	56	313	98	359
## 6894	NP_001349068.1	XP_021330459.1	41.924	291	160	3	34	316	13	302
## 6895	NP_001349068.1	XP_021330459.1	43.233	266	151	0	48	313	62	327
## 6896	NP_001349068.1	XP_021330459.1	38.636	88	54	0	231	318	49	136
## 6897	NP_001349068.1	XP_021330459.1	40.909	44	26	0	46	89	656	699
## 6898	NP_001349068.1	XP_021330576.1	50.699	286	113	2	58	315	1133	1418
## 6899	NP_001349068.1	XP_021330576.1	52.510	259	123	0	58	316	1469	1727
## 6900	NP_001349068.1	XP_021330576.1	52.809	267	126	0	49	315	1404	1670

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## 6901 NP_001349068.1 XP_021330576.1 53.488 258 120 0 58 315 489 746
## 6902 NP_001349068.1 XP_021330576.1 49.117 283 138 1 39 315 296 578
## 6903 NP_001349068.1 XP_021330576.1 53.101 258 121 0 58 315 433 690
## 6904 NP_001349068.1 XP_021330576.1 52.612 268 127 0 48 315 1291 1558
## 6905 NP_001349068.1 XP_021330576.1 52.326 258 123 0 58 315 657 914
## 6906 NP_001349068.1 XP_021330576.1 51.938 258 124 0 58 315 461 718
## 6907 NP_001349068.1 XP_021330576.1 51.825 274 131 1 58 330 1385 1658
## 6908 NP_001349068.1 XP_021330576.1 52.326 258 123 0 58 315 629 886
## 6909 NP_001349068.1 XP_021330576.1 49.635 274 137 1 58 330 377 650
## 6910 NP_001349068.1 XP_021330576.1 51.550 258 125 0 58 315 405 662
## 6911 NP_001349068.1 XP_021330576.1 51.938 258 124 0 58 315 1189 1446
## 6912 NP_001349068.1 XP_021330576.1 51.938 258 124 0 58 315 769 1026
## 6913 NP_001349068.1 XP_021330576.1 52.290 262 125 0 58 319 1329 1590
## 6914 NP_001349068.1 XP_021330576.1 50.391 256 127 0 58 313 1441 1696
## 6915 NP_001349068.1 XP_021330576.1 51.562 256 124 0 58 313 1021 1276
## 6916 NP_001349068.1 XP_021330576.1 51.938 258 124 0 58 315 1273 1530
## 6917 NP_001349068.1 XP_021330576.1 51.163 258 126 0 58 315 853 1110
## 6918 NP_001349068.1 XP_021330576.1 51.550 258 125 0 58 315 713 970
## 6919 NP_001349068.1 XP_021330576.1 52.713 258 122 0 58 315 1245 1502
## 6920 NP_001349068.1 XP_021330576.1 50.388 258 128 0 58 315 545 802
## 6921 NP_001349068.1 XP_021330576.1 51.163 258 126 0 58 315 1357 1614
## 6922 NP_001349068.1 XP_021330576.1 51.163 258 126 0 58 315 965 1222
## 6923 NP_001349068.1 XP_021330576.1 50.388 258 128 0 58 315 1077 1334
## 6924 NP_001349068.1 XP_021330576.1 50.193 259 129 0 58 316 601 859
## 6925 NP_001349068.1 XP_021330576.1 51.163 258 126 0 58 315 741 998
## 6926 NP_001349068.1 XP_021330576.1 49.438 267 135 0 49 315 564 830
## 6927 NP_001349068.1 XP_021330576.1 50.388 258 128 0 58 315 1049 1306
## 6928 NP_001349068.1 XP_021330576.1 50.775 258 127 0 58 315 797 1054
## 6929 NP_001349068.1 XP_021330576.1 50.388 258 128 0 58 315 825 1082
## 6930 NP_001349068.1 XP_021330576.1 50.388 258 128 0 58 315 881 1138
## 6931 NP_001349068.1 XP_021330576.1 50.000 258 129 0 58 315 937 1194
## 6932 NP_001349068.1 XP_021330576.1 49.225 258 131 0 58 315 993 1250
## 6933 NP_001349068.1 XP_021330576.1 49.219 256 129 1 58 313 294 548
## 6934 NP_001349068.1 XP_021330576.1 45.583 283 127 1 60 315 72 354
## 6935 NP_001349068.1 XP_021330576.1 45.455 286 154 1 33 316 882 1167
## 6936 NP_001349068.1 XP_021330576.1 41.853 313 127 2 58 315 98 410
## 6937 NP_001349068.1 XP_021330576.1 42.697 267 153 0 63 329 47 313
## 6938 NP_001349068.1 XP_021330576.1 48.684 228 117 0 58 285 1553 1780
## 6939 NP_001349068.1 XP_021330576.1 45.238 168 92 0 146 313 46 213
## 6940 NP_001349068.1 XP_017211205.2 49.438 267 135 0 49 315 164 430
## 6941 NP_001349068.1 XP_017211205.2 48.689 267 137 0 49 315 248 514
## 6942 NP_001349068.1 XP_017211205.2 49.438 267 135 0 49 315 444 710
## 6943 NP_001349068.1 XP_017211205.2 49.438 267 135 0 49 315 612 878
## 6944 NP_001349068.1 XP_017211205.2 47.552 286 122 1 58 315 285 570
## 6945 NP_001349068.1 XP_017211205.2 50.391 256 127 0 58 313 397 652
## 6946 NP_001349068.1 XP_017211205.2 50.584 257 127 0 60 316 231 487
## 6947 NP_001349068.1 XP_017211205.2 48.736 277 141 1 58 333 369 645
## 6948 NP_001349068.1 XP_017211205.2 49.438 267 135 0 49 315 528 794
## 6949 NP_001349068.1 XP_017211205.2 47.761 268 140 0 48 315 667 934
## 6950 NP_001349068.1 XP_017211205.2 46.043 278 144 1 44 315 629 906
## 6951 NP_001349068.1 XP_017211205.2 49.609 256 129 0 60 315 511 766
## 6952 NP_001349068.1 XP_017211205.2 46.465 297 155 2 48 340 79 375
## 6953 NP_001349068.1 XP_017211205.2 47.292 277 145 1 58 333 425 701
## 6954 NP_001349068.1 XP_017211205.2 47.778 270 141 0 46 315 581 850

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## 6955 NP_001349068.1 XP_017211205.2 47.445 274 143 1 58 330 145 418
## 6956 NP_001349068.1 XP_017211205.2 48.837 258 132 0 58 315 341 598
## 6957 NP_001349068.1 XP_017211205.2 45.578 294 158 2 42 333 44 337
## 6958 NP_001349068.1 XP_017211205.2 48.485 264 136 0 50 313 473 736
## 6959 NP_001349068.1 XP_017211205.2 50.644 233 115 0 58 290 705 937
## 6960 NP_001349068.1 XP_021331395.1 54.148 229 105 0 68 296 2 230
## 6961 NP_001349068.1 XP_021331395.1 50.226 221 110 0 95 315 1 221
## 6962 NP_001349068.1 XP_021331395.1 48.416 221 114 0 48 268 10 230
## 6963 NP_001349068.1 XP_021331105.1 51.103 272 132 1 49 319 211 482
## 6964 NP_001349068.1 XP_021331105.1 52.030 271 129 1 46 315 180 450
## 6965 NP_001349068.1 XP_021331105.1 51.049 286 112 1 58 315 473 758
## 6966 NP_001349068.1 XP_021331105.1 52.326 258 123 0 58 315 277 534
## 6967 NP_001349068.1 XP_021331105.1 48.344 302 127 2 58 330 361 662
## 6968 NP_001349068.1 XP_021331105.1 53.725 255 118 0 58 312 978 1232
## 6969 NP_001349068.1 XP_021331105.1 51.163 258 126 0 58 315 922 1179
## 6970 NP_001349068.1 XP_021331105.1 52.326 258 123 0 58 315 249 506
## 6971 NP_001349068.1 XP_021331105.1 51.351 259 126 0 58 316 305 563
## 6972 NP_001349068.1 XP_021331105.1 52.713 258 122 0 58 315 417 674
## 6973 NP_001349068.1 XP_021331105.1 52.344 256 122 0 60 315 840 1095
## 6974 NP_001349068.1 XP_021331105.1 52.326 258 123 0 58 315 894 1151
## 6975 NP_001349068.1 XP_021331105.1 51.737 259 124 1 58 315 809 1067
## 6976 NP_001349068.1 XP_021331105.1 51.172 256 125 0 58 313 585 840
## 6977 NP_001349068.1 XP_021331105.1 50.388 258 128 0 58 315 557 814
## 6978 NP_001349068.1 XP_021331105.1 50.973 257 126 0 59 315 951 1207
## 6979 NP_001349068.1 XP_021331105.1 51.550 258 123 1 58 313 1034 1291
## 6980 NP_001349068.1 XP_021331105.1 50.388 258 128 0 58 315 333 590
## 6981 NP_001349068.1 XP_021331105.1 47.842 278 125 2 58 315 5 282
## 6982 NP_001349068.1 XP_021331105.1 51.082 231 111 1 58 286 1062 1292
## 6983 NP_001349068.1 XP_021331105.1 47.638 254 113 2 82 315 1 254
## 6984 NP_001349068.1 XP_021331312.1 49.027 257 131 0 57 313 1 257
## 6985 NP_001349068.1 XP_017210993.2 51.562 256 124 0 58 313 58 313
## 6986 NP_001349068.1 XP_017210993.2 49.811 265 132 1 50 313 21 285
## 6987 NP_001349068.1 XP_017210993.2 46.058 241 130 0 46 286 74 314
## 6988 NP_001349068.1 XP_017210993.2 48.404 188 96 1 144 330 32 219
## 6989 NP_001349068.1 XP_021331234.1 51.953 256 123 0 58 313 76 331
## 6990 NP_001349068.1 XP_021331234.1 46.304 257 137 1 58 314 160 415
## 6991 NP_001349068.1 XP_021331234.1 47.547 265 138 1 50 313 39 303
## 6992 NP_001349068.1 XP_021331234.1 42.960 277 158 0 58 334 132 408
## 6993 NP_001349068.1 XP_021331234.1 48.148 216 111 1 119 333 53 268
## 6994 NP_001349068.1 XP_021331169.1 53.488 258 120 0 58 315 201 458
## 6995 NP_001349068.1 XP_021331169.1 51.163 258 126 0 58 315 33 290
## 6996 NP_001349068.1 XP_021331169.1 51.172 256 125 0 60 315 7 262
## 6997 NP_001349068.1 XP_021331169.1 53.101 258 121 0 58 315 341 598
## 6998 NP_001349068.1 XP_021331169.1 53.488 258 120 0 58 315 257 514
## 6999 NP_001349068.1 XP_021331169.1 51.953 256 123 0 60 315 175 430
## 7000 NP_001349068.1 XP_021331169.1 51.838 272 130 1 60 330 315 586
## 7001 NP_001349068.1 XP_021331169.1 49.225 258 131 0 58 315 117 374
## 7002 NP_001349068.1 XP_021331169.1 50.193 259 129 0 58 316 61 319
## 7003 NP_001349068.1 XP_021331169.1 49.612 258 130 0 58 315 89 346
## 7004 NP_001349068.1 XP_021331169.1 47.368 285 148 1 33 315 258 542
## 7005 NP_001349068.1 XP_021331169.1 49.225 258 131 0 58 315 145 402
## 7006 NP_001349068.1 XP_021331169.1 50.781 256 126 0 58 313 425 680
## 7007 NP_001349068.1 XP_021331169.1 51.709 234 113 0 82 315 1 234
## 7008 NP_001349068.1 XP_021331169.1 50.388 258 128 0 58 315 369 626

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## 7009 NP_001349068.1 XP_021331169.1 49.621 264 133 0 50 313 389 652
## 7010 NP_001349068.1 XP_021331169.1 49.718 177 89 0 140 316 3 179
## 7011 NP_001349068.1 XP_021331211.1 48.421 285 143 2 60 340 608 892
## 7012 NP_001349068.1 XP_021331211.1 52.326 258 123 0 58 315 354 611
## 7013 NP_001349068.1 XP_021331211.1 49.291 282 115 1 60 313 496 777
## 7014 NP_001349068.1 XP_021331211.1 48.571 280 143 1 58 336 662 941
## 7015 NP_001349068.1 XP_021331211.1 51.550 258 125 0 58 315 550 807
## 7016 NP_001349068.1 XP_021331211.1 50.388 258 128 0 58 315 382 639
## 7017 NP_001349068.1 XP_021331211.1 50.000 256 128 0 58 313 578 833
## 7018 NP_001349068.1 XP_021331211.1 50.775 258 127 0 58 315 326 583
## 7019 NP_001349068.1 XP_021331211.1 49.421 259 131 0 58 316 410 668
## 7020 NP_001349068.1 XP_021331211.1 47.826 276 143 1 40 315 29 303
## 7021 NP_001349068.1 XP_021331211.1 48.188 276 142 1 40 315 281 555
## 7022 NP_001349068.1 XP_021331211.1 50.781 256 126 0 60 315 244 499
## 7023 NP_001349068.1 XP_021331211.1 49.225 258 131 0 58 315 466 723
## 7024 NP_001349068.1 XP_021331211.1 48.881 268 137 0 38 305 670 937
## 7025 NP_001349068.1 XP_021331211.1 50.388 258 128 0 58 315 270 527
## 7026 NP_001349068.1 XP_021331211.1 50.391 256 127 0 58 313 158 413
## 7027 NP_001349068.1 XP_021331211.1 49.248 266 135 0 50 315 10 275
## 7028 NP_001349068.1 XP_021331211.1 50.391 256 127 0 58 313 102 357
## 7029 NP_001349068.1 XP_021331211.1 49.612 258 130 0 58 315 74 331
## 7030 NP_001349068.1 XP_021331211.1 47.810 274 142 1 58 330 438 711
## 7031 NP_001349068.1 XP_021331211.1 49.219 256 130 0 58 313 214 469
## 7032 NP_001349068.1 XP_021331211.1 45.296 287 153 2 58 340 186 472
## 7033 NP_001349068.1 XP_021331211.1 50.407 246 122 0 70 315 2 247
## 7034 NP_001349068.1 XP_021331211.1 49.309 217 110 0 97 313 1 217
## 7035 NP_001349068.1 XP_021330549.1 47.387 287 123 1 58 316 78 364
## 7036 NP_001349068.1 XP_021330549.1 49.421 259 131 0 58 316 50 308
## 7037 NP_001349068.1 XP_021330549.1 51.982 227 109 0 85 311 49 275
## 7038 NP_001349068.1 XP_021330549.1 44.170 283 128 2 58 310 106 388
## 7039 NP_001349068.1 XP_021330549.1 52.683 205 97 0 112 316 48 252
## 7040 NP_001349068.1 XP_021330549.1 44.048 84 46 1 251 333 47 130
## 7041 NP_001349068.1 XP_021330548.1 47.387 287 123 1 58 316 78 364
## 7042 NP_001349068.1 XP_021330548.1 49.421 259 131 0 58 316 50 308
## 7043 NP_001349068.1 XP_021330548.1 51.982 227 109 0 85 311 49 275
## 7044 NP_001349068.1 XP_021330548.1 44.170 283 128 2 58 310 106 388
## 7045 NP_001349068.1 XP_021330548.1 52.683 205 97 0 112 316 48 252
## 7046 NP_001349068.1 XP_021330548.1 44.048 84 46 1 251 333 47 130
## 7047 NP_001349068.1 XP_017210088.1 47.387 287 123 1 58 316 78 364
## 7048 NP_001349068.1 XP_017210088.1 49.421 259 131 0 58 316 50 308
## 7049 NP_001349068.1 XP_017210088.1 51.982 227 109 0 85 311 49 275
## 7050 NP_001349068.1 XP_017210088.1 44.170 283 128 2 58 310 106 388
## 7051 NP_001349068.1 XP_017210088.1 52.683 205 97 0 112 316 48 252
## 7052 NP_001349068.1 XP_017210088.1 44.048 84 46 1 251 333 47 130
## 7053 NP_001349068.1 XP_021330547.1 47.387 287 123 1 58 316 78 364
## 7054 NP_001349068.1 XP_021330547.1 49.421 259 131 0 58 316 50 308
## 7055 NP_001349068.1 XP_021330547.1 51.982 227 109 0 85 311 49 275
## 7056 NP_001349068.1 XP_021330547.1 44.170 283 128 2 58 310 106 388
## 7057 NP_001349068.1 XP_021330547.1 52.683 205 97 0 112 316 48 252
## 7058 NP_001349068.1 XP_021330547.1 44.048 84 46 1 251 333 47 130
## 7059 NP_001349068.1 XP_021331218.1 48.507 268 137 1 50 316 101 368
## 7060 NP_001349068.1 XP_021331218.1 49.213 254 129 0 60 313 140 393
## 7061 NP_001349068.1 XP_021331218.1 47.368 247 126 2 69 315 97 339
## 7062 NP_001349068.1 XP_021331218.1 48.246 228 118 0 58 285 166 393

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##	7063	NP_001349068.1	XP_021327002.1	50.000	254	126	1	59	311	45	298
##	7064	NP_001349068.1	XP_021327002.1	47.436	234	123	0	80	313	39	272
##	7065	NP_001349068.1	XP_021327002.1	51.010	198	97	0	58	255	101	298
##	7066	NP_001349068.1	XP_021327002.1	49.342	152	77	0	164	315	39	190
##	7067	NP_001349068.1	XP_021327002.1	45.361	97	53	0	220	316	39	135
##	7068	NP_001349068.1	XP_021327001.1	50.000	254	126	1	59	311	45	298
##	7069	NP_001349068.1	XP_021327001.1	47.436	234	123	0	80	313	39	272
##	7070	NP_001349068.1	XP_021327001.1	51.010	198	97	0	58	255	101	298
##	7071	NP_001349068.1	XP_021327001.1	49.342	152	77	0	164	315	39	190
##	7072	NP_001349068.1	XP_021327001.1	45.361	97	53	0	220	316	39	135
##	7073	NP_001349068.1	XP_021327000.1	50.000	254	126	1	59	311	45	298
##	7074	NP_001349068.1	XP_021327000.1	47.436	234	123	0	80	313	39	272
##	7075	NP_001349068.1	XP_021327000.1	51.010	198	97	0	58	255	101	298
##	7076	NP_001349068.1	XP_021327000.1	49.342	152	77	0	164	315	39	190
##	7077	NP_001349068.1	XP_021327000.1	45.361	97	53	0	220	316	39	135
##	7078	NP_001349068.1	XP_021326999.1	50.000	254	126	1	59	311	45	298
##	7079	NP_001349068.1	XP_021326999.1	47.436	234	123	0	80	313	39	272
##	7080	NP_001349068.1	XP_021326999.1	51.010	198	97	0	58	255	101	298
##	7081	NP_001349068.1	XP_021326999.1	49.342	152	77	0	164	315	39	190
##	7082	NP_001349068.1	XP_021326999.1	45.361	97	53	0	220	316	39	135
##	7083	NP_001349068.1	XP_021330541.1	50.000	254	126	1	59	311	45	298
##	7084	NP_001349068.1	XP_021330541.1	47.436	234	123	0	80	313	39	272
##	7085	NP_001349068.1	XP_021330541.1	51.010	198	97	0	58	255	101	298
##	7086	NP_001349068.1	XP_021330541.1	49.342	152	77	0	164	315	39	190
##	7087	NP_001349068.1	XP_021330541.1	45.361	97	53	0	220	316	39	135
##	7088	NP_001349068.1	XP_021330540.1	50.000	254	126	1	59	311	45	298
##	7089	NP_001349068.1	XP_021330540.1	47.436	234	123	0	80	313	39	272
##	7090	NP_001349068.1	XP_021330540.1	51.010	198	97	0	58	255	101	298
##	7091	NP_001349068.1	XP_021330540.1	49.342	152	77	0	164	315	39	190
##	7092	NP_001349068.1	XP_021330540.1	45.361	97	53	0	220	316	39	135
##	7093	NP_001349068.1	XP_021330539.1	50.000	254	126	1	59	311	45	298
##	7094	NP_001349068.1	XP_021330539.1	47.436	234	123	0	80	313	39	272
##	7095	NP_001349068.1	XP_021330539.1	51.010	198	97	0	58	255	101	298
##	7096	NP_001349068.1	XP_021330539.1	49.342	152	77	0	164	315	39	190
##	7097	NP_001349068.1	XP_021330539.1	45.361	97	53	0	220	316	39	135
##	7098	NP_001349068.1	XP_021330538.1	50.000	254	126	1	59	311	45	298
##	7099	NP_001349068.1	XP_021330538.1	47.436	234	123	0	80	313	39	272
##	7100	NP_001349068.1	XP_021330538.1	51.010	198	97	0	58	255	101	298
##	7101	NP_001349068.1	XP_021330538.1	49.342	152	77	0	164	315	39	190
##	7102	NP_001349068.1	XP_021330538.1	45.361	97	53	0	220	316	39	135
##	7103	NP_001349068.1	XP_021331122.1	50.973	257	125	1	58	313	303	559
##	7104	NP_001349068.1	XP_021331122.1	52.124	259	123	1	58	315	79	337
##	7105	NP_001349068.1	XP_021331122.1	49.438	267	134	1	50	315	42	308
##	7106	NP_001349068.1	XP_021331122.1	51.822	247	118	1	88	333	53	299
##	7107	NP_001349068.1	XP_021331122.1	46.341	246	132	0	40	285	314	559
##	7108	NP_001349068.1	XP_021331122.1	47.368	228	120	0	49	276	351	578
##	7109	NP_001349068.1	XP_017211155.1	50.000	254	127	0	60	313	91	344
##	7110	NP_001349068.1	XP_017211155.1	48.134	268	138	1	50	316	52	319
##	7111	NP_001349068.1	XP_017211155.1	46.964	247	127	2	69	315	48	290
##	7112	NP_001349068.1	XP_017211155.1	48.246	228	118	0	58	285	117	344
##	7113	NP_001349068.1	XP_021331430.1	50.000	254	127	0	58	311	5	258
##	7114	NP_001349068.1	XP_021331430.1	48.828	256	131	0	58	313	33	288
##	7115	NP_001349068.1	XP_021331430.1	52.991	234	110	0	82	315	1	234
##	7116	NP_001349068.1	XP_021331430.1	47.191	267	139	1	49	313	52	318

## 7117	NP_001349068.1	XP_021331430.1	43.023	258	143	2	33	286	62	319
## 7118	NP_001349068.1	XP_017210515.1	51.515	264	128	0	50	313	81	344
## 7119	NP_001349068.1	XP_017210515.1	49.057	265	134	1	50	313	52	316
## 7120	NP_001349068.1	XP_017210515.1	47.598	229	120	0	58	286	117	345
## 7121	NP_001349068.1	XP_017210515.1	49.468	188	94	1	144	330	63	250
## 7122	NP_001349068.1	XP_021330710.1	51.515	264	128	0	50	313	81	344
## 7123	NP_001349068.1	XP_021330710.1	46.801	297	153	3	50	341	52	348
## 7124	NP_001349068.1	XP_017211069.1	50.000	254	127	0	60	313	91	344
## 7125	NP_001349068.1	XP_017211069.1	48.134	268	138	1	50	316	52	319
## 7126	NP_001349068.1	XP_017211069.1	46.964	247	127	2	69	315	48	290
## 7127	NP_001349068.1	XP_017211069.1	48.684	228	117	0	58	285	117	344
## 7128	NP_001349068.1	XP_021327018.1	47.387	287	123	1	58	316	78	364
## 7129	NP_001349068.1	XP_021327018.1	49.807	259	130	0	58	316	50	308
## 7130	NP_001349068.1	XP_021327018.1	51.982	227	109	0	85	311	49	275
## 7131	NP_001349068.1	XP_021327018.1	44.170	283	128	2	58	310	106	388
## 7132	NP_001349068.1	XP_021327018.1	53.171	205	96	0	112	316	48	252
## 7133	NP_001349068.1	XP_021327018.1	45.238	84	45	1	251	333	47	130
## 7134	NP_001349068.1	XP_021331407.1	45.426	317	141	3	28	315	383	696
## 7135	NP_001349068.1	XP_021331407.1	51.562	256	124	0	58	313	635	890
## 7136	NP_001349068.1	XP_021331407.1	48.014	277	143	1	58	333	607	883
## 7137	NP_001349068.1	XP_021331407.1	45.631	309	117	1	58	315	528	836
## 7138	NP_001349068.1	XP_021331407.1	47.440	293	128	2	49	315	376	668
## 7139	NP_001349068.1	XP_021331407.1	42.073	328	155	3	59	351	274	601
## 7140	NP_001349068.1	XP_021331407.1	43.243	259	147	0	58	316	105	363
## 7141	NP_001349068.1	XP_021331407.1	45.382	249	136	0	63	311	82	330
## 7142	NP_001349068.1	XP_021331407.1	43.233	266	151	0	48	313	123	388
## 7143	NP_001349068.1	XP_021331407.1	48.000	225	117	0	91	315	82	306
## 7144	NP_001349068.1	NP_001104625.1	51.136	264	129	0	50	313	81	344
## 7145	NP_001349068.1	NP_001104625.1	49.057	265	134	1	50	313	52	316
## 7146	NP_001349068.1	NP_001104625.1	47.162	229	121	0	58	286	117	345
## 7147	NP_001349068.1	NP_001104625.1	49.468	188	94	1	144	330	63	250
## 7148	NP_001349068.1	XP_021331389.1	45.031	322	170	4	25	341	28	347
## 7149	NP_001349068.1	XP_001336870.2	51.550	258	125	0	58	315	16	273
## 7150	NP_001349068.1	XP_001336870.2	46.454	282	123	1	58	311	100	381
## 7151	NP_001349068.1	XP_001336870.2	48.638	257	132	0	58	314	72	328
## 7152	NP_001349068.1	XP_001336870.2	47.222	252	133	0	58	309	212	463
## 7153	NP_001349068.1	XP_001336870.2	49.362	235	119	0	81	315	11	245
## 7154	NP_001349068.1	XP_001336870.2	45.926	270	142	1	58	327	156	421
## 7155	NP_001349068.1	XP_001336870.2	33.333	96	59	1	23	113	368	463
## 7156	NP_001349068.1	XP_021331277.1	44.944	267	147	0	50	316	131	397
## 7157	NP_001349068.1	XP_021331277.1	47.490	259	130	1	63	315	82	340
## 7158	NP_001349068.1	XP_021331277.1	43.478	276	150	1	45	314	148	423
## 7159	NP_001349068.1	XP_021331277.1	46.185	249	134	0	63	311	116	364
## 7160	NP_001349068.1	XP_021331277.1	47.727	176	86	1	146	315	81	256
## 7161	NP_001349068.1	XP_021331277.1	46.622	148	73	1	172	313	79	226
## 7162	NP_001349068.1	XP_017211018.1	49.606	254	128	0	60	313	91	344
## 7163	NP_001349068.1	XP_017211018.1	48.134	268	138	1	50	316	52	319
## 7164	NP_001349068.1	XP_017211018.1	46.964	247	127	2	69	315	48	290
## 7165	NP_001349068.1	XP_017211018.1	48.246	228	118	0	58	285	117	344
## 7166	NP_001349068.1	XP_021329613.1	49.071	269	137	0	48	316	808	1076
## 7167	NP_001349068.1	XP_021329613.1	50.370	270	133	1	42	310	457	726
## 7168	NP_001349068.1	XP_021329613.1	50.000	268	134	0	48	315	120	387
## 7169	NP_001349068.1	XP_021329613.1	48.881	268	137	0	49	316	837	1104
## 7170	NP_001349068.1	XP_021329613.1	46.996	283	150	0	28	310	128	410

## 7171	NP_001349068.1	XP_021329613.1	51.172	256	125	0	58	313	902	1157
## 7172	NP_001349068.1	XP_021329613.1	48.828	256	131	0	60	315	104	359
## 7173	NP_001349068.1	XP_021329613.1	48.263	259	134	0	58	316	874	1132
## 7174	NP_001349068.1	XP_021329613.1	48.120	266	138	0	50	315	66	331
## 7175	NP_001349068.1	XP_021329613.1	46.595	279	148	1	39	316	770	1048
## 7176	NP_001349068.1	XP_021329613.1	47.287	258	136	0	59	316	47	304
## 7177	NP_001349068.1	XP_021329613.1	42.244	303	139	3	50	316	346	648
## 7178	NP_001349068.1	XP_021329613.1	50.000	228	114	0	88	315	476	703
## 7179	NP_001349068.1	XP_021329613.1	47.234	235	124	0	81	315	41	275
## 7180	NP_001349068.1	XP_021329613.1	42.268	97	56	0	49	145	1089	1185
## 7181	NP_001349068.1	XP_021329613.1	42.500	40	23	0	276	315	40	79
## 7182	NP_001349068.1	XP_017211199.1	54.709	223	101	0	70	292	2	224
## 7183	NP_001349068.1	XP_017211199.1	50.228	219	109	0	97	315	1	219
## 7184	NP_001349068.1	XP_017211199.1	48.387	217	112	0	48	264	8	224
## 7185	NP_001349068.1	XP_009299198.1	47.388	268	141	0	48	315	123	390
## 7186	NP_001349068.1	XP_009299198.1	46.875	256	136	0	56	311	159	414
## 7187	NP_001349068.1	XP_009299198.1	47.410	251	132	0	63	313	82	332
## 7188	NP_001349068.1	XP_009299198.1	43.701	254	143	0	60	313	107	360
## 7189	NP_001349068.1	XP_009299198.1	41.573	267	156	0	48	314	207	473
## 7190	NP_001349068.1	XP_009299198.1	41.799	189	109	1	146	333	81	269
## 7191	NP_001349068.1	XP_009299198.1	43.972	141	79	0	172	312	79	219
## 7192	NP_001349068.1	NP_001107078.1	44.371	302	161	2	18	312	13	314
## 7193	NP_001349068.1	NP_001107078.1	49.378	241	122	0	50	290	80	320
## 7194	NP_001349068.1	NP_001107078.1	48.696	230	118	0	86	315	60	289
## 7195	NP_001349068.1	NP_001107078.1	49.655	145	73	0	175	319	65	209
## 7196	NP_001349068.1	XP_017210948.1	47.212	269	141	1	42	309	44	312
## 7197	NP_001349068.1	XP_017210948.1	52.282	241	114	1	91	330	66	306
## 7198	NP_001349068.1	XP_017210948.1	52.000	225	104	1	58	278	89	313
## 7199	NP_001349068.1	XP_021331497.1	48.106	264	137	0	50	313	115	378
## 7200	NP_001349068.1	XP_021331497.1	47.656	256	133	1	58	313	151	405
## 7201	NP_001349068.1	XP_021331497.1	47.410	251	132	0	63	313	72	322
## 7202	NP_001349068.1	XP_021331497.1	44.403	268	149	0	48	315	85	352
## 7203	NP_001349068.1	XP_021331497.1	43.952	248	139	0	72	319	53	300
## 7204	NP_001349068.1	XP_021331497.1	44.498	209	115	1	50	258	199	406
## 7205	NP_001349068.1	XP_021331497.1	45.161	155	84	1	50	204	255	408
## 7206	NP_001349068.1	XP_021331497.1	40.000	75	44	1	46	120	335	408
## 7207	NP_001349068.1	XP_021331371.1	49.194	248	126	0	58	305	1	248
## 7208	NP_001349068.1	XP_021331371.1	49.206	252	127	1	86	336	1	252
## 7209	NP_001349068.1	XP_021331371.1	50.909	110	54	0	58	167	141	250
## 7210	NP_001349068.1	XP_021329631.1	49.421	259	131	0	58	316	50	308
## 7211	NP_001349068.1	XP_021329631.1	51.092	229	112	0	85	313	49	277
## 7212	NP_001349068.1	XP_021329631.1	47.805	205	107	0	112	316	48	252
## 7213	NP_001349068.1	XP_021329631.1	46.429	84	44	1	251	333	47	130
## 7214	NP_001349068.1	XP_021329631.1	40.000	70	40	1	47	114	263	332
## 7215	NP_001349068.1	XP_017207864.1	45.139	288	157	1	47	333	47	334
## 7216	NP_001349068.1	XP_017207864.1	46.715	274	146	0	46	319	102	375
## 7217	NP_001349068.1	XP_017207864.1	45.926	270	146	0	46	315	130	399
## 7218	NP_001349068.1	XP_017207864.1	45.865	266	144	0	48	313	160	425
## 7219	NP_001349068.1	XP_017207864.1	44.697	264	146	0	50	313	190	453
## 7220	NP_001349068.1	XP_017207864.1	47.674	258	135	0	58	315	86	343
## 7221	NP_001349068.1	XP_017207864.1	44.737	266	141	1	61	320	33	298
## 7222	NP_001349068.1	XP_017207864.1	43.874	253	139	1	58	310	226	475
## 7223	NP_001349068.1	XP_017207864.1	46.186	236	125	1	82	315	24	259
## 7224	NP_001349068.1	XP_017207864.1	42.857	210	118	1	111	318	25	234

## 7225	NP_001349068.1	XP_017207864.1	40.865	208	120	1	47	254	271	475
## 7226	NP_001349068.1	XP_017211167.1	52.191	251	120	0	63	313	66	316
## 7227	NP_001349068.1	XP_017211167.1	47.699	239	125	0	50	288	81	319
## 7228	NP_001349068.1	XP_017211167.1	49.115	226	115	0	88	313	63	288
## 7229	NP_001349068.1	XP_017211167.1	49.500	200	101	0	116	315	63	262
## 7230	NP_001349068.1	XP_017210839.1	47.431	253	133	0	63	315	82	334
## 7231	NP_001349068.1	XP_017210839.1	41.636	269	157	0	48	316	123	391
## 7232	NP_001349068.1	XP_017210839.1	40.467	257	153	0	58	314	161	417
## 7233	NP_001349068.1	XP_017211130.1	47.876	259	134	1	58	315	105	363
## 7234	NP_001349068.1	XP_017211130.1	44.528	265	146	1	48	311	123	387
## 7235	NP_001349068.1	XP_017211130.1	47.222	252	132	1	63	313	82	333
## 7236	NP_001349068.1	XP_017211130.1	41.418	268	156	1	48	314	179	446
## 7237	NP_001349068.1	XP_017211130.1	46.250	240	120	2	83	313	66	305
## 7238	NP_001349068.1	XP_017209852.2	45.907	281	133	1	58	319	194	474
## 7239	NP_001349068.1	XP_017209852.2	45.600	250	136	0	59	308	83	332
## 7240	NP_001349068.1	XP_017209852.2	42.617	298	151	2	56	333	136	433
## 7241	NP_001349068.1	XP_017209852.2	46.718	259	119	1	56	295	220	478
## 7242	NP_001349068.1	XP_017209852.2	43.015	272	136	1	63	315	115	386
## 7243	NP_001349068.1	XP_017209852.2	44.141	256	143	0	60	315	56	311
## 7244	NP_001349068.1	XP_017209852.2	43.701	254	139	1	63	316	35	284
## 7245	NP_001349068.1	XP_017209933.1	50.566	265	129	2	50	313	52	315
## 7246	NP_001349068.1	XP_017209933.1	50.218	229	113	1	58	286	89	316
## 7247	NP_001349068.1	XP_017209933.1	50.340	147	72	1	58	204	173	318
## 7248	NP_001349068.1	XP_021331303.1	49.242	264	133	1	50	312	52	315
## 7249	NP_001349068.1	XP_021331303.1	48.092	262	136	0	58	319	89	350
## 7250	NP_001349068.1	XP_021331303.1	49.115	226	115	0	88	313	63	288
## 7251	NP_001349068.1	XP_021331303.1	47.771	157	81	1	175	330	66	222
## 7252	NP_001349068.1	XP_021331303.1	35.849	106	40	1	58	135	285	390
## 7253	NP_001349068.1	XP_017211103.1	50.379	264	131	0	50	313	81	344
## 7254	NP_001349068.1	XP_017211103.1	48.302	265	136	1	50	313	52	316
## 7255	NP_001349068.1	XP_017211103.1	47.162	229	121	0	58	286	117	345
## 7256	NP_001349068.1	NP_001314951.1	46.980	298	156	2	19	315	22	318
## 7257	NP_001349068.1	NP_001314951.1	51.073	233	114	0	58	290	89	321
## 7258	NP_001349068.1	NP_001314951.1	48.673	226	116	0	91	316	66	291
## 7259	NP_001349068.1	XP_017209955.1	47.809	251	131	0	63	313	82	332
## 7260	NP_001349068.1	XP_017209955.1	44.697	264	146	0	48	311	123	386
## 7261	NP_001349068.1	XP_017209955.1	42.085	259	150	0	58	316	161	419
## 7262	NP_001349068.1	XP_017209955.1	43.411	258	146	0	56	313	187	444
## 7263	NP_001349068.1	XP_017209955.1	42.636	258	140	1	56	313	55	304
## 7264	NP_001349068.1	XP_017209955.1	36.264	91	58	0	56	146	355	445
## 7265	NP_001349068.1	XP_021331309.1	44.483	290	148	2	39	315	6	295
## 7266	NP_001349068.1	XP_021331309.1	42.322	267	154	0	48	314	84	350
## 7267	NP_001349068.1	XP_021331309.1	41.924	291	160	2	31	312	30	320
## 7268	NP_001349068.1	XP_021331309.1	46.018	226	122	0	91	316	43	268
## 7269	NP_001349068.1	XP_017210364.1	47.761	268	140	0	46	313	94	361
## 7270	NP_001349068.1	XP_017210364.1	47.191	267	141	0	50	316	182	448
## 7271	NP_001349068.1	XP_017210364.1	40.000	335	166	3	7	313	174	501
## 7272	NP_001349068.1	XP_017210364.1	48.047	256	133	0	58	313	78	333
## 7273	NP_001349068.1	XP_017210364.1	44.403	268	148	1	50	316	41	308
## 7274	NP_001349068.1	XP_017210364.1	42.105	304	142	2	44	313	114	417
## 7275	NP_001349068.1	XP_017210364.1	44.747	257	142	0	58	314	274	530
## 7276	NP_001349068.1	XP_017210364.1	43.019	265	151	0	49	313	293	557
## 7277	NP_001349068.1	XP_017210364.1	49.153	118	60	0	59	176	443	560
## 7278	NP_001349068.1	XP_021331056.1	48.560	243	125	0	73	315	16	258

## 7279	NP_001349068.1	XP_021331056.1	50.885	226	111	0	58	283	29	254
## 7280	NP_001349068.1	XP_021331056.1	47.253	91	48	0	58	148	169	259
## 7281	NP_001349068.1	XP_021323944.1	46.468	269	144	0	46	314	121	389
## 7282	NP_001349068.1	XP_021323944.1	46.350	274	147	0	46	319	93	366
## 7283	NP_001349068.1	XP_021323944.1	44.030	268	150	0	46	313	177	444
## 7284	NP_001349068.1	XP_021323944.1	45.926	270	146	0	46	315	65	334
## 7285	NP_001349068.1	XP_021323944.1	41.720	314	173	3	29	333	13	325
## 7286	NP_001349068.1	XP_021323944.1	45.703	256	139	0	58	313	161	416
## 7287	NP_001349068.1	XP_021323944.1	44.105	229	128	0	58	286	217	445
## 7288	NP_001349068.1	XP_021323944.1	41.290	155	91	0	48	202	291	445
## 7289	NP_001349068.1	XP_021323944.1	33.333	45	30	0	46	90	401	445
## 7290	NP_001349068.1	XP_017211226.1	48.529	272	139	1	50	320	52	323
## 7291	NP_001349068.1	XP_017211226.1	35.849	106	40	1	58	135	257	362
## 7292	NP_001349068.1	XP_021327009.1	47.388	268	139	2	50	316	42	308
## 7293	NP_001349068.1	XP_021327009.1	46.825	252	133	1	60	311	81	331
## 7294	NP_001349068.1	XP_021327009.1	49.561	228	115	0	56	283	104	331
## 7295	NP_001349068.1	XP_021327008.1	47.388	268	139	2	50	316	42	308
## 7296	NP_001349068.1	XP_021327008.1	46.825	252	133	1	60	311	81	331
## 7297	NP_001349068.1	XP_021327008.1	49.561	228	115	0	56	283	104	331
## 7298	NP_001349068.1	XP_021327007.1	47.388	268	139	2	50	316	42	308
## 7299	NP_001349068.1	XP_021327007.1	46.825	252	133	1	60	311	81	331
## 7300	NP_001349068.1	XP_021327007.1	49.561	228	115	0	56	283	104	331
## 7301	NP_001349068.1	XP_009296573.2	48.031	254	132	0	58	311	41	294
## 7302	NP_001349068.1	XP_009296573.2	48.828	256	131	0	58	313	13	268
## 7303	NP_001349068.1	XP_009296573.2	44.876	283	154	1	33	313	42	324
## 7304	NP_001349068.1	XP_009296573.2	47.266	256	135	0	58	313	97	352
## 7305	NP_001349068.1	XP_009296573.2	46.332	259	139	0	58	316	153	411
## 7306	NP_001349068.1	XP_009296573.2	44.906	265	146	0	49	313	200	464
## 7307	NP_001349068.1	XP_009296573.2	48.819	254	130	0	60	313	183	436
## 7308	NP_001349068.1	XP_009296573.2	45.560	259	141	0	58	316	125	383
## 7309	NP_001349068.1	XP_009296573.2	43.333	270	153	0	49	318	228	497
## 7310	NP_001349068.1	XP_009296573.2	46.078	204	110	0	112	315	11	214
## 7311	NP_001349068.1	XP_009296573.2	50.000	66	33	0	250	315	9	74
## 7312	NP_001349068.1	NP_001104669.1	45.038	262	144	0	50	311	96	357
## 7313	NP_001349068.1	NP_001104669.1	47.826	253	132	0	63	315	81	333
## 7314	NP_001349068.1	NP_001104669.1	45.977	261	141	0	56	316	130	390
## 7315	NP_001349068.1	NP_001104669.1	43.969	257	144	0	58	314	160	416
## 7316	NP_001349068.1	NP_001104669.1	43.721	215	120	1	120	333	82	296
## 7317	NP_001349068.1	XP_017210573.1	45.038	262	144	0	50	311	96	357
## 7318	NP_001349068.1	XP_017210573.1	47.826	253	132	0	63	315	81	333
## 7319	NP_001349068.1	XP_017210573.1	45.977	261	141	0	56	316	130	390
## 7320	NP_001349068.1	XP_017210573.1	43.969	257	144	0	58	314	160	416
## 7321	NP_001349068.1	XP_017210573.1	43.721	215	120	1	120	333	82	296
## 7322	NP_001349068.1	XP_017211129.1	45.455	264	144	0	48	311	123	386
## 7323	NP_001349068.1	XP_017211129.1	47.012	251	133	0	63	313	82	332
## 7324	NP_001349068.1	XP_017211129.1	44.569	267	148	0	50	316	153	419
## 7325	NP_001349068.1	XP_017211129.1	45.882	170	92	0	146	315	81	250
## 7326	NP_001349068.1	XP_017211129.1	47.917	144	75	0	172	315	79	222
## 7327	NP_001349068.1	XP_017211057.1	47.012	251	133	0	63	313	82	332
## 7328	NP_001349068.1	XP_017211057.1	44.318	264	147	0	48	311	123	386
## 7329	NP_001349068.1	XP_017211057.1	43.922	255	143	0	58	312	189	443
## 7330	NP_001349068.1	XP_017211057.1	40.154	259	155	0	58	316	161	419
## 7331	NP_001349068.1	XP_017211057.1	39.437	284	157	2	30	313	36	304
## 7332	NP_001349068.1	XP_017211057.1	40.465	215	126	1	103	315	64	278

## 7333	NP_001349068.1	XP_017210198.1	42.671	307	173	2	12	316	1	306
## 7334	NP_001349068.1	XP_017210198.1	46.360	261	140	0	56	316	74	334
## 7335	NP_001349068.1	XP_017210198.1	43.182	264	150	0	50	313	124	387
## 7336	NP_001349068.1	XP_017210198.1	42.435	271	156	0	46	316	92	362
## 7337	NP_001349068.1	XP_017210198.1	46.025	239	129	0	48	286	150	388
## 7338	NP_001349068.1	XP_021331223.1	49.237	262	133	0	58	319	215	476
## 7339	NP_001349068.1	XP_021331223.1	49.225	258	131	0	58	315	299	556
## 7340	NP_001349068.1	XP_021331223.1	45.296	287	156	1	48	333	121	407
## 7341	NP_001349068.1	XP_021331223.1	51.464	239	116	0	58	296	327	565
## 7342	NP_001349068.1	XP_021331223.1	45.736	258	140	0	58	315	187	444
## 7343	NP_001349068.1	XP_021331223.1	46.586	249	133	0	63	311	80	328
## 7344	NP_001349068.1	XP_021331223.1	47.556	225	118	0	91	315	80	304
## 7345	NP_001349068.1	XP_021331223.1	51.309	191	93	0	58	248	383	573
## 7346	NP_001349068.1	XP_021331223.1	48.214	168	87	0	146	313	79	246
## 7347	NP_001349068.1	XP_021331223.1	45.223	157	78	1	167	315	64	220
## 7348	NP_001349068.1	XP_021331223.1	41.667	132	76	1	203	333	80	211
## 7349	NP_001349068.1	XP_017211015.1	51.394	251	122	0	63	313	66	316
## 7350	NP_001349068.1	XP_017211015.1	47.257	237	125	0	50	286	81	317
## 7351	NP_001349068.1	XP_017211015.1	50.254	197	98	0	119	315	66	262
## 7352	NP_001349068.1	XP_017211015.1	49.375	160	80	1	172	330	63	222
## 7353	NP_001349068.1	XP_017210344.1	47.638	254	133	0	58	311	13	266
## 7354	NP_001349068.1	XP_017210344.1	46.290	283	150	1	33	313	42	324
## 7355	NP_001349068.1	XP_017210344.1	45.946	259	140	0	58	316	97	355
## 7356	NP_001349068.1	XP_017210344.1	47.656	256	134	0	58	313	153	408
## 7357	NP_001349068.1	XP_017210344.1	44.788	259	143	0	58	316	41	299
## 7358	NP_001349068.1	XP_017210344.1	48.954	239	120	1	75	313	4	240
## 7359	NP_001349068.1	XP_017210344.1	44.747	257	142	0	60	316	183	439
## 7360	NP_001349068.1	XP_017210344.1	45.575	226	123	0	58	283	209	434
## 7361	NP_001349068.1	XP_017210344.1	34.940	166	101	1	6	171	276	434
## 7362	NP_001349068.1	XP_017211218.1	51.394	251	122	0	63	313	66	316
## 7363	NP_001349068.1	XP_017211218.1	47.257	237	125	0	50	286	81	317
## 7364	NP_001349068.1	XP_017211218.1	50.254	197	98	0	119	315	66	262
## 7365	NP_001349068.1	XP_017211218.1	49.375	160	80	1	172	330	63	222
## 7366	NP_001349068.1	NP_001014384.1	44.251	287	153	2	33	313	40	325
## 7367	NP_001349068.1	NP_001014384.1	40.625	288	167	3	26	313	14	297
## 7368	NP_001349068.1	NP_001014384.1	44.690	226	123	2	58	282	127	351
## 7369	NP_001349068.1	NP_001014384.1	44.211	95	52	1	49	142	257	351
## 7370	NP_001349068.1	XP_005160995.1	44.251	287	153	2	33	313	40	325
## 7371	NP_001349068.1	XP_005160995.1	40.625	288	167	3	26	313	14	297
## 7372	NP_001349068.1	XP_005160995.1	44.690	226	123	2	58	282	127	351
## 7373	NP_001349068.1	XP_005160995.1	44.211	95	52	1	49	142	257	351
## 7374	NP_001349068.1	XP_017208296.1	50.193	259	129	0	58	316	167	425
## 7375	NP_001349068.1	XP_017208296.1	47.015	268	142	0	46	313	127	394
## 7376	NP_001349068.1	XP_017208296.1	48.828	256	131	0	58	313	83	338
## 7377	NP_001349068.1	XP_017208296.1	45.865	266	144	0	48	313	325	590
## 7378	NP_001349068.1	XP_017208296.1	48.047	256	133	0	58	313	223	478
## 7379	NP_001349068.1	XP_017208296.1	50.638	235	116	0	81	315	50	284
## 7380	NP_001349068.1	XP_017208296.1	48.649	259	133	0	58	316	111	369
## 7381	NP_001349068.1	XP_017208296.1	43.431	274	149	1	44	311	231	504
## 7382	NP_001349068.1	XP_017208296.1	47.656	256	134	0	58	313	307	562
## 7383	NP_001349068.1	XP_017208296.1	45.312	256	140	0	58	313	279	534
## 7384	NP_001349068.1	XP_017208296.1	44.843	223	123	0	91	313	32	254
## 7385	NP_001349068.1	XP_017210349.1	49.624	266	133	1	50	314	42	307
## 7386	NP_001349068.1	XP_017210349.1	44.643	56	31	0	261	316	58	113

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## 7387 NP_001349068.1 XP_009298179.1 49.624 266 133 1 50 314 42 307
## 7388 NP_001349068.1 XP_009298179.1 44.643 56 31 0 261 316 58 113
## 7389 NP_001349068.1 XP_009298178.1 49.624 266 133 1 50 314 42 307
## 7390 NP_001349068.1 XP_009298178.1 44.643 56 31 0 261 316 58 113
## 7391 NP_001349068.1 XP_021327153.1 49.624 266 133 1 50 314 42 307
## 7392 NP_001349068.1 XP_021327153.1 44.643 56 31 0 261 316 58 113
## 7393 NP_001349068.1 XP_005170442.1 44.444 270 150 0 46 315 122 391
## 7394 NP_001349068.1 XP_005170442.1 46.886 273 145 0 44 316 64 336
## 7395 NP_001349068.1 XP_005170442.1 41.772 158 91 1 41 198 230 386
## 7396 NP_001349068.1 XP_021331063.1 52.155 232 111 0 82 313 1 232
## 7397 NP_001349068.1 XP_021331063.1 50.215 233 116 0 58 290 5 237
## 7398 NP_001349068.1 XP_021331063.1 51.515 66 32 0 56 121 171 236
## 7399 NP_001349068.1 XP_021327905.1 48.263 259 134 0 58 316 103 361
## 7400 NP_001349068.1 XP_021327905.1 46.642 268 142 1 47 313 35 302
## 7401 NP_001349068.1 XP_021327905.1 45.865 266 144 0 48 313 65 330
## 7402 NP_001349068.1 XP_021327905.1 46.121 232 125 0 58 289 131 362
## 7403 NP_001349068.1 XP_021327905.1 43.038 158 90 0 50 207 207 364
## 7404 NP_001349068.1 XP_017210371.1 48.263 259 134 0 58 316 103 361
## 7405 NP_001349068.1 XP_017210371.1 46.642 268 142 1 47 313 35 302
## 7406 NP_001349068.1 XP_017210371.1 45.865 266 144 0 48 313 65 330
## 7407 NP_001349068.1 XP_017210371.1 46.121 232 125 0 58 289 131 362
## 7408 NP_001349068.1 XP_017210371.1 43.038 158 90 0 50 207 207 364
## 7409 NP_001349068.1 XP_009297802.1 45.660 265 144 0 48 312 141 405
## 7410 NP_001349068.1 XP_009297802.1 47.266 256 135 0 60 315 125 380
## 7411 NP_001349068.1 XP_009297802.1 40.221 271 161 1 64 333 73 343
## 7412 NP_001349068.1 XP_021331500.1 45.126 277 151 1 58 333 153 429
## 7413 NP_001349068.1 XP_021331500.1 43.866 269 151 0 48 316 199 467
## 7414 NP_001349068.1 XP_021331500.1 44.656 262 145 0 58 319 125 386
## 7415 NP_001349068.1 XP_021331500.1 43.165 278 152 1 42 313 75 352
## 7416 NP_001349068.1 XP_021331500.1 45.418 251 137 0 63 313 74 324
## 7417 NP_001349068.1 XP_009301501.1 46.899 258 137 0 58 315 124 381
## 7418 NP_001349068.1 XP_009301501.1 43.321 277 156 1 60 335 98 374
## 7419 NP_001349068.1 XP_009301501.1 43.137 255 144 1 58 311 180 434
## 7420 NP_001349068.1 XP_009301501.1 39.394 330 178 5 19 329 14 340
## 7421 NP_001349068.1 XP_021331255.1 52.074 217 104 0 82 298 1 217
## 7422 NP_001349068.1 XP_021331255.1 50.233 215 107 0 58 272 5 219
## 7423 NP_001349068.1 XP_021331255.1 49.282 209 106 0 111 319 2 210
## 7424 NP_001349068.1 XP_021331255.1 50.649 154 76 0 166 319 1 154
## 7425 NP_001349068.1 XP_021327011.1 50.826 242 114 1 80 316 40 281
## 7426 NP_001349068.1 XP_021327011.1 50.427 234 115 1 63 296 56 288
## 7427 NP_001349068.1 XP_021327011.1 48.598 214 110 0 48 261 69 282
## 7428 NP_001349068.1 XP_021327011.1 48.634 183 93 1 58 240 107 288
## 7429 NP_001349068.1 XP_021327010.1 50.826 242 114 1 80 316 40 281
## 7430 NP_001349068.1 XP_021327010.1 50.427 234 115 1 63 296 56 288
## 7431 NP_001349068.1 XP_021327010.1 48.598 214 110 0 48 261 69 282
## 7432 NP_001349068.1 XP_021327010.1 48.634 183 93 1 58 240 107 288
## 7433 NP_001349068.1 XP_021324489.1 48.828 256 131 0 58 313 33 288
## 7434 NP_001349068.1 XP_021324489.1 45.833 264 143 0 46 309 77 340
## 7435 NP_001349068.1 XP_021324489.1 47.619 273 142 1 58 329 61 333
## 7436 NP_001349068.1 XP_021324489.1 50.427 234 116 0 82 315 1 234
## 7437 NP_001349068.1 XP_021324489.1 41.250 160 88 1 44 197 181 340
## 7438 NP_001349068.1 NP_001025265.3 49.398 249 126 0 63 311 39 287
## 7439 NP_001349068.1 NP_001025265.3 47.170 265 140 0 49 313 109 373
## 7440 NP_001349068.1 NP_001025265.3 47.266 256 135 0 58 313 62 317

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## 7441	NP_001349068.1	NP_001025265.3	45.798	238	129	0	49	286	137	374
## 7442	NP_001349068.1	NP_001025265.3	46.606	221	118	0	93	313	41	261
## 7443	NP_001349068.1	NP_001025265.3	50.000	200	100	0	115	314	35	234
## 7444	NP_001349068.1	NP_001025265.3	46.939	98	52	0	48	145	276	373
## 7445	NP_001349068.1	XP_017210838.1	46.215	251	135	0	63	313	82	332
## 7446	NP_001349068.1	XP_017210838.1	43.561	264	149	0	48	311	123	386
## 7447	NP_001349068.1	XP_017210838.1	43.580	257	145	0	58	314	189	445
## 7448	NP_001349068.1	XP_017210838.1	41.313	259	152	0	58	316	161	419
## 7449	NP_001349068.1	XP_017210838.1	42.640	197	113	0	119	315	82	278
## 7450	NP_001349068.1	XP_021330478.1	50.388	258	128	0	58	315	13	270
## 7451	NP_001349068.1	XP_021330478.1	48.031	254	132	0	58	311	97	350
## 7452	NP_001349068.1	XP_021330478.1	48.249	257	133	0	58	314	495	751
## 7453	NP_001349068.1	XP_021330478.1	49.035	259	132	0	58	316	153	411
## 7454	NP_001349068.1	XP_021330478.1	47.656	256	134	0	58	313	69	324
## 7455	NP_001349068.1	XP_021330478.1	44.815	270	149	0	49	318	116	385
## 7456	NP_001349068.1	XP_021330478.1	44.948	287	151	1	34	313	436	722
## 7457	NP_001349068.1	XP_021330478.1	46.875	256	136	0	58	313	181	436
## 7458	NP_001349068.1	XP_021330478.1	43.463	283	153	3	58	333	349	631
## 7459	NP_001349068.1	XP_021330478.1	42.599	277	152	3	43	313	419	694
## 7460	NP_001349068.1	XP_021330478.1	45.532	235	128	0	81	315	8	242
## 7461	NP_001349068.1	XP_021330478.1	46.774	186	98	1	130	315	2	186
## 7462	NP_001349068.1	XP_021330478.1	44.737	152	84	0	50	201	599	750
## 7463	NP_001349068.1	XP_021330478.1	40.426	47	27	1	43	89	705	750
## 7464	NP_001349068.1	XP_021324487.1	48.828	256	131	0	58	313	82	337
## 7465	NP_001349068.1	XP_021324487.1	45.833	264	143	0	46	309	126	389
## 7466	NP_001349068.1	XP_021324487.1	50.638	235	116	0	81	315	49	283
## 7467	NP_001349068.1	XP_021324487.1	47.619	273	142	1	58	329	110	382
## 7468	NP_001349068.1	XP_021324487.1	44.843	223	123	0	91	313	31	253
## 7469	NP_001349068.1	XP_021324487.1	41.250	160	88	1	44	197	230	389
## 7470	NP_001349068.1	NP_001314925.1	47.619	273	141	2	19	290	22	293
## 7471	NP_001349068.1	NP_001314925.1	52.212	226	108	0	88	313	63	288
## 7472	NP_001349068.1	XP_021331298.1	46.899	258	137	0	58	315	124	381
## 7473	NP_001349068.1	XP_021331298.1	46.094	256	138	0	60	315	98	353
## 7474	NP_001349068.1	XP_021331298.1	42.636	258	147	1	58	314	180	437
## 7475	NP_001349068.1	XP_021331298.1	39.697	330	177	5	19	329	14	340
## 7476	NP_001349068.1	XP_021331297.1	46.899	258	137	0	58	315	124	381
## 7477	NP_001349068.1	XP_021331297.1	46.094	256	138	0	60	315	98	353
## 7478	NP_001349068.1	XP_021331297.1	42.636	258	147	1	58	314	180	437
## 7479	NP_001349068.1	XP_021331297.1	39.697	330	177	5	19	329	14	340
## 7480	NP_001349068.1	XP_009299002.1	46.215	251	135	0	63	313	82	332
## 7481	NP_001349068.1	XP_009299002.1	44.318	264	147	0	48	311	123	386
## 7482	NP_001349068.1	XP_009299002.1	44.706	255	141	0	58	312	189	443
## 7483	NP_001349068.1	XP_009299002.1	40.541	259	154	0	58	316	161	419
## 7484	NP_001349068.1	XP_009299002.1	41.624	197	115	0	119	315	82	278
## 7485	NP_001349068.1	XP_009299002.1	42.857	168	96	0	146	313	81	248
## 7486	NP_001349068.1	XP_009299002.1	47.887	142	74	0	172	313	79	220
## 7487	NP_001349068.1	NP_001116099.1	49.402	251	127	0	63	313	65	315
## 7488	NP_001349068.1	NP_001116099.1	49.785	233	117	0	58	290	88	320
## 7489	NP_001349068.1	NP_001116099.1	47.368	114	60	0	203	316	65	178
## 7490	NP_001349068.1	XP_017210218.1	47.170	265	140	0	49	313	76	340
## 7491	NP_001349068.1	XP_017210218.1	45.703	256	139	0	58	313	169	424
## 7492	NP_001349068.1	XP_017210218.1	46.875	256	136	0	58	313	141	396
## 7493	NP_001349068.1	XP_017210218.1	45.914	257	139	0	58	314	113	369
## 7494	NP_001349068.1	XP_017210218.1	42.697	267	153	0	48	314	271	537

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## 7495 NP_001349068.1 XP_017210218.1 42.697 267 153 0 47 313 242 508
## 7496 NP_001349068.1 XP_017210218.1 40.411 292 146 1 50 313 301 592
## 7497 NP_001349068.1 XP_017210218.1 41.573 267 156 0 50 316 217 483
## 7498 NP_001349068.1 XP_017210218.1 42.322 267 154 0 50 316 189 455
## 7499 NP_001349068.1 XP_017210218.1 43.580 257 141 1 60 316 35 287
## 7500 NP_001349068.1 XP_017210218.1 40.927 259 153 0 58 316 365 623
## 7501 NP_001349068.1 XP_017210218.1 41.327 196 115 0 58 253 449 644
## 7502 NP_001349068.1 XP_017210218.1 34.848 66 43 0 58 123 589 654
## 7503 NP_001349068.1 XP_021331372.1 50.206 243 120 1 68 309 2 244
## 7504 NP_001349068.1 XP_021331372.1 52.727 220 104 0 58 277 20 239
## 7505 NP_001349068.1 XP_021331372.1 51.598 219 106 0 95 313 1 219
## 7506 NP_001349068.1 XP_021331372.1 51.818 110 53 0 58 167 132 241
## 7507 NP_001349068.1 XP_021331372.1 55.172 29 12 1 58 85 216 244
## 7508 NP_001349068.1 XP_021330856.1 47.510 261 136 1 50 309 57 317
## 7509 NP_001349068.1 XP_021330856.1 47.131 244 125 1 70 313 54 293
## 7510 NP_001349068.1 XP_021330856.1 32.597 181 89 2 166 313 1 181
## 7511 NP_001349068.1 XP_021330856.1 49.123 57 29 0 259 315 71 127
## 7512 NP_001349068.1 NP_001103336.1 46.512 258 138 0 56 313 58 315
## 7513 NP_001349068.1 NP_001103336.1 45.489 266 145 0 48 313 22 287
## 7514 NP_001349068.1 NP_001103336.1 45.560 259 140 1 56 313 1 259
## 7515 NP_001349068.1 NP_001103336.1 46.610 236 126 0 50 285 108 343
## 7516 NP_001349068.1 NP_001103336.1 43.671 158 89 0 47 204 189 346
## 7517 NP_001349068.1 XP_021331300.1 46.124 258 139 0 58 315 124 381
## 7518 NP_001349068.1 XP_021331300.1 44.922 256 141 0 60 315 98 353
## 7519 NP_001349068.1 XP_021331300.1 42.353 255 146 1 58 311 180 434
## 7520 NP_001349068.1 XP_021331300.1 43.820 267 146 2 67 329 74 340
## 7521 NP_001349068.1 XP_021325042.1 48.339 271 140 0 44 314 68 338
## 7522 NP_001349068.1 XP_021325042.1 44.747 257 142 0 58 314 110 366
## 7523 NP_001349068.1 XP_021325042.1 40.264 303 135 3 58 314 556 858
## 7524 NP_001349068.1 XP_021325042.1 38.411 302 140 3 61 316 503 804
## 7525 NP_001349068.1 XP_021325042.1 43.169 183 104 0 50 232 186 368
## 7526 NP_001349068.1 XP_021325042.1 42.581 155 89 0 49 203 705 859
## 7527 NP_001349068.1 XP_021325042.1 33.191 235 121 4 142 342 500 732
## 7528 NP_001349068.1 NP_001107943.1 48.438 256 132 0 58 313 83 338
## 7529 NP_001349068.1 NP_001107943.1 45.833 264 143 0 46 309 127 390
## 7530 NP_001349068.1 NP_001107943.1 50.638 235 116 0 81 315 50 284
## 7531 NP_001349068.1 NP_001107943.1 47.253 273 143 1 58 329 111 383
## 7532 NP_001349068.1 NP_001107943.1 44.843 223 123 0 91 313 32 254
## 7533 NP_001349068.1 NP_001107943.1 40.625 160 89 1 44 197 231 390
## 7534 NP_001349068.1 XP_017210947.1 47.212 269 141 1 42 309 44 312
## 7535 NP_001349068.1 XP_017210947.1 51.111 225 106 1 58 278 89 313
## 7536 NP_001349068.1 XP_017210947.1 48.963 241 122 1 91 330 66 306
## 7537 NP_001349068.1 XP_021331137.1 45.318 267 145 1 50 315 52 318
## 7538 NP_001349068.1 NP_001121721.2 44.195 267 149 0 50 316 95 361
## 7539 NP_001349068.1 NP_001121721.2 44.747 257 142 0 58 314 131 387
## 7540 NP_001349068.1 NP_001121721.2 38.730 315 171 2 19 311 14 328
## 7541 NP_001349068.1 NP_001121721.2 36.842 152 96 0 50 201 235 386
## 7542 NP_001349068.1 XP_021328589.1 43.182 308 168 1 6 313 166 466
## 7543 NP_001349068.1 XP_021328589.1 48.134 268 139 0 46 313 255 522
## 7544 NP_001349068.1 XP_021328589.1 47.170 265 140 0 50 314 175 439
## 7545 NP_001349068.1 XP_021328589.1 48.828 256 131 0 58 313 127 382
## 7546 NP_001349068.1 XP_021328589.1 47.794 272 141 1 43 314 225 495
## 7547 NP_001349068.1 XP_021328589.1 46.642 268 143 0 49 316 34 301
## 7548 NP_001349068.1 XP_021328589.1 47.727 264 138 0 50 313 343 606

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## 7549	NP_001349068.1	XP_021328589.1	47.925	265	138	0	49	313	286	550
## 7550	NP_001349068.1	XP_021328589.1	46.970	264	140	0	50	313	147	410
## 7551	NP_001349068.1	XP_021328589.1	48.819	254	130	0	63	316	20	273
## 7552	NP_001349068.1	XP_021328589.1	47.755	245	126	1	46	288	365	609
## 7553	NP_001349068.1	XP_021328589.1	44.667	150	83	0	58	207	463	612
## 7554	NP_001349068.1	XP_021328589.1	45.070	71	39	0	58	128	547	617
## 7555	NP_001349068.1	XP_017210982.1	44.882	254	140	0	58	311	133	386
## 7556	NP_001349068.1	XP_017210982.1	47.012	251	133	0	63	313	82	332
## 7557	NP_001349068.1	XP_017210982.1	44.922	256	141	0	60	315	107	362
## 7558	NP_001349068.1	XP_017210982.1	45.455	253	138	0	58	310	161	413
## 7559	NP_001349068.1	XP_017210982.1	41.569	255	149	0	58	312	189	443
## 7560	NP_001349068.1	XP_017210982.1	43.529	170	96	0	146	315	81	250
## 7561	NP_001349068.1	XP_017210982.1	45.070	142	78	0	172	313	79	220
## 7562	NP_001349068.1	XP_021324420.1	41.993	281	163	0	29	309	48	328
## 7563	NP_001349068.1	XP_021324420.1	46.429	224	120	0	90	313	81	304
## 7564	NP_001349068.1	XP_021324420.1	45.366	205	112	0	111	315	74	278
## 7565	NP_001349068.1	XP_009299025.2	45.490	255	138	1	60	314	102	355
## 7566	NP_001349068.1	XP_009299025.2	41.912	272	158	0	63	334	77	348
## 7567	NP_001349068.1	XP_009299025.2	43.860	228	127	1	58	285	128	354
## 7568	NP_001349068.1	XP_009299025.2	45.238	168	92	0	146	313	76	243
## 7569	NP_001349068.1	XP_017210837.1	45.736	258	140	0	58	315	101	358
## 7570	NP_001349068.1	XP_017210837.1	41.877	277	160	1	58	333	157	433
## 7571	NP_001349068.1	XP_017210837.1	45.817	251	136	0	63	313	78	328
## 7572	NP_001349068.1	XP_017210837.1	43.701	254	143	0	58	311	129	382
## 7573	NP_001349068.1	XP_017210837.1	45.740	223	121	0	93	315	80	302
## 7574	NP_001349068.1	XP_017210837.1	40.784	255	151	0	60	314	187	441
## 7575	NP_001349068.1	XP_017210837.1	40.789	228	135	0	58	285	213	440
## 7576	NP_001349068.1	XP_017210837.1	42.523	214	122	1	121	333	80	293
## 7577	NP_001349068.1	XP_017210014.1	45.490	255	138	1	60	314	72	325
## 7578	NP_001349068.1	XP_017210014.1	41.912	272	158	0	63	334	47	318
## 7579	NP_001349068.1	XP_017210014.1	39.643	280	161	2	6	285	53	324
## 7580	NP_001349068.1	XP_017210014.1	45.238	168	92	0	146	313	46	213
## 7581	NP_001349068.1	XP_021328707.1	48.485	264	136	0	50	313	117	380
## 7582	NP_001349068.1	XP_021328707.1	44.257	296	137	1	49	316	228	523
## 7583	NP_001349068.1	XP_021328707.1	45.588	272	147	1	43	314	195	465
## 7584	NP_001349068.1	XP_021328707.1	45.614	285	154	1	50	333	61	345
## 7585	NP_001349068.1	XP_021328707.1	46.816	267	142	0	47	313	30	296
## 7586	NP_001349068.1	XP_021328707.1	44.776	268	148	0	49	316	144	411
## 7587	NP_001349068.1	XP_021328707.1	46.792	265	141	0	49	313	172	436
## 7588	NP_001349068.1	XP_021328707.1	45.833	264	143	0	50	313	89	352
## 7589	NP_001349068.1	XP_021328707.1	45.896	268	145	0	46	313	1	268
## 7590	NP_001349068.1	XP_021328707.1	48.117	239	124	0	76	314	3	241
## 7591	NP_001349068.1	XP_021328707.1	43.983	241	135	0	58	298	293	533
## 7592	NP_001349068.1	XP_021328707.1	42.188	256	146	1	33	286	294	549
## 7593	NP_001349068.1	NP_001353349.1	46.591	264	140	1	50	312	42	305
## 7594	NP_001349068.1	NP_001353349.1	47.598	229	120	0	58	286	79	307
## 7595	NP_001349068.1	NP_001353349.1	45.492	244	129	2	70	313	39	278
## 7596	NP_001349068.1	NP_001353349.1	44.828	58	32	0	259	316	56	113
## 7597	NP_001349068.1	NP_001353349.1	46.341	41	22	0	50	90	267	307
## 7598	NP_001349068.1	XP_017211097.1	45.882	255	137	1	60	314	102	355
## 7599	NP_001349068.1	XP_017211097.1	41.912	272	158	0	63	334	77	348
## 7600	NP_001349068.1	XP_017211097.1	44.298	228	126	1	58	285	128	354
## 7601	NP_001349068.1	XP_017211097.1	45.238	168	92	0	146	313	76	243
## 7602	NP_001349068.1	XP_021332639.1	45.914	257	138	1	58	314	107	362

##	7603	NP_001349068.1	XP_021332639.1	46.473	241	123	4	78	316	72	308
##	7604	NP_001349068.1	XP_021332639.1	39.552	134	73	4	189	319	71	199
##	7605	NP_001349068.1	XP_021332639.1	40.476	42	25	0	48	89	320	361
##	7606	NP_001349068.1	XP_017210985.1	46.988	249	132	0	63	311	82	330
##	7607	NP_001349068.1	XP_017210985.1	43.191	257	146	0	60	316	107	363
##	7608	NP_001349068.1	XP_017210985.1	48.000	225	117	0	91	315	82	306
##	7609	NP_001349068.1	XP_017210985.1	40.449	267	159	0	48	314	123	389
##	7610	NP_001349068.1	XP_021327368.1	46.816	267	141	1	46	311	1	267
##	7611	NP_001349068.1	XP_021327368.1	45.113	266	146	0	48	313	32	297
##	7612	NP_001349068.1	XP_021327368.1	45.249	221	121	0	93	313	21	241
##	7613	NP_001349068.1	XP_021327368.1	50.251	199	99	0	116	314	16	214
##	7614	NP_001349068.1	XP_021327368.1	37.209	43	27	0	47	89	283	325
##	7615	NP_001349068.1	XP_021332373.1	46.816	267	141	1	46	311	1	267
##	7616	NP_001349068.1	XP_021332373.1	45.113	266	146	0	48	313	32	297
##	7617	NP_001349068.1	XP_021332373.1	45.249	221	121	0	93	313	21	241
##	7618	NP_001349068.1	XP_021332373.1	50.251	199	99	0	116	314	16	214
##	7619	NP_001349068.1	XP_021332373.1	37.209	43	27	0	47	89	283	325
##	7620	NP_001349068.1	XP_021330826.1	50.400	250	122	2	60	309	20	267
##	7621	NP_001349068.1	XP_021330826.1	50.215	233	115	1	49	281	36	267
##	7622	NP_001349068.1	XP_021330826.1	50.218	229	113	1	88	316	20	247
##	7623	NP_001349068.1	XP_021330826.1	45.390	141	76	1	29	169	128	267
##	7624	NP_001349068.1	XP_021324998.1	47.037	270	143	0	47	316	157	426
##	7625	NP_001349068.1	XP_021324998.1	48.450	258	133	0	56	313	82	339
##	7626	NP_001349068.1	XP_021324998.1	42.806	278	152	2	58	335	140	410
##	7627	NP_001349068.1	XP_021324998.1	44.402	259	144	0	58	316	112	370
##	7628	NP_001349068.1	XP_021324998.1	41.958	286	165	1	31	316	2	286
##	7629	NP_001349068.1	XP_021324998.1	45.865	133	71	1	43	175	294	425
##	7630	NP_001349068.1	XP_009301296.1	49.219	256	130	0	58	313	104	359
##	7631	NP_001349068.1	XP_009301296.1	47.266	256	135	0	58	313	76	331
##	7632	NP_001349068.1	XP_009301296.1	43.774	265	149	0	49	313	151	415
##	7633	NP_001349068.1	XP_009301296.1	45.992	237	128	0	50	286	180	416
##	7634	NP_001349068.1	XP_009301296.1	42.292	253	146	0	61	313	23	275
##	7635	NP_001349068.1	XP_009301296.1	44.601	213	118	0	46	258	204	416
##	7636	NP_001349068.1	XP_009301296.1	48.387	31	16	0	283	313	21	51
##	7637	NP_001349068.1	XP_021331432.1	46.800	250	133	0	63	312	39	288
##	7638	NP_001349068.1	XP_021331432.1	45.374	227	124	0	58	284	62	288
##	7639	NP_001349068.1	XP_021331432.1	43.111	225	128	0	91	315	39	263
##	7640	NP_001349068.1	XP_021331432.1	43.284	201	114	0	119	319	39	239
##	7641	NP_001349068.1	XP_009301295.1	49.219	256	130	0	58	313	116	371
##	7642	NP_001349068.1	XP_009301295.1	47.266	256	135	0	58	313	88	343
##	7643	NP_001349068.1	XP_009301295.1	43.774	265	149	0	49	313	163	427
##	7644	NP_001349068.1	XP_009301295.1	45.992	237	128	0	50	286	192	428
##	7645	NP_001349068.1	XP_009301295.1	42.292	253	146	0	61	313	35	287
##	7646	NP_001349068.1	XP_009301295.1	44.601	213	118	0	46	258	216	428
##	7647	NP_001349068.1	XP_009301295.1	48.387	31	16	0	283	313	33	63
##	7648	NP_001349068.1	XP_021330818.1	47.471	257	135	0	59	315	74	330
##	7649	NP_001349068.1	XP_021330818.1	44.815	270	149	0	46	315	89	358
##	7650	NP_001349068.1	XP_021330818.1	46.899	258	137	0	58	315	157	414
##	7651	NP_001349068.1	XP_021330818.1	45.489	266	145	0	48	313	175	440
##	7652	NP_001349068.1	XP_021330818.1	41.000	100	59	0	46	145	341	440
##	7653	NP_001349068.1	XP_021330818.1	37.607	117	58	4	220	333	49	153
##	7654	NP_001349068.1	XP_017209967.1	47.431	253	133	0	63	315	82	334
##	7655	NP_001349068.1	XP_017209967.1	42.751	269	154	0	48	316	123	391
##	7656	NP_001349068.1	XP_017209967.1	45.914	257	139	0	56	312	159	415

## 7657	NP_001349068.1	XP_017209967.1	45.238	252	138	0	60	311	107	358
## 7658	NP_001349068.1	XP_017209967.1	43.529	170	96	0	146	315	81	250
## 7659	NP_001349068.1	XP_017209967.1	44.366	142	79	0	172	313	79	220
## 7660	NP_001349068.1	XP_017209967.1	38.202	89	55	0	58	146	329	417
## 7661	NP_001349068.1	XP_021331130.1	44.358	257	143	0	60	316	107	363
## 7662	NP_001349068.1	XP_021331130.1	46.586	249	133	0	63	311	82	330
## 7663	NP_001349068.1	XP_021331130.1	43.071	267	152	0	48	314	123	389
## 7664	NP_001349068.1	XP_021331130.1	47.111	225	119	0	91	315	82	306
## 7665	NP_001349068.1	XP_021331130.1	42.424	132	75	1	203	333	82	213
## 7666	NP_001349068.1	NP_001107903.1	39.748	317	166	3	19	313	14	327
## 7667	NP_001349068.1	NP_001107903.1	44.404	277	153	1	60	335	102	378
## 7668	NP_001349068.1	NP_001107903.1	40.860	279	164	1	56	333	154	432
## 7669	NP_001349068.1	NP_001107903.1	43.359	256	145	0	56	311	126	381
## 7670	NP_001349068.1	NP_001107903.1	42.391	276	153	1	45	314	165	440
## 7671	NP_001349068.1	NP_001107903.1	44.286	210	116	1	121	329	79	288
## 7672	NP_001349068.1	XP_021323165.1	44.906	265	146	0	49	313	87	351
## 7673	NP_001349068.1	XP_021323165.1	48.193	249	129	0	65	313	75	323
## 7674	NP_001349068.1	XP_021323165.1	48.438	192	99	0	120	311	74	265
## 7675	NP_001349068.1	XP_021323165.1	69.231	26	8	0	288	313	74	99
## 7676	NP_001349068.1	XP_021331235.1	45.490	255	138	1	60	314	102	355
## 7677	NP_001349068.1	XP_021331235.1	41.912	272	158	0	63	334	77	348
## 7678	NP_001349068.1	XP_021331235.1	43.860	228	127	1	58	285	128	354
## 7679	NP_001349068.1	XP_021331235.1	45.238	168	92	0	146	313	76	243
## 7680	NP_001349068.1	XP_017211118.1	45.490	255	138	1	60	314	102	355
## 7681	NP_001349068.1	XP_017211118.1	41.912	272	158	0	63	334	77	348
## 7682	NP_001349068.1	XP_017211118.1	43.860	228	127	1	58	285	128	354
## 7683	NP_001349068.1	XP_017211118.1	45.238	168	92	0	146	313	76	243
## 7684	NP_001349068.1	XP_001923592.1	46.617	266	142	0	48	313	37	302
## 7685	NP_001349068.1	XP_001923592.1	44.223	251	140	0	65	315	26	276
## 7686	NP_001349068.1	XP_001923592.1	50.000	108	54	0	204	311	25	132
## 7687	NP_001349068.1	XP_001923592.1	43.902	82	46	0	232	313	25	106
## 7688	NP_001349068.1	XP_021330457.1	49.213	254	129	0	58	311	5	258
## 7689	NP_001349068.1	XP_021330457.1	42.857	287	136	1	58	316	33	319
## 7690	NP_001349068.1	XP_021330457.1	48.101	237	123	0	82	318	1	237
## 7691	NP_001349068.1	XP_021330457.1	43.243	296	140	1	46	313	77	372
## 7692	NP_001349068.1	XP_021330457.1	51.042	96	47	0	224	319	3	98
## 7693	NP_001349068.1	XP_021330456.1	49.213	254	129	0	58	311	5	258
## 7694	NP_001349068.1	XP_021330456.1	42.857	287	136	1	58	316	33	319
## 7695	NP_001349068.1	XP_021330456.1	48.101	237	123	0	82	318	1	237
## 7696	NP_001349068.1	XP_021330456.1	43.243	296	140	1	46	313	77	372
## 7697	NP_001349068.1	XP_021330456.1	51.042	96	47	0	224	319	3	98
## 7698	NP_001349068.1	XP_021327230.1	42.857	266	152	0	48	313	89	354
## 7699	NP_001349068.1	XP_021327230.1	40.067	297	175	1	19	315	35	328
## 7700	NP_001349068.1	XP_021327230.1	46.414	237	127	0	83	319	68	304
## 7701	NP_001349068.1	XP_021327230.1	48.309	207	107	0	110	316	67	273
## 7702	NP_001349068.1	XP_017211312.1	42.857	266	152	0	48	313	89	354
## 7703	NP_001349068.1	XP_017211312.1	40.067	297	175	1	19	315	35	328
## 7704	NP_001349068.1	XP_017211312.1	46.414	237	127	0	83	319	68	304
## 7705	NP_001349068.1	XP_017211312.1	48.309	207	107	0	110	316	67	273
## 7706	NP_001349068.1	XP_021331487.1	42.857	266	152	0	48	313	89	354
## 7707	NP_001349068.1	XP_021331487.1	40.067	297	175	1	19	315	35	328
## 7708	NP_001349068.1	XP_021331487.1	46.414	237	127	0	83	319	68	304
## 7709	NP_001349068.1	XP_021331487.1	48.309	207	107	0	110	316	67	273
## 7710	NP_001349068.1	XP_021331486.1	42.857	266	152	0	48	313	89	354

## 7711	NP_001349068.1	XP_021331486.1	40.067	297	175	1	19	315	35	328
## 7712	NP_001349068.1	XP_021331486.1	46.414	237	127	0	83	319	68	304
## 7713	NP_001349068.1	XP_021331486.1	48.309	207	107	0	110	316	67	273
## 7714	NP_001349068.1	XP_021330824.1	42.751	269	154	0	48	316	109	377
## 7715	NP_001349068.1	XP_021330824.1	47.431	253	133	0	63	315	68	320
## 7716	NP_001349068.1	XP_021330824.1	44.747	257	142	0	58	314	147	403
## 7717	NP_001349068.1	XP_021330824.1	46.032	252	136	0	60	311	93	344
## 7718	NP_001349068.1	XP_021330824.1	45.294	170	93	0	146	315	67	236
## 7719	NP_001349068.1	XP_021330824.1	39.773	176	97	2	167	333	52	227
## 7720	NP_001349068.1	XP_021323166.1	44.906	265	146	0	49	313	22	286
## 7721	NP_001349068.1	XP_021323166.1	48.193	249	129	0	65	313	10	258
## 7722	NP_001349068.1	XP_021323166.1	48.438	192	99	0	120	311	9	200
## 7723	NP_001349068.1	XP_021323166.1	69.231	26	8	0	288	313	9	34
## 7724	NP_001349068.1	XP_009294085.1	41.722	302	170	1	20	315	71	372
## 7725	NP_001349068.1	XP_009294085.1	47.619	63	33	0	254	316	87	149
## 7726	NP_001349068.1	XP_009297245.1	46.899	258	137	0	59	316	135	392
## 7727	NP_001349068.1	XP_009297245.1	47.104	259	137	0	58	316	78	336
## 7728	NP_001349068.1	XP_009297245.1	42.164	268	154	1	50	316	41	308
## 7729	NP_001349068.1	XP_009297245.1	46.352	233	125	0	50	282	182	414
## 7730	NP_001349068.1	XP_009297245.1	42.308	156	89	1	43	198	260	414
## 7731	NP_001349068.1	XP_009294086.1	41.722	302	170	1	20	315	60	361
## 7732	NP_001349068.1	XP_009294086.1	47.619	63	33	0	254	316	76	138
## 7733	NP_001349068.1	XP_021331498.1	43.902	287	160	1	48	333	405	691
## 7734	NP_001349068.1	XP_021331498.1	46.923	260	138	0	56	315	161	420
## 7735	NP_001349068.1	XP_021331498.1	44.528	265	147	0	49	313	238	502
## 7736	NP_001349068.1	XP_021331498.1	47.388	268	141	0	46	313	571	838
## 7737	NP_001349068.1	XP_021331498.1	44.238	269	150	0	48	316	265	533
## 7738	NP_001349068.1	XP_021331498.1	46.241	266	143	0	48	313	461	726
## 7739	NP_001349068.1	XP_021331498.1	45.896	268	145	0	48	315	209	476
## 7740	NP_001349068.1	XP_021331498.1	44.318	264	147	0	50	313	323	586
## 7741	NP_001349068.1	XP_021331498.1	43.985	266	149	0	48	313	349	614
## 7742	NP_001349068.1	XP_021331498.1	42.434	304	165	3	45	338	620	923
## 7743	NP_001349068.1	XP_021331498.1	44.361	266	148	0	48	313	293	558
## 7744	NP_001349068.1	XP_021331498.1	45.113	266	146	0	48	313	433	698
## 7745	NP_001349068.1	XP_021331498.1	44.487	263	146	0	48	310	489	751
## 7746	NP_001349068.1	XP_021331498.1	43.609	266	150	0	48	313	181	446
## 7747	NP_001349068.1	XP_021331498.1	45.703	256	139	0	58	313	107	362
## 7748	NP_001349068.1	XP_021331498.1	47.266	256	135	0	58	313	555	810
## 7749	NP_001349068.1	XP_021331498.1	46.591	264	141	0	50	313	743	1006
## 7750	NP_001349068.1	XP_021331498.1	44.737	266	147	0	48	313	125	390
## 7751	NP_001349068.1	XP_021331498.1	47.244	254	134	0	60	313	697	950
## 7752	NP_001349068.1	XP_021331498.1	42.244	303	162	3	44	333	53	355
## 7753	NP_001349068.1	XP_021331498.1	45.076	264	145	0	48	311	713	976
## 7754	NP_001349068.1	XP_021331498.1	45.417	240	130	1	49	288	798	1036
## 7755	NP_001349068.1	XP_017211078.1	46.988	249	132	0	63	311	80	328
## 7756	NP_001349068.1	XP_017211078.1	42.802	257	147	0	60	316	105	361
## 7757	NP_001349068.1	XP_017211078.1	48.444	225	116	0	91	315	80	304
## 7758	NP_001349068.1	XP_017211078.1	40.755	265	157	0	48	312	121	385
## 7759	NP_001349068.1	XP_017211078.1	45.833	168	91	0	146	313	79	246
## 7760	NP_001349068.1	XP_017211078.1	40.764	157	85	1	167	315	64	220
## 7761	NP_001349068.1	XP_017211078.1	37.079	89	56	0	58	146	299	387
## 7762	NP_001349068.1	XP_017209821.1	45.490	255	138	1	60	314	102	355
## 7763	NP_001349068.1	XP_017209821.1	41.912	272	158	0	63	334	77	348
## 7764	NP_001349068.1	XP_017209821.1	44.298	228	126	1	58	285	128	354

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## 7765 NP_001349068.1 XP_017209821.1 45.238 168 92 0 146 313 76 243
## 7766 NP_001349068.1 XP_017209820.1 45.490 255 138 1 60 314 102 355
## 7767 NP_001349068.1 XP_017209820.1 41.912 272 158 0 63 334 77 348
## 7768 NP_001349068.1 XP_017209820.1 44.298 228 126 1 58 285 128 354
## 7769 NP_001349068.1 XP_017209820.1 45.238 168 92 0 146 313 76 243
## 7770 NP_001349068.1 NP_001314833.1 42.574 303 172 1 11 313 158 458
## 7771 NP_001349068.1 NP_001314833.1 45.914 257 138 1 58 313 231 487
## 7772 NP_001349068.1 NP_001314833.1 45.600 250 135 1 58 306 259 508
## 7773 NP_001349068.1 NP_001314833.1 39.556 225 107 1 58 253 287 511
## 7774 NP_001349068.1 NP_001314833.1 48.837 129 66 0 188 316 193 321
## 7775 NP_001349068.1 NP_001314833.1 31.884 69 46 1 43 110 440 508
## 7776 NP_001349068.1 XP_017208888.1 44.574 258 143 0 58 315 84 341
## 7777 NP_001349068.1 XP_017208888.1 45.703 256 139 0 58 313 168 423
## 7778 NP_001349068.1 XP_017208888.1 44.922 256 141 0 58 313 112 367
## 7779 NP_001349068.1 XP_017208888.1 42.910 268 153 0 46 313 128 395
## 7780 NP_001349068.1 XP_017208888.1 40.580 276 156 2 38 313 44 311
## 7781 NP_001349068.1 XP_017208888.1 41.597 238 139 0 50 287 216 453
## 7782 NP_001349068.1 XP_017208888.1 40.000 175 105 0 58 232 280 454
## 7783 NP_001349068.1 XP_017208888.1 44.954 109 59 1 208 316 67 174
## 7784 NP_001349068.1 XP_017208888.1 44.444 99 55 0 49 147 355 453
## 7785 NP_001349068.1 XP_021331385.1 44.358 257 143 0 60 316 105 361
## 7786 NP_001349068.1 XP_021331385.1 46.185 249 134 0 63 311 80 328
## 7787 NP_001349068.1 XP_021331385.1 43.071 267 152 0 48 314 121 387
## 7788 NP_001349068.1 XP_021331385.1 47.111 225 119 0 91 315 80 304
## 7789 NP_001349068.1 XP_021331385.1 47.619 168 88 0 146 313 79 246
## 7790 NP_001349068.1 XP_021331385.1 45.223 157 78 1 167 315 64 220
## 7791 NP_001349068.1 XP_021331385.1 41.667 132 76 1 203 333 80 211
## 7792 NP_001349068.1 XP_017209848.1 45.736 258 140 0 58 315 101 358
## 7793 NP_001349068.1 XP_017209848.1 44.882 254 140 0 58 311 129 382
## 7794 NP_001349068.1 XP_017209848.1 44.223 251 140 0 63 313 78 328
## 7795 NP_001349068.1 XP_017209848.1 43.969 257 144 0 60 316 159 415
## 7796 NP_001349068.1 XP_017209848.1 40.467 257 153 0 58 314 185 441
## 7797 NP_001349068.1 XP_017209848.1 43.719 199 112 0 121 319 80 278
## 7798 NP_001349068.1 XP_017208612.1 43.911 271 152 0 46 316 111 381
## 7799 NP_001349068.1 XP_017208612.1 39.936 313 173 2 19 316 13 325
## 7800 NP_001349068.1 XP_017208612.1 45.660 265 144 0 49 313 142 406
## 7801 NP_001349068.1 XP_017208612.1 42.798 243 135 1 45 287 170 408
## 7802 NP_001349068.1 XP_017208611.1 43.911 271 152 0 46 316 111 381
## 7803 NP_001349068.1 XP_017208611.1 39.936 313 173 2 19 316 13 325
## 7804 NP_001349068.1 XP_017208611.1 45.660 265 144 0 49 313 142 406
## 7805 NP_001349068.1 XP_017208611.1 42.798 243 135 1 45 287 170 408
## 7806 NP_001349068.1 XP_017210830.1 42.751 269 154 0 48 316 123 391
## 7807 NP_001349068.1 XP_017210830.1 47.036 253 134 0 63 315 82 334
## 7808 NP_001349068.1 XP_017210830.1 45.525 257 140 0 56 312 159 415
## 7809 NP_001349068.1 XP_017210830.1 45.635 252 137 0 60 311 107 358
## 7810 NP_001349068.1 XP_017210830.1 42.941 170 97 0 146 315 81 250
## 7811 NP_001349068.1 XP_017210830.1 43.662 142 80 0 172 313 79 220
## 7812 NP_001349068.1 XP_017210830.1 38.202 89 55 0 58 146 329 417
## 7813 NP_001349068.1 XP_017210895.1 45.349 258 141 0 58 315 101 358
## 7814 NP_001349068.1 XP_017210895.1 42.960 277 157 1 58 333 157 433
## 7815 NP_001349068.1 XP_017210895.1 45.817 251 136 0 63 313 78 328
## 7816 NP_001349068.1 XP_017210895.1 44.664 253 140 0 58 310 129 381
## 7817 NP_001349068.1 XP_017210895.1 40.392 255 152 0 60 314 187 441
## 7818 NP_001349068.1 XP_017210895.1 41.228 228 134 0 58 285 213 440

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## 7819	NP_001349068.1	XP_017210895.1	40.083	242	116	3	121	333	80	321
## 7820	NP_001349068.1	XP_017210895.1	37.079	89	56	0	58	146	353	441
## 7821	NP_001349068.1	XP_017211131.1	46.586	249	133	0	63	311	82	330
## 7822	NP_001349068.1	XP_017211131.1	48.548	241	116	1	83	315	66	306
## 7823	NP_001349068.1	XP_017211131.1	40.449	267	159	0	48	314	123	389
## 7824	NP_001349068.1	XP_017211187.1	46.988	249	132	0	63	311	82	330
## 7825	NP_001349068.1	XP_017211187.1	40.226	266	159	0	48	313	123	388
## 7826	NP_001349068.1	XP_017211187.1	48.000	225	117	0	91	315	82	306
## 7827	NP_001349068.1	XP_017211187.1	42.262	168	97	0	146	313	81	248
## 7828	NP_001349068.1	XP_017211187.1	43.750	144	81	0	172	315	79	222
## 7829	NP_001349068.1	XP_017211187.1	35.955	89	57	0	58	146	301	389
## 7830	NP_001349068.1	XP_005158995.1	45.149	268	147	0	46	313	95	362
## 7831	NP_001349068.1	XP_005158995.1	44.444	252	140	0	65	316	86	337
## 7832	NP_001349068.1	XP_005158995.1	45.178	197	108	0	120	316	85	281
## 7833	NP_001349068.1	XP_005158995.1	42.636	129	73	1	43	171	261	388
## 7834	NP_001349068.1	XP_005158995.1	42.857	70	40	0	48	117	321	390
## 7835	NP_001349068.1	XP_021331152.1	45.276	254	139	0	63	316	82	335
## 7836	NP_001349068.1	XP_021331152.1	39.496	238	144	0	48	285	123	360
## 7837	NP_001349068.1	XP_021331152.1	48.214	168	87	0	146	313	81	248
## 7838	NP_001349068.1	XP_021331152.1	47.887	142	74	0	172	313	79	220
## 7839	NP_001349068.1	XP_021326627.1	47.191	267	141	0	47	313	176	442
## 7840	NP_001349068.1	XP_021326627.1	46.212	264	142	0	50	313	207	470
## 7841	NP_001349068.1	XP_021326627.1	46.494	271	144	1	46	316	232	501
## 7842	NP_001349068.1	XP_021326627.1	45.522	268	146	0	46	313	287	554
## 7843	NP_001349068.1	XP_021326627.1	48.221	253	131	0	61	313	162	414
## 7844	NP_001349068.1	XP_021326627.1	44.238	269	150	0	48	316	37	305
## 7845	NP_001349068.1	XP_021326627.1	45.455	264	144	0	50	313	263	526
## 7846	NP_001349068.1	XP_021326627.1	45.076	264	145	0	50	313	319	582
## 7847	NP_001349068.1	XP_021326627.1	43.411	258	146	0	56	313	101	358
## 7848	NP_001349068.1	XP_021326627.1	43.123	269	153	0	48	316	65	333
## 7849	NP_001349068.1	XP_021326627.1	42.910	268	153	0	49	316	122	389
## 7850	NP_001349068.1	XP_021326627.1	40.860	279	161	2	39	316	2	277
## 7851	NP_001349068.1	XP_021326627.1	45.492	244	132	1	43	286	341	583
## 7852	NP_001349068.1	XP_017211163.1	46.586	249	133	0	63	311	51	299
## 7853	NP_001349068.1	XP_017211163.1	40.449	267	159	0	48	314	92	358
## 7854	NP_001349068.1	XP_017211163.1	47.111	225	119	0	91	315	51	275
## 7855	NP_001349068.1	XP_017211163.1	41.634	257	150	0	60	316	76	332
## 7856	NP_001349068.1	XP_017211163.1	45.882	170	92	0	146	315	50	219
## 7857	NP_001349068.1	XP_017211163.1	41.718	163	94	1	172	333	48	210
## 7858	NP_001349068.1	XP_017210984.1	42.379	269	155	0	48	316	123	391
## 7859	NP_001349068.1	XP_017210984.1	47.036	253	134	0	63	315	82	334
## 7860	NP_001349068.1	XP_017210984.1	44.358	257	143	0	58	314	161	417
## 7861	NP_001349068.1	XP_017210984.1	45.238	252	138	0	60	311	107	358
## 7862	NP_001349068.1	XP_017210984.1	45.294	170	93	0	146	315	81	250
## 7863	NP_001349068.1	XP_017210984.1	39.773	176	97	2	167	333	66	241
## 7864	NP_001349068.1	XP_021325149.1	43.478	276	156	0	37	312	9	284
## 7865	NP_001349068.1	XP_021325149.1	41.880	234	136	0	83	316	27	260
## 7866	NP_001349068.1	XP_021325149.1	46.392	97	52	0	50	146	190	286
## 7867	NP_001349068.1	XP_021331388.1	45.098	255	139	1	60	314	102	355
## 7868	NP_001349068.1	XP_021331388.1	42.279	272	157	0	63	334	77	348
## 7869	NP_001349068.1	XP_021331388.1	43.860	228	127	1	58	285	128	354
## 7870	NP_001349068.1	XP_021331388.1	45.238	168	92	0	146	313	76	243
## 7871	NP_001349068.1	XP_017211249.1	45.098	255	139	1	60	314	102	355
## 7872	NP_001349068.1	XP_017211249.1	42.279	272	157	0	63	334	77	348

## 7873	NP_001349068.1	XP_017211249.1	43.860	228	127	1	58	285	128	354
## 7874	NP_001349068.1	XP_017211249.1	45.238	168	92	0	146	313	76	243
## 7875	NP_001349068.1	XP_009301308.1	46.792	265	141	0	49	313	37	301
## 7876	NP_001349068.1	XP_009301308.1	46.512	258	138	0	59	316	19	276
## 7877	NP_001349068.1	XP_009301308.1	44.262	183	102	0	48	230	120	302
## 7878	NP_001349068.1	XP_003201690.2	46.792	265	141	0	49	313	37	301
## 7879	NP_001349068.1	XP_003201690.2	46.512	258	138	0	59	316	19	276
## 7880	NP_001349068.1	XP_003201690.2	44.262	183	102	0	48	230	120	302
## 7881	NP_001349068.1	XP_021324971.1	46.043	278	142	1	57	326	52	329
## 7882	NP_001349068.1	XP_021324971.1	41.700	247	136	1	49	287	72	318
## 7883	NP_001349068.1	XP_021324971.1	43.871	155	87	0	47	201	162	316
## 7884	NP_001349068.1	XP_021324970.1	46.043	278	142	1	57	326	52	329
## 7885	NP_001349068.1	XP_021324970.1	41.700	247	136	1	49	287	72	318
## 7886	NP_001349068.1	XP_021324970.1	43.871	155	87	0	47	201	162	316
## 7887	NP_001349068.1	XP_017210690.1	47.036	253	134	0	63	315	55	307
## 7888	NP_001349068.1	XP_017210690.1	42.379	269	155	0	48	316	96	364
## 7889	NP_001349068.1	XP_017210690.1	44.015	259	145	0	56	314	132	390
## 7890	NP_001349068.1	XP_017210690.1	45.635	252	137	0	60	311	80	331
## 7891	NP_001349068.1	XP_017210690.1	44.706	170	94	0	146	315	54	223
## 7892	NP_001349068.1	XP_017210690.1	40.491	163	96	1	172	333	52	214
## 7893	NP_001349068.1	XP_017210343.1	43.972	282	130	1	58	311	33	314
## 7894	NP_001349068.1	XP_017210343.1	45.882	255	138	0	59	313	6	260
## 7895	NP_001349068.1	XP_017210343.1	46.484	256	137	0	58	313	173	428
## 7896	NP_001349068.1	XP_017210343.1	47.244	254	134	0	60	313	119	372
## 7897	NP_001349068.1	XP_017210343.1	45.703	256	139	0	58	313	229	484
## 7898	NP_001349068.1	XP_017210343.1	41.791	268	156	0	49	316	80	347
## 7899	NP_001349068.1	XP_017210343.1	44.788	259	143	0	58	316	201	459
## 7900	NP_001349068.1	XP_017210343.1	44.488	254	141	0	58	311	257	510
## 7901	NP_001349068.1	XP_017210343.1	45.588	204	111	0	112	315	3	206
## 7902	NP_001349068.1	XP_017210343.1	45.270	148	81	0	166	313	1	148
## 7903	NP_001349068.1	XP_017210343.1	43.503	177	100	0	58	234	341	517
## 7904	NP_001349068.1	XP_017210343.1	51.020	98	48	0	224	321	3	100
## 7905	NP_001349068.1	XP_009297410.1	48.828	256	131	0	58	313	187	442
## 7906	NP_001349068.1	XP_009297410.1	45.896	268	145	0	49	316	94	361
## 7907	NP_001349068.1	XP_009297410.1	47.104	259	137	0	58	316	131	389
## 7908	NP_001349068.1	XP_009297410.1	46.718	259	138	0	58	316	75	333
## 7909	NP_001349068.1	XP_009297410.1	42.751	269	154	0	48	316	37	305
## 7910	NP_001349068.1	XP_009297410.1	44.815	270	149	0	47	316	148	417
## 7911	NP_001349068.1	XP_009297410.1	45.833	240	130	0	47	286	204	443
## 7912	NP_001349068.1	XP_009297410.1	44.664	253	140	0	61	313	22	274
## 7913	NP_001349068.1	XP_009297410.1	44.068	236	132	0	81	316	14	249
## 7914	NP_001349068.1	XP_009297410.1	48.092	131	64	1	186	316	11	137
## 7915	NP_001349068.1	XP_009297410.1	41.333	75	44	0	249	323	14	88
## 7916	NP_001349068.1	XP_017211221.1	46.988	249	132	0	63	311	82	330
## 7917	NP_001349068.1	XP_017211221.1	41.573	267	156	0	48	314	123	389
## 7918	NP_001349068.1	XP_017211221.1	41.634	257	150	0	60	316	107	363
## 7919	NP_001349068.1	XP_017211221.1	49.333	225	114	0	91	315	82	306
## 7920	NP_001349068.1	XP_017211221.1	47.619	168	88	0	146	313	81	248
## 7921	NP_001349068.1	XP_017211221.1	42.667	150	86	0	166	315	73	222
## 7922	NP_001349068.1	XP_005161607.1	44.569	267	148	0	50	316	76	342
## 7923	NP_001349068.1	XP_005161607.1	44.238	269	150	0	48	316	102	370
## 7924	NP_001349068.1	XP_005161607.1	43.494	269	152	0	48	316	46	314
## 7925	NP_001349068.1	XP_005161607.1	45.382	249	136	0	65	313	35	283
## 7926	NP_001349068.1	XP_005161607.1	44.690	226	125	0	93	318	35	260

## 7927	NP_001349068.1	XP_005161607.1	43.939	198	111	0	116	313	30	227
## 7928	NP_001349068.1	XP_005161607.1	40.323	124	74	0	46	169	268	391
## 7929	NP_001349068.1	XP_009294102.1	44.569	267	148	0	50	316	76	342
## 7930	NP_001349068.1	XP_009294102.1	44.238	269	150	0	48	316	102	370
## 7931	NP_001349068.1	XP_009294102.1	43.494	269	152	0	48	316	46	314
## 7932	NP_001349068.1	XP_009294102.1	45.382	249	136	0	65	313	35	283
## 7933	NP_001349068.1	XP_009294102.1	44.690	226	125	0	93	318	35	260
## 7934	NP_001349068.1	XP_009294102.1	43.939	198	111	0	116	313	30	227
## 7935	NP_001349068.1	XP_009294102.1	40.323	124	74	0	46	169	268	391
## 7936	NP_001349068.1	XP_009294101.1	44.569	267	148	0	50	316	76	342
## 7937	NP_001349068.1	XP_009294101.1	44.238	269	150	0	48	316	102	370
## 7938	NP_001349068.1	XP_009294101.1	43.494	269	152	0	48	316	46	314
## 7939	NP_001349068.1	XP_009294101.1	45.382	249	136	0	65	313	35	283
## 7940	NP_001349068.1	XP_009294101.1	44.690	226	125	0	93	318	35	260
## 7941	NP_001349068.1	XP_009294101.1	43.939	198	111	0	116	313	30	227
## 7942	NP_001349068.1	XP_009294101.1	40.323	124	74	0	46	169	268	391
## 7943	NP_001349068.1	XP_021330691.1	43.333	300	170	0	14	313	23	322
## 7944	NP_001349068.1	XP_021330691.1	44.444	261	145	0	50	310	87	347
## 7945	NP_001349068.1	XP_021330691.1	44.358	257	141	1	58	314	123	377
## 7946	NP_001349068.1	XP_021330691.1	42.857	210	118	1	48	257	169	376
## 7947	NP_001349068.1	XP_021330691.1	42.857	182	102	1	137	318	64	243
## 7948	NP_001349068.1	XP_021330691.1	42.623	61	35	0	259	319	72	132
## 7949	NP_001349068.1	NP_001013514.1	43.542	271	153	0	46	316	110	380
## 7950	NP_001349068.1	NP_001013514.1	43.446	267	151	0	50	316	58	324
## 7951	NP_001349068.1	NP_001013514.1	45.660	265	144	0	49	313	141	405
## 7952	NP_001349068.1	NP_001013514.1	46.718	259	138	0	58	316	94	352
## 7953	NP_001349068.1	NP_001013514.1	43.060	281	153	2	42	316	17	296
## 7954	NP_001349068.1	NP_001013514.1	42.387	243	136	1	45	287	169	407
## 7955	NP_001349068.1	XP_021323881.1	46.642	268	143	0	46	313	623	890
## 7956	NP_001349068.1	XP_021323881.1	45.556	270	147	0	46	315	132	401
## 7957	NP_001349068.1	XP_021323881.1	45.423	284	154	1	47	329	49	332
## 7958	NP_001349068.1	XP_021323881.1	46.853	286	146	1	36	315	551	836
## 7959	NP_001349068.1	XP_021323881.1	46.899	258	137	0	58	315	719	976
## 7960	NP_001349068.1	XP_021323881.1	46.350	274	147	0	46	319	595	868
## 7961	NP_001349068.1	XP_021323881.1	45.788	273	147	1	58	329	551	823
## 7962	NP_001349068.1	XP_021323881.1	45.865	266	144	0	48	313	162	427
## 7963	NP_001349068.1	XP_021323881.1	44.526	274	152	0	46	319	104	377
## 7964	NP_001349068.1	XP_021323881.1	46.094	256	138	0	58	313	200	455
## 7965	NP_001349068.1	XP_021323881.1	45.489	266	145	0	48	313	653	918
## 7966	NP_001349068.1	XP_021323881.1	44.030	268	150	0	46	313	679	946
## 7967	NP_001349068.1	XP_021323881.1	47.674	258	135	0	58	315	88	345
## 7968	NP_001349068.1	XP_021323881.1	40.753	292	169	1	46	337	216	503
## 7969	NP_001349068.1	XP_021323881.1	45.490	255	139	0	61	315	526	780
## 7970	NP_001349068.1	XP_021323881.1	45.455	253	138	0	63	315	37	289
## 7971	NP_001349068.1	XP_021323881.1	38.538	301	142	1	58	315	452	752
## 7972	NP_001349068.1	XP_021323881.1	47.034	236	123	1	82	315	26	261
## 7973	NP_001349068.1	XP_021323881.1	45.852	229	124	0	58	286	775	1003
## 7974	NP_001349068.1	XP_021323881.1	35.783	313	158	1	49	318	359	671
## 7975	NP_001349068.1	XP_021323881.1	33.968	315	165	1	47	318	273	587
## 7976	NP_001349068.1	XP_021323881.1	42.180	211	122	0	48	258	793	1003
## 7977	NP_001349068.1	XP_021323881.1	42.857	210	118	1	111	318	27	236
## 7978	NP_001349068.1	NP_001289569.1	46.063	254	137	0	60	313	90	343
## 7979	NP_001349068.1	NP_001289569.1	38.710	186	114	0	47	232	161	346
## 7980	NP_001349068.1	NP_001289569.1	43.548	124	70	0	195	318	57	180

## 7981	NP_001349068.1	NP_001289569.1	40.984	61	36	0	259	319	65	125
## 7982	NP_001349068.1	NP_001103952.2	46.063	254	137	0	60	313	97	350
## 7983	NP_001349068.1	NP_001103952.2	38.710	186	114	0	47	232	168	353
## 7984	NP_001349068.1	NP_001103952.2	43.548	124	70	0	195	318	64	187
## 7985	NP_001349068.1	NP_001103952.2	40.984	61	36	0	259	319	72	132
## 7986	NP_001349068.1	XP_017209854.1	46.988	249	132	0	63	311	82	330
## 7987	NP_001349068.1	XP_017209854.1	49.333	225	114	0	91	315	82	306
## 7988	NP_001349068.1	XP_017209854.1	39.850	266	160	0	48	313	123	388
## 7989	NP_001349068.1	XP_017209854.1	43.452	168	95	0	146	313	81	248
## 7990	NP_001349068.1	XP_017209854.1	44.444	144	80	0	172	315	79	222
## 7991	NP_001349068.1	XP_017209854.1	34.831	89	58	0	58	146	301	389
## 7992	NP_001349068.1	XP_009294140.1	41.613	310	172	2	6	314	122	423
## 7993	NP_001349068.1	XP_009294140.1	44.944	267	147	0	47	313	184	450
## 7994	NP_001349068.1	XP_009294140.1	42.803	264	151	0	50	313	75	338
## 7995	NP_001349068.1	XP_009294140.1	41.833	251	146	0	61	311	58	308
## 7996	NP_001349068.1	XP_009294140.1	40.984	244	144	0	70	313	39	282
## 7997	NP_001349068.1	XP_009294140.1	41.872	203	90	1	58	232	251	453
## 7998	NP_001349068.1	XP_009294140.1	40.845	71	42	0	246	316	47	117
## 7999	NP_001349068.1	XP_021331129.1	44.275	262	146	0	50	311	92	353
## 8000	NP_001349068.1	XP_021331129.1	43.243	259	147	0	58	316	128	386
## 8001	NP_001349068.1	XP_021331129.1	43.802	242	136	0	74	315	88	329
## 8002	NP_001349068.1	XP_021331129.1	40.784	255	151	0	60	314	158	412
## 8003	NP_001349068.1	XP_021331129.1	42.222	225	130	0	58	282	184	408
## 8004	NP_001349068.1	XP_021331129.1	43.379	219	124	0	98	316	84	302
## 8005	NP_001349068.1	XP_021331129.1	38.525	122	75	0	48	169	286	407
## 8006	NP_001349068.1	XP_021331384.1	42.379	269	155	0	48	316	121	389
## 8007	NP_001349068.1	XP_021331384.1	47.036	253	134	0	63	315	80	332
## 8008	NP_001349068.1	XP_021331384.1	44.358	257	143	0	58	314	159	415
## 8009	NP_001349068.1	XP_021331384.1	45.238	252	138	0	60	311	105	356
## 8010	NP_001349068.1	XP_021331384.1	44.706	170	94	0	146	315	79	248
## 8011	NP_001349068.1	XP_021331384.1	39.205	176	98	2	167	333	64	239
## 8012	NP_001349068.1	XP_009291588.1	45.783	249	135	0	65	313	64	312
## 8013	NP_001349068.1	XP_009291588.1	41.549	284	166	0	2	285	29	312
## 8014	NP_001349068.1	XP_009291588.1	48.223	197	102	0	120	316	63	259
## 8015	NP_001349068.1	XP_009291588.1	39.888	178	73	3	58	204	141	315
## 8016	NP_001349068.1	XP_009291588.1	45.238	126	69	0	188	313	47	172
## 8017	NP_001349068.1	XP_009291588.1	30.233	43	30	0	49	91	272	314
## 8018	NP_001349068.1	XP_009291587.1	45.783	249	135	0	65	313	64	312
## 8019	NP_001349068.1	XP_009291587.1	41.549	284	166	0	2	285	29	312
## 8020	NP_001349068.1	XP_009291587.1	48.223	197	102	0	120	316	63	259
## 8021	NP_001349068.1	XP_009291587.1	39.888	178	73	3	58	204	141	315
## 8022	NP_001349068.1	XP_009291587.1	45.238	126	69	0	188	313	47	172
## 8023	NP_001349068.1	XP_009291587.1	30.233	43	30	0	49	91	272	314
## 8024	NP_001349068.1	XP_017208652.1	44.853	272	150	0	42	313	142	413
## 8025	NP_001349068.1	XP_017208652.1	45.312	256	140	0	58	313	186	441
## 8026	NP_001349068.1	XP_017208652.1	43.511	262	148	0	50	311	206	467
## 8027	NP_001349068.1	XP_017208652.1	45.703	256	139	0	58	313	242	497
## 8028	NP_001349068.1	XP_017208652.1	44.651	215	99	2	119	313	87	301
## 8029	NP_001349068.1	XP_021327374.1	46.642	268	143	0	47	314	177	444
## 8030	NP_001349068.1	XP_021327374.1	48.375	277	142	1	58	333	384	660
## 8031	NP_001349068.1	XP_021327374.1	45.693	267	145	0	47	313	345	611
## 8032	NP_001349068.1	XP_021327374.1	46.992	266	141	0	48	313	150	415
## 8033	NP_001349068.1	XP_021327374.1	47.451	255	134	0	59	313	329	583
## 8034	NP_001349068.1	XP_021327374.1	47.244	254	134	0	58	311	440	693

## 8035	NP_001349068.1	XP_021327374.1	45.489	266	145	0	48	313	38	303
## 8036	NP_001349068.1	XP_021327374.1	45.635	252	137	0	60	311	78	329
## 8037	NP_001349068.1	XP_021327374.1	45.882	255	138	0	60	314	22	276
## 8038	NP_001349068.1	XP_021327374.1	44.922	256	141	0	58	313	104	359
## 8039	NP_001349068.1	XP_021327374.1	45.038	262	144	0	49	310	487	748
## 8040	NP_001349068.1	XP_021327374.1	45.076	264	145	0	50	313	292	555
## 8041	NP_001349068.1	XP_021327374.1	42.754	276	152	1	44	313	448	723
## 8042	NP_001349068.1	XP_021327374.1	47.234	235	120	1	83	313	13	247
## 8043	NP_001349068.1	XP_021327374.1	42.197	173	100	0	144	316	22	194
## 8044	NP_001349068.1	XP_021327374.1	38.806	67	41	0	48	114	682	748
## 8045	NP_001349068.1	NP_001104697.1	46.332	259	139	0	58	316	5	263
## 8046	NP_001349068.1	NP_001104697.1	46.552	232	124	0	82	313	1	232
## 8047	NP_001349068.1	NP_001104697.1	44.809	183	101	0	47	229	106	288
## 8048	NP_001349068.1	XP_021325148.1	46.008	263	142	0	50	312	49	311
## 8049	NP_001349068.1	XP_021325148.1	44.269	253	141	0	61	313	32	284
## 8050	NP_001349068.1	XP_021325148.1	44.253	174	97	0	143	316	30	203
## 8051	NP_001349068.1	XP_021325148.1	41.270	126	74	0	190	315	21	146
## 8052	NP_001349068.1	XP_021325148.1	51.429	35	17	0	285	319	32	66
## 8053	NP_001349068.1	XP_021327400.1	46.332	259	139	0	58	316	48	306
## 8054	NP_001349068.1	XP_021327400.1	44.697	264	145	1	51	313	12	275
## 8055	NP_001349068.1	XP_021327400.1	44.809	183	101	0	47	229	149	331
## 8056	NP_001349068.1	XP_017210930.1	45.098	255	139	1	60	314	102	355
## 8057	NP_001349068.1	XP_017210930.1	41.544	272	159	0	63	334	77	348
## 8058	NP_001349068.1	XP_017210930.1	43.860	228	127	1	58	285	128	354
## 8059	NP_001349068.1	XP_017210930.1	43.452	168	95	0	146	313	76	243
## 8060	NP_001349068.1	XP_021331031.1	48.918	231	118	0	60	290	33	263
## 8061	NP_001349068.1	XP_021331031.1	47.479	238	122	1	81	315	23	260
## 8062	NP_001349068.1	XP_021331031.1	50.000	206	103	0	56	261	57	262
## 8063	NP_001349068.1	XP_021331031.1	47.685	216	112	1	119	333	36	251
## 8064	NP_001349068.1	XP_021331031.1	48.344	151	78	0	56	206	113	263
## 8065	NP_001349068.1	XP_009301276.1	45.896	268	145	0	49	316	39	306
## 8066	NP_001349068.1	XP_009301276.1	40.714	280	138	1	58	309	76	355
## 8067	NP_001349068.1	XP_009301276.1	43.874	253	142	0	61	313	23	275
## 8068	NP_001349068.1	XP_009301276.1	43.590	234	132	0	48	281	122	355
## 8069	NP_001349068.1	XP_009301276.1	41.618	173	101	0	144	316	22	194
## 8070	NP_001349068.1	XP_009301276.1	40.769	130	73	1	182	311	8	133
## 8071	NP_001349068.1	XP_009301276.1	43.802	121	68	0	50	170	236	356
## 8072	NP_001349068.1	XP_009301276.1	34.043	47	31	0	270	316	8	54
## 8073	NP_001349068.1	XP_021325064.1	45.833	264	143	0	50	313	217	480
## 8074	NP_001349068.1	XP_021325064.1	45.833	264	143	0	50	313	105	368
## 8075	NP_001349068.1	XP_021325064.1	44.186	258	144	0	58	315	169	426
## 8076	NP_001349068.1	XP_021325064.1	41.825	263	153	0	48	310	271	533
## 8077	NP_001349068.1	XP_021325064.1	43.478	253	143	0	61	313	60	312
## 8078	NP_001349068.1	XP_021325064.1	41.636	269	157	0	48	316	75	343
## 8079	NP_001349068.1	XP_021325064.1	42.797	236	135	0	47	282	298	533
## 8080	NP_001349068.1	XP_021325064.1	42.920	226	129	0	86	311	57	282
## 8081	NP_001349068.1	XP_021325064.1	43.353	173	98	0	142	314	57	229
## 8082	NP_001349068.1	XP_017208849.1	45.489	266	145	0	50	315	217	482
## 8083	NP_001349068.1	XP_017208849.1	45.833	264	143	0	50	313	105	368
## 8084	NP_001349068.1	XP_017208849.1	44.186	258	144	0	58	315	169	426
## 8085	NP_001349068.1	XP_017208849.1	41.729	266	155	0	48	313	271	536
## 8086	NP_001349068.1	XP_017208849.1	43.478	253	143	0	61	313	60	312
## 8087	NP_001349068.1	XP_017208849.1	41.636	269	157	0	48	316	75	343
## 8088	NP_001349068.1	XP_017208849.1	42.739	241	138	0	47	287	298	538

## 8089	NP_001349068.1	XP_017208849.1	42.920	226	129	0	86	311	57	282
## 8090	NP_001349068.1	XP_017208849.1	43.169	183	104	0	50	232	357	539
## 8091	NP_001349068.1	XP_017208849.1	43.353	173	98	0	142	314	57	229
## 8092	NP_001349068.1	XP_017208849.1	39.785	93	56	0	226	318	57	149
## 8093	NP_001349068.1	XP_017210824.1	44.706	255	140	1	60	314	102	355
## 8094	NP_001349068.1	XP_017210824.1	42.279	272	157	0	63	334	77	348
## 8095	NP_001349068.1	XP_017210824.1	44.298	228	126	1	58	285	128	354
## 8096	NP_001349068.1	XP_017210824.1	45.833	168	91	0	146	313	76	243
## 8097	NP_001349068.1	XP_017209950.1	45.896	268	145	0	49	316	39	306
## 8098	NP_001349068.1	XP_017209950.1	41.071	280	137	1	58	309	76	355
## 8099	NP_001349068.1	XP_017209950.1	43.529	255	144	0	59	313	21	275
## 8100	NP_001349068.1	XP_017209950.1	42.000	150	87	0	48	197	206	355
## 8101	NP_001349068.1	XP_017209950.1	43.802	121	68	0	50	170	236	356
## 8102	NP_001349068.1	XP_017209950.1	44.118	34	19	0	283	316	21	54
## 8103	NP_001349068.1	XP_017210008.1	42.434	304	163	1	29	320	7	310
## 8104	NP_001349068.1	XP_017210008.1	40.000	280	166	1	37	316	1	278
## 8105	NP_001349068.1	XP_017211189.1	45.600	250	136	0	63	312	82	331
## 8106	NP_001349068.1	XP_017211189.1	42.023	257	148	1	58	314	105	360
## 8107	NP_001349068.1	XP_017211189.1	44.444	171	95	0	146	316	81	251
## 8108	NP_001349068.1	XP_017211189.1	42.945	163	92	1	172	333	79	241
## 8109	NP_001349068.1	XP_009294078.1	40.273	293	147	1	47	311	130	422
## 8110	NP_001349068.1	XP_009294078.1	46.245	253	136	0	61	313	60	312
## 8111	NP_001349068.1	XP_009294078.1	41.667	264	154	0	50	313	189	452
## 8112	NP_001349068.1	XP_009294078.1	41.199	267	157	0	47	313	102	368
## 8113	NP_001349068.1	XP_009294078.1	40.283	283	168	1	47	329	214	495
## 8114	NP_001349068.1	XP_009294078.1	40.467	257	151	1	46	302	241	495
## 8115	NP_001349068.1	XP_009294078.1	44.253	174	97	0	142	315	57	230
## 8116	NP_001349068.1	XP_021322226.1	43.841	276	149	1	44	313	347	622
## 8117	NP_001349068.1	XP_021322226.1	44.615	260	144	0	56	315	113	372
## 8118	NP_001349068.1	XP_021322226.1	42.069	290	162	1	30	313	53	342
## 8119	NP_001349068.1	XP_021322226.1	43.023	258	147	0	56	313	141	398
## 8120	NP_001349068.1	XP_021322226.1	44.574	258	143	0	56	313	421	678
## 8121	NP_001349068.1	XP_021322226.1	44.574	258	143	0	56	313	197	454
## 8122	NP_001349068.1	XP_021322226.1	44.488	254	141	0	60	313	341	594
## 8123	NP_001349068.1	XP_021322226.1	39.860	286	144	1	58	315	255	540
## 8124	NP_001349068.1	XP_021322226.1	41.473	258	151	0	56	313	309	566
## 8125	NP_001349068.1	XP_021322226.1	42.969	256	146	0	58	313	171	426
## 8126	NP_001349068.1	XP_021322226.1	41.339	254	149	0	58	311	227	480
## 8127	NP_001349068.1	XP_021322226.1	46.552	232	124	0	58	289	451	682
## 8128	NP_001349068.1	XP_021322226.1	38.436	307	140	1	56	313	505	811
## 8129	NP_001349068.1	XP_021322226.1	37.241	290	133	1	56	296	561	850
## 8130	NP_001349068.1	XP_021322226.1	41.364	220	129	0	65	284	1097	1316
## 8131	NP_001349068.1	XP_021322226.1	35.690	297	143	1	65	313	909	1205
## 8132	NP_001349068.1	XP_021322226.1	41.441	222	130	0	93	314	1097	1318
## 8133	NP_001349068.1	XP_021322226.1	37.063	286	160	3	48	313	976	1261
## 8134	NP_001349068.1	XP_021322226.1	35.172	290	150	2	56	307	750	1039
## 8135	NP_001349068.1	XP_021322226.1	30.747	348	148	4	56	313	589	933
## 8136	NP_001349068.1	XP_021322226.1	28.329	353	166	2	48	313	637	989
## 8137	NP_001349068.1	XP_021322226.1	37.931	87	54	0	58	144	1230	1316
## 8138	NP_001349068.1	XP_021322226.1	34.211	76	47	1	42	117	1245	1317
## 8139	NP_001349068.1	XP_017210034.1	46.586	249	133	0	63	311	82	330
## 8140	NP_001349068.1	XP_017210034.1	48.444	225	116	0	91	315	82	306
## 8141	NP_001349068.1	XP_017210034.1	40.226	266	159	0	48	313	123	388
## 8142	NP_001349068.1	XP_017210034.1	44.048	168	94	0	146	313	81	248

## 8143	NP_001349068.1	XP_017210034.1	44.444	144	80	0	172	315	79	222
## 8144	NP_001349068.1	XP_017210034.1	35.955	89	57	0	58	146	301	389
## 8145	NP_001349068.1	XP_009297415.1	46.296	270	145	0	47	316	203	472
## 8146	NP_001349068.1	XP_009297415.1	43.885	278	154	1	39	316	253	528
## 8147	NP_001349068.1	XP_009297415.1	44.275	262	146	0	49	310	289	550
## 8148	NP_001349068.1	XP_009297415.1	37.771	323	147	2	48	316	38	360
## 8149	NP_001349068.1	XP_009297415.1	45.339	236	129	0	47	282	315	550
## 8150	NP_001349068.1	XP_009297415.1	40.000	285	145	1	58	316	132	416
## 8151	NP_001349068.1	XP_009297415.1	42.012	169	96	1	143	311	21	187
## 8152	NP_001349068.1	XP_009297415.1	43.103	116	66	0	199	314	21	136
## 8153	NP_001349068.1	XP_005174571.3	41.297	293	149	2	39	311	6	295
## 8154	NP_001349068.1	XP_005174571.3	41.797	256	148	1	59	314	99	353
## 8155	NP_001349068.1	XP_005174571.3	41.732	254	148	0	60	313	72	325
## 8156	NP_001349068.1	XP_005174571.3	42.439	205	114	1	116	316	40	244
## 8157	NP_001349068.1	XP_005174571.3	39.109	202	122	1	56	257	152	352
## 8158	NP_001349068.1	XP_005174571.3	42.405	158	83	2	167	316	31	188
## 8159	NP_001349068.1	XP_017211093.2	42.322	267	154	0	50	316	96	362
## 8160	NP_001349068.1	XP_017211093.2	44.578	249	138	0	63	311	81	329
## 8161	NP_001349068.1	XP_017211093.2	43.629	259	146	0	56	314	130	388
## 8162	NP_001349068.1	XP_017211093.2	48.430	223	115	0	91	313	81	303
## 8163	NP_001349068.1	XP_017211093.2	43.386	189	106	1	146	333	80	268
## 8164	NP_001349068.1	NP_001103337.1	45.600	250	136	0	63	312	82	331
## 8165	NP_001349068.1	NP_001103337.1	42.023	257	148	1	58	314	105	360
## 8166	NP_001349068.1	NP_001103337.1	43.860	171	96	0	146	316	81	251
## 8167	NP_001349068.1	NP_001103337.1	42.331	163	93	1	172	333	79	241
## 8168	NP_001349068.1	XP_021325072.1	47.656	256	134	0	58	313	116	371
## 8169	NP_001349068.1	XP_021325072.1	43.939	264	148	0	50	313	192	455
## 8170	NP_001349068.1	XP_021325072.1	44.105	229	128	0	58	286	228	456
## 8171	NP_001349068.1	XP_021325072.1	42.857	196	112	0	116	311	90	285
## 8172	NP_001349068.1	XP_021325072.1	43.062	209	119	0	50	258	248	456
## 8173	NP_001349068.1	XP_021325072.1	42.690	171	98	0	143	313	89	259
## 8174	NP_001349068.1	XP_021331357.1	38.344	326	177	3	29	333	21	343
## 8175	NP_001349068.1	XP_021331357.1	42.412	257	147	1	58	314	96	351
## 8176	NP_001349068.1	XP_021331357.1	35.294	68	43	1	49	116	283	349
## 8177	NP_001349068.1	XP_021333299.1	52.315	216	103	0	68	283	104	319
## 8178	NP_001349068.1	XP_021333299.1	50.691	217	107	0	95	311	103	319
## 8179	NP_001349068.1	XP_021333299.1	53.535	198	92	0	58	255	122	319
## 8180	NP_001349068.1	XP_021333299.1	54.082	196	90	0	124	319	104	299
## 8181	NP_001349068.1	XP_021333299.1	53.374	163	76	0	151	313	103	265
## 8182	NP_001349068.1	XP_017210035.1	46.586	249	133	0	63	311	82	330
## 8183	NP_001349068.1	XP_017210035.1	40.977	266	157	0	48	313	123	388
## 8184	NP_001349068.1	XP_017210035.1	48.000	225	117	0	91	315	82	306
## 8185	NP_001349068.1	XP_017210035.1	42.857	168	96	0	146	313	81	248
## 8186	NP_001349068.1	XP_017210035.1	43.750	144	81	0	172	315	79	222
## 8187	NP_001349068.1	XP_017210035.1	35.955	89	57	0	58	146	301	389
## 8188	NP_001349068.1	XP_017211087.1	46.586	249	133	0	63	311	82	330
## 8189	NP_001349068.1	XP_017211087.1	48.889	225	115	0	91	315	82	306
## 8190	NP_001349068.1	XP_017211087.1	41.569	255	149	0	60	314	135	389
## 8191	NP_001349068.1	XP_017211087.1	42.982	228	130	0	58	285	161	388
## 8192	NP_001349068.1	XP_017211087.1	44.643	168	93	0	146	313	81	248
## 8193	NP_001349068.1	XP_017211087.1	43.750	144	81	0	172	315	79	222
## 8194	NP_001349068.1	XP_017211087.1	41.346	104	60	1	231	333	82	185
## 8195	NP_001349068.1	XP_017211087.1	37.079	89	56	0	58	146	301	389
## 8196	NP_001349068.1	XP_005168517.1	48.047	256	133	0	58	313	76	331

## 8197	NP_001349068.1	XP_005168517.1	41.481	270	158	0	47	316	37	306
## 8198	NP_001349068.1	XP_005168517.1	43.561	264	148	1	51	313	12	275
## 8199	NP_001349068.1	XP_005168517.1	40.807	223	132	0	49	271	123	345
## 8200	NP_001349068.1	XP_005168517.1	45.625	160	87	0	58	217	188	347
## 8201	NP_001349068.1	NP_001108190.1	45.600	250	136	0	63	312	82	331
## 8202	NP_001349068.1	NP_001108190.1	42.023	257	148	1	58	314	105	360
## 8203	NP_001349068.1	NP_001108190.1	44.444	171	95	0	146	316	81	251
## 8204	NP_001349068.1	NP_001108190.1	42.945	163	92	1	172	333	79	241
## 8205	NP_001349068.1	XP_021330571.1	45.600	250	136	0	63	312	82	331
## 8206	NP_001349068.1	XP_021330571.1	42.023	257	148	1	58	314	105	360
## 8207	NP_001349068.1	XP_021330571.1	44.444	171	95	0	146	316	81	251
## 8208	NP_001349068.1	XP_021330571.1	42.945	163	92	1	172	333	79	241
## 8209	NP_001349068.1	NP_001083044.1	47.566	267	132	2	57	315	52	318
## 8210	NP_001349068.1	NP_001083044.1	41.700	247	136	2	49	287	72	318
## 8211	NP_001349068.1	NP_001083044.1	43.226	155	88	0	47	201	162	316
## 8212	NP_001349068.1	NP_001083044.1	29.412	51	36	0	50	100	277	327
## 8213	NP_001349068.1	XP_021325074.1	47.287	258	136	0	58	315	81	338
## 8214	NP_001349068.1	XP_021325074.1	43.774	265	149	0	49	313	156	420
## 8215	NP_001349068.1	XP_021325074.1	44.105	229	128	0	58	286	193	421
## 8216	NP_001349068.1	XP_021325074.1	42.857	196	112	0	116	311	55	250
## 8217	NP_001349068.1	XP_021325074.1	43.062	209	119	0	50	258	213	421
## 8218	NP_001349068.1	XP_021325074.1	42.690	171	98	0	143	313	54	224
## 8219	NP_001349068.1	XP_002661836.5	44.094	254	142	0	63	316	82	335
## 8220	NP_001349068.1	XP_002661836.5	41.406	256	150	0	58	313	105	360
## 8221	NP_001349068.1	XP_002661836.5	45.238	168	92	0	146	313	81	248
## 8222	NP_001349068.1	NP_001348404.1	42.069	290	161	2	30	313	47	335
## 8223	NP_001349068.1	XP_021323880.1	44.483	290	156	2	46	334	484	769
## 8224	NP_001349068.1	XP_021323880.1	44.649	271	150	0	46	316	21	291
## 8225	NP_001349068.1	XP_021323880.1	45.985	274	148	0	46	319	456	729
## 8226	NP_001349068.1	XP_021323880.1	43.750	288	161	1	47	333	401	688
## 8227	NP_001349068.1	XP_021323880.1	46.484	256	137	0	58	313	5	260
## 8228	NP_001349068.1	XP_021323880.1	45.703	256	139	0	58	313	552	807
## 8229	NP_001349068.1	XP_021323880.1	45.113	266	146	0	48	313	514	779
## 8230	NP_001349068.1	XP_021323880.1	47.287	258	136	0	58	315	440	697
## 8231	NP_001349068.1	XP_021323880.1	45.882	255	138	0	58	312	61	315
## 8232	NP_001349068.1	XP_021323880.1	42.910	268	153	0	46	313	77	344
## 8233	NP_001349068.1	XP_021323880.1	49.138	232	118	0	82	313	1	232
## 8234	NP_001349068.1	XP_021323880.1	44.151	265	148	0	51	315	377	641
## 8235	NP_001349068.1	XP_021323880.1	42.324	241	139	0	46	286	568	808
## 8236	NP_001349068.1	XP_021323880.1	35.370	311	158	1	46	313	245	555
## 8237	NP_001349068.1	XP_021323880.1	37.742	310	150	1	47	313	106	415
## 8238	NP_001349068.1	XP_021323880.1	35.987	314	158	1	48	318	135	448
## 8239	NP_001349068.1	XP_021323880.1	37.829	304	146	2	58	318	285	588
## 8240	NP_001349068.1	XP_021323880.1	47.929	169	87	1	166	333	1	169
## 8241	NP_001349068.1	XP_021322225.1	47.287	258	136	0	58	315	607	864
## 8242	NP_001349068.1	XP_021322225.1	41.748	309	166	2	19	313	414	722
## 8243	NP_001349068.1	XP_021322225.1	43.662	284	159	1	47	329	736	1019
## 8244	NP_001349068.1	XP_021322225.1	44.186	258	144	0	58	315	495	752
## 8245	NP_001349068.1	XP_021322225.1	42.636	258	148	0	58	315	663	920
## 8246	NP_001349068.1	XP_021322225.1	43.969	257	144	0	59	315	720	976
## 8247	NP_001349068.1	XP_021322225.1	42.537	268	154	0	48	315	541	808
## 8248	NP_001349068.1	XP_021322225.1	41.045	268	158	0	48	315	681	948
## 8249	NP_001349068.1	XP_021322225.1	44.186	258	144	0	58	315	803	1060
## 8250	NP_001349068.1	XP_021322225.1	43.023	258	147	0	58	315	523	780

## 8251	NP_001349068.1	XP_021322225.1	42.688	253	145	0	61	313	582	834
## 8252	NP_001349068.1	XP_021322225.1	42.023	257	149	0	59	315	776	1032
## 8253	NP_001349068.1	XP_021322225.1	42.481	266	153	0	50	315	851	1116
## 8254	NP_001349068.1	XP_021322225.1	38.095	336	196	3	25	353	61	391
## 8255	NP_001349068.1	XP_021322225.1	37.162	296	158	1	48	315	877	1172
## 8256	NP_001349068.1	XP_021322225.1	39.394	264	160	0	48	311	933	1196
## 8257	NP_001349068.1	XP_021322225.1	39.841	251	140	3	71	318	35	277
## 8258	NP_001349068.1	XP_021322178.1	46.484	256	137	0	58	313	50	305
## 8259	NP_001349068.1	XP_021322178.1	44.574	258	143	0	58	315	162	419
## 8260	NP_001349068.1	XP_021322178.1	46.215	251	135	0	65	315	29	279
## 8261	NP_001349068.1	XP_021322178.1	44.238	269	150	0	50	318	126	394
## 8262	NP_001349068.1	XP_021322178.1	42.180	211	94	1	50	232	210	420
## 8263	NP_001349068.1	XP_005161011.1	41.254	303	165	3	24	313	24	326
## 8264	NP_001349068.1	XP_005161011.1	44.355	248	138	0	63	310	104	351
## 8265	NP_001349068.1	XP_005161011.1	44.889	225	124	0	58	282	127	351
## 8266	NP_001349068.1	XP_005161011.1	43.820	178	99	1	143	319	43	220
## 8267	NP_001349068.1	XP_005161011.1	43.182	132	71	2	188	315	29	160
## 8268	NP_001349068.1	XP_005161011.1	42.268	97	56	0	50	146	259	355
## 8269	NP_001349068.1	XP_005161011.1	34.211	38	25	0	49	86	314	351
## 8270	NP_001349068.1	XP_017211883.2	45.455	264	144	0	48	311	32	295
## 8271	NP_001349068.1	XP_017211883.2	45.660	265	144	0	49	313	89	353
## 8272	NP_001349068.1	XP_017211883.2	46.058	241	126	1	46	286	118	354
## 8273	NP_001349068.1	XP_017211883.2	45.614	228	124	0	87	314	15	242
## 8274	NP_001349068.1	XP_017211883.2	46.512	172	92	0	144	315	16	187
## 8275	NP_001349068.1	XP_017211883.2	48.936	141	72	0	176	316	20	160
## 8276	NP_001349068.1	XP_005164989.2	45.385	260	138	1	60	315	105	364
## 8277	NP_001349068.1	XP_005164989.2	42.308	260	146	1	58	313	75	334
## 8278	NP_001349068.1	XP_005164989.2	44.538	238	128	2	58	291	131	368
## 8279	NP_001349068.1	XP_005164989.2	44.681	188	100	1	48	231	177	364
## 8280	NP_001349068.1	XP_005164989.2	43.353	173	98	0	146	318	51	223
## 8281	NP_001349068.1	XP_005170427.2	45.318	267	146	0	49	315	76	342
## 8282	NP_001349068.1	XP_005170427.2	44.622	251	139	0	61	311	60	310
## 8283	NP_001349068.1	XP_005170427.2	43.182	220	125	0	93	312	64	283
## 8284	NP_001349068.1	XP_005170427.2	45.876	194	105	0	120	313	63	256
## 8285	NP_001349068.1	XP_005170427.2	45.029	171	94	0	145	315	60	230
## 8286	NP_001349068.1	XP_005170427.2	38.462	117	44	1	58	146	253	369
## 8287	NP_001349068.1	XP_017211088.1	46.185	249	134	0	63	311	82	330
## 8288	NP_001349068.1	XP_017211088.1	48.000	225	117	0	91	315	82	306
## 8289	NP_001349068.1	XP_017211088.1	40.449	267	159	0	48	314	123	389
## 8290	NP_001349068.1	XP_017211088.1	43.452	168	95	0	146	313	81	248
## 8291	NP_001349068.1	XP_017211088.1	43.750	144	81	0	172	315	79	222
## 8292	NP_001349068.1	XP_009294081.2	45.455	264	144	0	50	313	105	368
## 8293	NP_001349068.1	XP_009294081.2	41.447	304	172	1	16	313	37	340
## 8294	NP_001349068.1	XP_009294081.2	41.844	282	157	1	6	287	124	398
## 8295	NP_001349068.1	XP_009294081.2	46.328	177	95	0	56	232	223	399
## 8296	NP_001349068.1	XP_009294081.2	33.846	65	43	0	254	318	57	121
## 8297	NP_001349068.1	XP_017206615.1	42.069	290	161	2	30	313	74	362
## 8298	NP_001349068.1	XP_009294100.1	46.304	257	138	0	58	314	70	326
## 8299	NP_001349068.1	XP_009294100.1	41.700	247	144	0	65	311	21	267
## 8300	NP_001349068.1	XP_009294100.1	44.690	226	125	0	93	318	21	246
## 8301	NP_001349068.1	XP_009294100.1	43.655	197	111	0	120	316	20	216
## 8302	NP_001349068.1	XP_017211314.1	46.185	249	134	0	65	313	82	330
## 8303	NP_001349068.1	XP_017211314.1	43.946	223	125	0	93	315	82	304
## 8304	NP_001349068.1	XP_017211314.1	42.500	200	115	0	58	257	131	330

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## 8305 NP_001349068.1 XP_017211314.1 40.458 131 77 1 204 333 81 211
## 8306 NP_001349068.1 XP_017211314.1 39.623 106 63 1 231 335 80 185
## 8307 NP_001349068.1 XP_017211314.1 41.667 96 56 0 50 145 235 330
## 8308 NP_001349068.1 XP_017211314.1 38.095 42 26 0 48 89 289 330
## 8309 NP_001349068.1 XP_003201694.1 46.185 249 134 0 65 313 82 330
## 8310 NP_001349068.1 XP_003201694.1 43.946 223 125 0 93 315 82 304
## 8311 NP_001349068.1 XP_003201694.1 42.500 200 115 0 58 257 131 330
## 8312 NP_001349068.1 XP_003201694.1 40.458 131 77 1 204 333 81 211
## 8313 NP_001349068.1 XP_003201694.1 39.623 106 63 1 231 335 80 185
## 8314 NP_001349068.1 XP_003201694.1 41.667 96 56 0 50 145 235 330
## 8315 NP_001349068.1 XP_003201694.1 38.095 42 26 0 48 89 289 330
## 8316 NP_001349068.1 XP_017211136.2 44.094 254 142 0 63 316 71 324
## 8317 NP_001349068.1 XP_017211136.2 40.625 256 152 0 58 313 94 349
## 8318 NP_001349068.1 XP_017211136.2 44.643 168 93 0 146 313 70 237
## 8319 NP_001349068.1 XP_001334166.2 45.020 251 138 0 63 313 82 332
## 8320 NP_001349068.1 XP_001334166.2 43.805 226 127 0 91 316 82 307
## 8321 NP_001349068.1 XP_001334166.2 40.952 210 124 0 48 257 123 332
## 8322 NP_001349068.1 XP_001334166.2 42.408 191 109 1 146 335 81 271
## 8323 NP_001349068.1 XP_001334166.2 45.775 142 77 0 172 313 79 220
## 8324 NP_001349068.1 XP_001334166.2 35.955 89 57 0 58 146 245 333
## 8325 NP_001349068.1 XP_009289655.2 41.196 301 170 2 19 313 75 374
## 8326 NP_001349068.1 XP_021327023.1 43.273 275 156 0 48 322 37 311
## 8327 NP_001349068.1 XP_021327023.1 44.269 253 141 0 61 313 22 274
## 8328 NP_001349068.1 XP_021327023.1 41.228 228 128 1 39 260 78 305
## 8329 NP_001349068.1 XP_021327023.1 53.704 54 25 0 261 314 26 79
## 8330 NP_001349068.1 XP_017210201.2 44.610 269 148 1 48 316 37 304
## 8331 NP_001349068.1 XP_017210201.2 44.531 256 141 1 61 316 22 276
## 8332 NP_001349068.1 XP_017210201.2 42.718 206 111 1 49 254 149 347
## 8333 NP_001349068.1 XP_021329630.1 44.610 269 148 1 48 316 37 304
## X1.24e.150 X426
## 1 8.62e-92 279.0
## 2 5.14e-06 49.7
## 3 1.00e-01 35.8
## 4 0.00e+00 877.0
## 5 6.70e+00 29.3
## 6 7.50e+00 29.6
## 7 2.97e-127 360.0
## 8 1.80e+00 31.2
## 9 1.90e+00 31.2
## 10 2.10e+00 30.8
## 11 8.00e-02 31.2
## 12 8.30e-02 31.2
## 13 1.00e+00 28.1
## 14 7.70e+00 25.4
## 15 8.00e+00 25.4
## 16 2.18e-65 202.0
## 17 3.61e-146 410.0
## 18 1.60e+00 31.6
## 19 1.70e+00 31.6
## 20 8.40e+00 29.3
## 21 2.53e-43 138.0
## 22 5.73e-29 100.0
## 23 6.50e+00 26.9
## 24 6.70e+00 26.9

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## 25      1.00e+01  26.6
## 26      0.00e+00  572.0
## 27      1.32e-05  48.9
## 28      1.30e+00  32.7
## 29      7.30e+00  30.8
## 30      0.00e+00  617.0
## 31      1.51e-09  62.0
## 32      1.17e-06  52.4
## 33      1.90e+00  33.1
## 34      2.40e+00  32.7
## 35      4.20e+00  32.0
## 36      8.40e+00  31.2
## 37      2.34e-20  84.0
## 38      5.40e+00  28.9
## 39      0.00e+00  588.0
## 40      4.80e+00  30.8
## 41      4.80e+00  30.8
## 42      5.60e+00  30.4
## 43      5.60e+00  30.4
## 44      1.24e-150 426.0
## 45      8.62e-92  279.0
## 46      5.14e-06  49.7
## 47      1.00e-01  35.8
## 48      0.00e+00  877.0
## 49      6.70e+00  29.3
## 50      7.50e+00  29.6
## 51      2.97e-127 360.0
## 52      1.80e+00  31.2
## 53      1.90e+00  31.2
## 54      2.10e+00  30.8
## 55      8.00e-02  31.2
## 56      8.30e-02  31.2
## 57      1.00e+00  28.1
## 58      7.70e+00  25.4
## 59      8.00e+00  25.4
## 60      2.18e-65  202.0
## 61      3.61e-146 410.0
## 62      1.60e+00  31.6
## 63      1.70e+00  31.6
## 64      8.40e+00  29.3
## 65      2.53e-43  138.0
## 66      5.73e-29  100.0
## 67      6.50e+00  26.9
## 68      6.70e+00  26.9
## 69      1.00e+01  26.6
## 70      0.00e+00  572.0
## 71      1.32e-05  48.9
## 72      1.30e+00  32.7
## 73      7.30e+00  30.8
## 74      0.00e+00  617.0
## 75      1.51e-09  62.0
## 76      1.17e-06  52.4
## 77      1.90e+00  33.1
## 78      2.40e+00  32.7

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## 79      4.20e+00  32.0
## 80      8.40e+00  31.2
## 81      2.34e-20  84.0
## 82      5.40e+00  28.9
## 83      0.00e+00  588.0
## 84      4.80e+00  30.8
## 85      4.80e+00  30.8
## 86      5.60e+00  30.4
## 87      5.60e+00  30.4
## 88      1.69e-63  214.0
## 89      4.51e-63  214.0
## 90      4.69e-63  214.0
## 91      5.19e-12  67.8
## 92      2.66e-11  65.5
## 93      4.40e-01  33.9
## 94      1.70e-10  63.2
## 95      4.00e-03  40.0
## 96      5.00e-03  40.0
## 97      2.28e-09  59.7
## 98      8.80e+00  29.6
## 99      1.65e-06  50.8
## 100     4.00e-03  40.0
## 101     4.04e-05  46.6
## 102     1.44e-04  44.7
## 103     1.00e-03  41.2
## 104     1.80e-02  38.5
## 105     2.10e-02  37.7
## 106     2.20e+00  31.2
## 107     2.40e-02  37.7
## 108     4.70e+00  30.4
## 109     2.70e-02  37.4
## 110     2.50e-01  34.3
## 111     7.20e-02  36.2
## 112     8.90e-02  35.8
## 113     2.50e-01  34.7
## 114     1.50e-01  35.0
## 115     2.70e-01  34.3
## 116     2.80e-01  33.5
## 117     3.70e-01  33.9
## 118     3.90e-01  33.9
## 119     4.80e-01  33.5
## 120     9.90e-01  32.7
## 121     1.30e+00  32.7
## 122     1.30e+00  32.3
## 123     1.60e+00  32.3
## 124     1.60e+00  32.3
## 125     1.60e+00  32.3
## 126     1.60e+00  32.3
## 127     1.70e+00  32.0
## 128     1.70e+00  32.3
## 129     1.70e+00  32.3
## 130     1.80e+00  32.0
## 131     1.80e+00  32.0
## 132     2.00e+00  32.0

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## 133 2.40e+00 31.6
## 134 2.40e+00 31.6
## 135 2.60e+00 31.2
## 136 2.60e+00 31.2
## 137 2.70e+00 31.2
## 138 3.30e+00 31.2
## 139 4.00e+00 30.4
## 140 9.00e+00 29.6
## 141 9.50e+00 29.6
## 142 9.80e+00 29.6
## 143 1.74e-11 67.4
## 144 2.27e-09 60.8
## 145 5.00e-03 40.8
## 146 9.00e-03 40.0
## 147 6.20e-02 37.4
## 148 6.80e-02 37.0
## 149 7.10e-02 37.0
## 150 9.00e-01 33.5
## 151 3.30e-01 35.0
## 152 4.60e-01 34.7
## 153 6.70e+00 30.8
## 154 5.20e-01 34.3
## 155 5.50e-01 33.9
## 156 5.90e-01 33.9
## 157 6.70e-01 33.9
## 158 7.70e-01 33.5
## 159 8.40e-01 33.5
## 160 8.60e-01 33.5
## 161 9.40e-01 33.5
## 162 1.00e+00 33.5
## 163 1.00e+00 33.1
## 164 1.00e+00 33.5
## 165 1.00e+00 33.1
## 166 1.10e+00 33.1
## 167 1.20e+00 33.1
## 168 4.00e+00 31.6
## 169 6.80e+00 30.4
## 170 7.00e+00 30.8
## 171 7.10e+00 30.8
## 172 7.40e+00 30.8
## 173 7.50e+00 30.4
## 174 7.80e+00 30.4
## 175 7.80e+00 30.4
## 176 7.90e+00 30.4
## 177 8.00e+00 30.4
## 178 8.00e+00 30.4
## 179 8.00e+00 30.4
## 180 8.10e+00 30.4
## 181 8.20e+00 30.4
## 182 8.30e+00 30.4
## 183 8.30e+00 30.4
## 184 8.40e+00 30.4
## 185 8.70e+00 30.4
## 186 8.80e+00 30.4

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## 187 8.80e+00 30.4
## 188 3.45e-61 203.0
## 189 1.89e-57 194.0
## 190 2.42e-53 183.0
## 191 3.61e-53 182.0
## 192 3.62e-52 180.0
## 193 1.17e-50 176.0
## 194 1.34e-50 176.0
## 195 1.61e-50 175.0
## 196 1.04e-41 152.0
## 197 3.51e-60 204.0
## 198 6.46e-53 185.0
## 199 1.85e-52 184.0
## 200 3.82e-52 183.0
## 201 6.74e-52 182.0
## 202 7.63e-52 182.0
## 203 1.78e-51 181.0
## 204 3.69e-51 180.0
## 205 4.27e-51 180.0
## 206 6.78e-51 179.0
## 207 5.58e-49 174.0
## 208 4.24e-47 169.0
## 209 2.95e-45 164.0
## 210 1.47e-41 154.0
## 211 8.59e-19 89.0
## 212 5.86e-60 196.0
## 213 6.77e-56 186.0
## 214 2.74e-55 184.0
## 215 3.90e-55 184.0
## 216 9.20e-37 136.0
## 217 8.03e-60 201.0
## 218 5.57e-59 198.0
## 219 4.35e-54 186.0
## 220 7.75e-54 185.0
## 221 3.17e-53 183.0
## 222 2.74e-37 140.0
## 223 3.19e-28 115.0
## 224 8.03e-60 201.0
## 225 5.57e-59 198.0
## 226 4.35e-54 186.0
## 227 7.75e-54 185.0
## 228 3.17e-53 183.0
## 229 2.74e-37 140.0
## 230 3.19e-28 115.0
## 231 1.11e-59 197.0
## 232 4.68e-57 190.0
## 233 1.01e-53 181.0
## 234 1.90e-51 176.0
## 235 7.54e-43 153.0
## 236 4.52e-26 108.0
## 237 6.67e-04 42.7
## 238 1.67e-59 205.0
## 239 9.73e-54 189.0
## 240 2.51e-52 185.0

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## 241 4.91e-52 184.0
## 242 3.54e-51 182.0
## 243 4.29e-51 182.0
## 244 6.29e-51 181.0
## 245 2.81e-50 180.0
## 246 6.14e-49 176.0
## 247 9.95e-49 175.0
## 248 8.89e-48 173.0
## 249 5.12e-46 168.0
## 250 1.15e-45 167.0
## 251 1.49e-45 167.0
## 252 2.88e-45 166.0
## 253 6.85e-39 148.0
## 254 3.60e-24 105.0
## 255 3.18e-59 199.0
## 256 1.88e-53 184.0
## 257 2.02e-53 184.0
## 258 3.11e-53 183.0
## 259 1.72e-52 181.0
## 260 1.87e-52 181.0
## 261 2.10e-52 181.0
## 262 1.34e-49 174.0
## 263 6.33e-48 169.0
## 264 1.50e-45 163.0
## 265 1.04e-40 150.0
## 266 2.46e-37 141.0
## 267 3.22e-59 197.0
## 268 4.47e-55 186.0
## 269 4.61e-54 183.0
## 270 1.94e-52 179.0
## 271 1.62e-51 177.0
## 272 2.59e-51 176.0
## 273 5.36e-20 91.7
## 274 4.37e-05 46.6
## 275 2.00e-03 41.2
## 276 4.47e-59 199.0
## 277 9.70e-55 187.0
## 278 6.37e-54 185.0
## 279 1.62e-53 184.0
## 280 2.60e-53 184.0
## 281 2.74e-53 184.0
## 282 4.54e-53 183.0
## 283 2.62e-52 181.0
## 284 1.68e-49 174.0
## 285 9.12e-48 169.0
## 286 3.53e-43 157.0
## 287 3.14e-37 140.0
## 288 6.06e-59 199.0
## 289 7.62e-55 188.0
## 290 3.24e-54 187.0
## 291 3.48e-53 184.0
## 292 3.75e-53 184.0
## 293 5.58e-53 183.0
## 294 3.13e-52 181.0

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## 295 3.86e-52 181.0
## 296 1.19e-49 174.0
## 297 1.20e-49 174.0
## 298 2.30e-49 174.0
## 299 1.03e-45 164.0
## 300 7.49e-41 151.0
## 301 3.45e-37 141.0
## 302 6.06e-59 199.0
## 303 1.27e-55 190.0
## 304 4.70e-55 189.0
## 305 3.56e-53 184.0
## 306 3.67e-53 184.0
## 307 5.64e-53 183.0
## 308 3.30e-52 181.0
## 309 4.11e-52 181.0
## 310 4.87e-50 176.0
## 311 1.19e-49 174.0
## 312 2.30e-49 174.0
## 313 3.16e-46 165.0
## 314 6.91e-42 154.0
## 315 3.59e-37 141.0
## 316 6.25e-59 199.0
## 317 1.73e-54 187.0
## 318 3.56e-53 184.0
## 319 3.87e-53 184.0
## 320 5.88e-53 183.0
## 321 3.41e-52 181.0
## 322 3.86e-52 181.0
## 323 5.53e-51 178.0
## 324 1.16e-49 174.0
## 325 2.28e-49 174.0
## 326 1.55e-46 166.0
## 327 2.95e-45 163.0
## 328 1.00e-39 148.0
## 329 3.65e-37 141.0
## 330 2.80e-02 37.7
## 331 8.34e-59 200.0
## 332 7.24e-55 190.0
## 333 2.20e-50 178.0
## 334 1.70e-49 176.0
## 335 1.94e-49 175.0
## 336 4.60e-48 172.0
## 337 1.74e-43 159.0
## 338 5.18e-42 155.0
## 339 1.14e-40 151.0
## 340 1.83e-32 129.0
## 341 2.52e-18 87.8
## 342 8.34e-59 200.0
## 343 7.24e-55 190.0
## 344 2.20e-50 178.0
## 345 1.70e-49 176.0
## 346 1.94e-49 175.0
## 347 4.60e-48 172.0
## 348 1.74e-43 159.0
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## 349 5.18e-42 155.0
## 350 1.14e-40 151.0
## 351 1.83e-32 129.0
## 352 2.52e-18 87.8
## 353 9.69e-59 202.0
## 354 6.81e-53 187.0
## 355 6.11e-52 184.0
## 356 1.65e-51 183.0
## 357 2.60e-51 182.0
## 358 5.23e-51 182.0
## 359 3.99e-50 179.0
## 360 4.41e-50 179.0
## 361 5.38e-49 176.0
## 362 1.81e-47 172.0
## 363 1.83e-47 172.0
## 364 2.66e-47 171.0
## 365 2.58e-46 169.0
## 366 4.64e-44 162.0
## 367 6.89e-43 159.0
## 368 3.48e-29 120.0
## 369 9.90e+00 29.6
## 370 1.09e-58 204.0
## 371 2.97e-57 200.0
## 372 3.85e-53 189.0
## 373 2.19e-52 186.0
## 374 3.80e-52 186.0
## 375 4.65e-51 183.0
## 376 1.86e-49 178.0
## 377 2.48e-49 178.0
## 378 4.96e-49 177.0
## 379 7.52e-49 177.0
## 380 1.71e-47 173.0
## 381 1.60e-46 170.0
## 382 4.91e-46 169.0
## 383 2.84e-43 161.0
## 384 1.03e-34 136.0
## 385 1.74e-58 206.0
## 386 4.42e-56 199.0
## 387 1.09e-54 195.0
## 388 2.22e-54 194.0
## 389 4.91e-54 193.0
## 390 7.92e-54 192.0
## 391 8.23e-54 192.0
## 392 8.55e-54 192.0
## 393 1.12e-53 192.0
## 394 1.56e-53 192.0
## 395 2.35e-53 191.0
## 396 3.58e-53 191.0
## 397 3.87e-53 191.0
## 398 6.00e-53 190.0
## 399 7.20e-53 190.0
## 400 1.30e-52 189.0
## 401 1.75e-52 189.0
## 402 2.29e-52 188.0

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## 403 2.61e-52 188.0
## 404 2.69e-52 188.0
## 405 3.35e-52 188.0
## 406 7.83e-52 187.0
## 407 8.22e-52 187.0
## 408 9.57e-52 186.0
## 409 1.12e-51 186.0
## 410 2.42e-51 185.0
## 411 2.53e-51 185.0
## 412 3.86e-51 185.0
## 413 4.20e-51 184.0
## 414 5.98e-51 184.0
## 415 6.58e-51 184.0
## 416 6.64e-51 184.0
## 417 7.17e-51 184.0
## 418 8.60e-51 184.0
## 419 1.13e-50 183.0
## 420 1.14e-50 183.0
## 421 1.58e-50 183.0
## 422 2.48e-50 182.0
## 423 3.03e-50 182.0
## 424 3.70e-50 182.0
## 425 4.11e-50 182.0
## 426 4.23e-50 182.0
## 427 1.62e-49 180.0
## 428 2.27e-49 179.0
## 429 2.49e-49 179.0
## 430 2.54e-49 179.0
## 431 2.79e-49 179.0
## 432 3.07e-49 179.0
## 433 5.00e-49 179.0
## 434 5.45e-49 179.0
## 435 5.99e-49 178.0
## 436 6.16e-49 178.0
## 437 6.47e-49 178.0
## 438 6.53e-49 178.0
## 439 7.75e-49 178.0
## 440 9.03e-49 178.0
## 441 1.24e-48 177.0
## 442 1.88e-48 177.0
## 443 3.39e-48 176.0
## 444 3.77e-48 176.0
## 445 9.59e-48 175.0
## 446 1.17e-47 174.0
## 447 1.40e-47 174.0
## 448 1.92e-47 174.0
## 449 2.28e-47 174.0
## 450 7.87e-47 172.0
## 451 1.98e-46 171.0
## 452 1.12e-45 169.0
## 453 2.49e-45 168.0
## 454 2.66e-45 168.0
## 455 6.33e-45 167.0
## 456 4.04e-44 164.0
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## 457 4.20e-44 164.0
## 458 4.67e-42 158.0
## 459 4.85e-34 135.0
## 460 2.12e-58 199.0
## 461 2.44e-54 188.0
## 462 5.77e-54 187.0
## 463 1.06e-52 184.0
## 464 1.11e-52 184.0
## 465 1.43e-52 184.0
## 466 1.93e-52 183.0
## 467 5.12e-52 182.0
## 468 1.07e-51 181.0
## 469 1.22e-51 181.0
## 470 3.56e-49 174.0
## 471 6.20e-49 174.0
## 472 8.83e-48 171.0
## 473 9.50e-44 160.0
## 474 3.07e-42 155.0
## 475 7.71e-37 141.0
## 476 2.34e-58 199.0
## 477 6.48e-54 187.0
## 478 1.19e-52 184.0
## 479 1.26e-52 184.0
## 480 2.10e-52 183.0
## 481 6.63e-52 182.0
## 482 1.17e-51 181.0
## 483 1.40e-51 181.0
## 484 1.33e-50 178.0
## 485 3.85e-49 174.0
## 486 6.92e-49 174.0
## 487 9.44e-48 171.0
## 488 2.53e-40 150.0
## 489 8.54e-37 140.0
## 490 3.40e-58 199.0
## 491 6.54e-55 190.0
## 492 3.00e-54 189.0
## 493 8.46e-54 187.0
## 494 1.65e-52 184.0
## 495 2.85e-52 183.0
## 496 1.56e-51 181.0
## 497 1.86e-51 181.0
## 498 4.66e-51 180.0
## 499 9.78e-51 179.0
## 500 5.33e-49 174.0
## 501 1.15e-48 174.0
## 502 9.02e-48 171.0
## 503 1.15e-47 171.0
## 504 9.58e-40 149.0
## 505 2.51e-18 87.8
## 506 3.65e-58 196.0
## 507 1.28e-56 191.0
## 508 1.40e-53 184.0
## 509 1.70e-49 173.0
## 510 8.00e-02 36.2
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## 511 3.68e-58 196.0
## 512 9.20e-57 192.0
## 513 2.38e-56 191.0
## 514 7.55e-55 187.0
## 515 3.41e-54 185.0
## 516 1.49e-52 181.0
## 517 5.24e-50 174.0
## 518 1.39e-47 167.0
## 519 4.26e-18 86.3
## 520 3.69e-58 198.0
## 521 6.58e-57 195.0
## 522 2.59e-56 193.0
## 523 5.98e-56 192.0
## 524 1.32e-55 191.0
## 525 8.39e-55 189.0
## 526 9.79e-53 184.0
## 527 2.03e-50 177.0
## 528 4.67e-45 163.0
## 529 6.63e-42 154.0
## 530 3.99e-40 149.0
## 531 7.38e-29 118.0
## 532 4.22e-58 195.0
## 533 4.20e-57 193.0
## 534 2.56e-56 191.0
## 535 6.91e-55 187.0
## 536 3.90e-54 185.0
## 537 1.77e-52 181.0
## 538 9.10e-51 176.0
## 539 4.63e-50 174.0
## 540 1.10e-32 127.0
## 541 3.71e-18 86.7
## 542 4.66e-58 197.0
## 543 2.28e-52 182.0
## 544 6.38e-52 181.0
## 545 4.40e-51 179.0
## 546 1.51e-50 178.0
## 547 4.67e-50 176.0
## 548 2.39e-49 174.0
## 549 1.29e-41 154.0
## 550 7.54e-58 196.0
## 551 7.39e-52 180.0
## 552 3.65e-51 178.0
## 553 1.91e-47 168.0
## 554 9.71e-47 166.0
## 555 1.59e-43 158.0
## 556 9.79e-58 189.0
## 557 3.54e-49 166.0
## 558 1.60e-45 157.0
## 559 1.15e-36 134.0
## 560 1.08e-57 195.0
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## 562 8.54e-55 187.0
## 563 1.18e-54 187.0
## 564 5.67e-54 185.0
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## 565 1.11e-53 184.0
## 566 1.30e-53 184.0
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## 569 9.73e-46 163.0
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## 572 4.64e-54 184.0
## 573 2.85e-53 182.0
## 574 1.42e-52 180.0
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## 576 2.65e-48 169.0
## 577 5.49e-45 160.0
## 578 1.54e-57 194.0
## 579 9.00e-52 179.0
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## 583 2.90e+00 31.2
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## 587 2.28e-57 192.0
## 588 6.12e-57 191.0
## 589 9.93e-55 185.0
## 590 8.55e-54 182.0
## 591 5.88e-38 140.0
## 592 2.35e-57 189.0
## 593 8.00e-54 181.0
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## 595 4.95e-51 173.0
## 596 5.35e-46 160.0
## 597 2.48e-57 201.0
## 598 8.01e-56 197.0
## 599 1.02e-55 197.0
## 600 4.23e-55 195.0
## 601 1.18e-54 194.0
## 602 7.25e-54 192.0
## 603 7.25e-53 189.0
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## 606 1.23e-51 185.0
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## 608 1.70e-51 185.0
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## 610 5.12e-51 184.0
## 611 8.93e-51 183.0
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## 614 7.94e-42 157.0
## 615 1.93e-39 150.0
## 616 2.70e-57 192.0
## 617 6.39e-51 176.0
## 618 7.77e-50 172.0
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## 624 2.48e-52 179.0
## 625 6.23e-47 164.0
## 626 2.71e-57 192.0
## 627 8.61e-54 182.0
## 628 2.48e-52 179.0
## 629 6.23e-47 164.0
## 630 2.71e-57 192.0
## 631 8.61e-54 182.0
## 632 2.48e-52 179.0
## 633 6.23e-47 164.0
## 634 2.71e-57 192.0
## 635 8.61e-54 182.0
## 636 2.48e-52 179.0
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## 638 2.81e-57 189.0
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## 641 3.95e-52 176.0
## 642 3.35e-49 168.0
## 643 3.11e-44 155.0
## 644 8.04e-30 117.0
## 645 2.88e-57 194.0
## 646 1.42e-55 190.0
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## 648 4.08e-54 186.0
## 649 8.95e-54 186.0
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## 651 8.73e-52 180.0
## 652 5.15e-51 178.0
## 653 1.01e-50 177.0
## 654 4.06e-48 171.0
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## 662 4.53e-52 176.0
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## 664 1.45e-30 119.0
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## 671 3.36e-57 196.0
## 672 6.32e-56 192.0
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## 674 1.72e-53 186.0
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## 695 5.68e-55 193.0
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## 699 1.05e-52 187.0
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## 708 3.04e-48 165.0
## 709 4.37e-45 157.0
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## 715 1.40e-47 167.0
## 716 1.65e-21 96.3
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## 718 2.10e-56 191.0
## 719 1.56e-54 186.0
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## 722 1.87e-51 178.0
## 723 7.56e-51 176.0
## 724 5.49e-49 172.0
## 725 1.52e-41 152.0
## 726 1.70e-34 132.0
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## 727 6.26e-57 194.0
## 728 5.95e-49 173.0
## 729 3.90e-47 168.0
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## 732 5.95e-46 165.0
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## 736 6.85e-57 192.0
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## 738 4.83e-54 184.0
## 739 2.07e-53 182.0
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## 744 1.77e-53 176.0
## 745 7.68e-57 191.0
## 746 8.26e-50 172.0
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## 748 6.98e-46 162.0
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## 754 8.19e-57 190.0
## 755 2.22e-51 176.0
## 756 4.63e-50 172.0
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## 758 9.70e-57 190.0
## 759 1.53e-56 189.0
## 760 2.40e-56 189.0
## 761 2.63e-54 184.0
## 762 4.53e-49 170.0
## 763 3.36e-37 139.0
## 764 7.20e-02 36.2
## 765 1.40e+00 32.3
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## 767 1.13e-56 189.0
## 768 3.86e-52 177.0
## 769 7.17e-36 134.0
## 770 3.31e-35 132.0
## 771 9.72e-57 189.0
## 772 1.13e-56 189.0
## 773 3.86e-52 177.0
## 774 7.17e-36 134.0
## 775 3.31e-35 132.0
## 776 9.72e-57 189.0
## 777 1.13e-56 189.0
## 778 3.86e-52 177.0
## 779 7.17e-36 134.0
## 780 3.31e-35 132.0

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## 781 1.15e-56 201.0
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## 786 7.94e-51 184.0
## 787 9.99e-51 183.0
## 788 1.10e-50 183.0
## 789 1.13e-50 183.0
## 790 1.70e-50 182.0
## 791 5.25e-50 181.0
## 792 1.39e-49 180.0
## 793 2.61e-49 179.0
## 794 6.15e-49 178.0
## 795 1.05e-48 177.0
## 796 1.13e-48 177.0
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## 801 1.68e-46 171.0
## 802 2.95e-46 170.0
## 803 4.70e-46 170.0
## 804 1.96e-45 168.0
## 805 1.59e-44 165.0
## 806 2.03e-43 162.0
## 807 3.33e-43 161.0
## 808 3.49e-41 155.0
## 809 1.23e-39 151.0
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## 815 2.69e-42 152.0
## 816 1.44e-56 190.0
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## 819 9.99e-50 172.0
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## 829 1.15e-53 184.0
## 830 4.97e-52 179.0
## 831 1.77e-50 176.0
## 832 2.72e-49 172.0
## 833 1.46e-47 168.0
## 834 4.97e-39 145.0
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## 839 2.00e-54 188.0
## 840 2.20e-54 187.0
## 841 1.10e-53 186.0
## 842 1.08e-52 183.0
## 843 1.24e-51 180.0
## 844 1.42e-50 177.0
## 845 2.56e-50 177.0
## 846 1.10e-47 170.0
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## 853 7.10e-48 167.0
## 854 2.34e-45 161.0
## 855 3.27e-44 158.0
## 856 1.68e-56 190.0
## 857 3.36e-51 176.0
## 858 3.84e-50 173.0
## 859 7.10e-48 167.0
## 860 2.34e-45 161.0
## 861 3.27e-44 158.0
## 862 1.68e-56 190.0
## 863 3.36e-51 176.0
## 864 3.84e-50 173.0
## 865 7.10e-48 167.0
## 866 2.34e-45 161.0
## 867 3.27e-44 158.0
## 868 1.68e-56 190.0
## 869 3.36e-51 176.0
## 870 3.84e-50 173.0
## 871 7.10e-48 167.0
## 872 2.34e-45 161.0
## 873 3.27e-44 158.0
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## 876 4.39e-52 187.0
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## 878 2.08e-51 185.0
## 879 3.49e-51 184.0
## 880 4.69e-51 184.0
## 881 4.07e-49 179.0
## 882 4.97e-49 178.0
## 883 8.33e-49 177.0
## 884 5.32e-48 175.0
## 885 4.24e-46 170.0
## 886 7.30e-46 169.0
## 887 2.36e-45 167.0
## 888 1.00e-44 166.0
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## 889 8.86e-44 163.0
## 890 1.01e-43 163.0
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## 899 8.78e-55 187.0
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## 996 6.04e-42 157.0
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## 1007 4.12e-56 184.0
## 1008 6.32e-53 176.0
## 1009 2.72e-43 151.0
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## 1012 1.01e-52 181.0
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## 1016 7.61e-42 152.0
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## 1018 6.41e-53 179.0
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## 1071 1.37e-51 186.0
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## 1093 6.23e-50 181.0
## 1094 7.83e-50 181.0
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## 1099 1.73e-49 180.0
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## 1101 2.21e-49 180.0
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## 1121 2.49e-48 177.0
## 1122 2.77e-48 176.0
## 1123 2.96e-48 176.0
## 1124 3.98e-48 176.0
## 1125 4.29e-48 176.0
## 1126 5.29e-48 176.0
## 1127 5.55e-48 176.0
## 1128 5.99e-48 176.0
## 1129 5.99e-48 176.0
## 1130 7.32e-48 175.0
## 1131 7.53e-48 175.0
## 1132 9.20e-48 175.0
## 1133 9.55e-48 175.0
## 1134 1.20e-47 175.0
## 1135 1.20e-47 175.0
## 1136 1.27e-47 174.0
## 1137 1.55e-47 174.0
## 1138 1.69e-47 174.0
## 1139 1.99e-47 174.0
## 1140 2.05e-47 174.0
## 1141 2.38e-47 174.0
## 1142 3.05e-47 173.0
## 1143 3.26e-47 173.0
## 1144 7.92e-47 172.0
## 1145 1.14e-46 172.0
## 1146 1.31e-46 172.0
## 1147 1.50e-46 171.0
## 1148 2.58e-46 171.0
## 1149 2.70e-46 171.0
## 1150 3.81e-46 170.0
## 1151 5.16e-46 170.0
## 1152 6.74e-46 169.0
## 1153 7.56e-46 169.0
## 1154 9.86e-46 169.0
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## 1156 2.84e-45 168.0
## 1157 6.93e-45 167.0
## 1158 6.93e-45 167.0
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## 1164 4.96e-44 164.0
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## 1166 1.99e-43 162.0
## 1167 3.69e-43 162.0
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## 1173 4.18e-40 152.0
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## 1179 8.66e-55 186.0
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## 1186 9.95e-53 180.0
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## 1188 3.81e-46 162.0
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## 1191 7.10e-56 197.0
## 1192 1.70e-52 187.0
## 1193 1.88e-52 187.0
## 1194 9.75e-52 185.0
## 1195 3.90e-51 184.0
## 1196 4.48e-51 183.0
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## 1204 2.28e-47 173.0
## 1205 2.72e-47 173.0
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## 1209 4.48e-44 164.0
## 1210 1.27e-41 156.0
## 1211 5.48e-39 149.0
## 1212 3.43e-34 135.0
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## 1221 6.00e-51 184.0
## 1222 1.67e-50 182.0
## 1223 1.02e-49 180.0
## 1224 1.59e-49 180.0
## 1225 2.27e-49 179.0
## 1226 4.60e-49 178.0
## 1227 3.43e-48 176.0
## 1228 6.56e-48 175.0
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## 1231 6.94e-45 166.0
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## 1233 1.98e-41 156.0
## 1234 1.23e-40 154.0
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## 1236 1.29e-38 148.0
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## 1240 1.10e-50 173.0
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## 1242 3.89e-34 129.0
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## 1244 8.52e-55 189.0
## 1245 1.79e-54 188.0
## 1246 2.35e-54 187.0
## 1247 2.77e-54 187.0
## 1248 7.34e-53 184.0
## 1249 8.67e-52 181.0
## 1250 1.38e-50 177.0
## 1251 2.20e-50 177.0
## 1252 3.55e-48 171.0
## 1253 1.10e-47 170.0
## 1254 1.54e-45 164.0
## 1255 2.35e-45 164.0
## 1256 1.33e-17 85.5
## 1257 7.96e-56 188.0
## 1258 3.34e-54 184.0
## 1259 4.37e-52 178.0
## 1260 2.25e-51 176.0
## 1261 1.66e-33 129.0
## 1262 8.38e-56 186.0
## 1263 2.75e-54 182.0
## 1264 2.01e-49 169.0
## 1265 5.94e-37 136.0
## 1266 8.38e-56 186.0
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## 1267 2.75e-54 182.0
## 1268 2.01e-49 169.0
## 1269 5.94e-37 136.0
## 1270 8.38e-56 186.0
## 1271 2.75e-54 182.0
## 1272 2.01e-49 169.0
## 1273 5.94e-37 136.0
## 1274 8.38e-56 186.0
## 1275 2.75e-54 182.0
## 1276 2.01e-49 169.0
## 1277 5.94e-37 136.0
## 1278 8.38e-56 186.0
## 1279 2.75e-54 182.0
## 1280 2.01e-49 169.0
## 1281 5.94e-37 136.0
## 1282 8.38e-56 186.0
## 1283 2.75e-54 182.0
## 1284 2.01e-49 169.0
## 1285 5.94e-37 136.0
## 1286 8.38e-56 186.0
## 1287 2.75e-54 182.0
## 1288 2.01e-49 169.0
## 1289 5.94e-37 136.0
## 1290 8.38e-56 186.0
## 1291 2.75e-54 182.0
## 1292 2.01e-49 169.0
## 1293 5.94e-37 136.0
## 1294 9.68e-56 186.0
## 1295 3.95e-51 174.0
## 1296 1.69e-37 138.0
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## 1299 3.82e-55 187.0
## 1300 1.18e-54 186.0
## 1301 2.26e-54 185.0
## 1302 3.00e-53 182.0
## 1303 4.10e-32 125.0
## 1304 3.21e-23 101.0
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## 1306 1.21e-55 183.0
## 1307 9.72e-52 172.0
## 1308 1.33e-55 196.0
## 1309 1.99e-55 195.0
## 1310 1.91e-54 192.0
## 1311 9.19e-53 188.0
## 1312 1.17e-51 185.0
## 1313 4.99e-51 183.0
## 1314 2.16e-49 178.0
## 1315 2.66e-49 178.0
## 1316 3.34e-49 178.0
## 1317 5.32e-48 174.0
## 1318 9.32e-48 174.0
## 1319 8.48e-45 166.0
## 1320 8.18e-40 151.0
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## 1321 3.07e-33 132.0
## 1322 8.59e-33 130.0
## 1323 3.28e-32 129.0
## 1324 1.33e-55 186.0
## 1325 1.28e-54 183.0
## 1326 1.35e-55 185.0
## 1327 1.92e-55 185.0
## 1328 1.35e-55 185.0
## 1329 1.92e-55 185.0
## 1330 1.37e-55 185.0
## 1331 1.85e-53 179.0
## 1332 3.94e-52 176.0
## 1333 7.39e-52 175.0
## 1334 1.24e-50 172.0
## 1335 9.45e-42 149.0
## 1336 1.32e-34 130.0
## 1337 4.00e+00 30.8
## 1338 1.38e-55 186.0
## 1339 1.90e-42 151.0
## 1340 2.48e-38 140.0
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## 1344 3.75e-54 192.0
## 1345 6.30e-54 192.0
## 1346 3.93e-52 187.0
## 1347 6.27e-52 186.0
## 1348 1.43e-51 185.0
## 1349 1.16e-50 182.0
## 1350 1.92e-50 182.0
## 1351 5.27e-50 181.0
## 1352 5.59e-50 181.0
## 1353 6.72e-50 181.0
## 1354 1.08e-49 180.0
## 1355 1.08e-49 180.0
## 1356 1.20e-49 180.0
## 1357 2.09e-49 179.0
## 1358 5.66e-49 178.0
## 1359 1.06e-46 171.0
## 1360 1.19e-45 168.0
## 1361 4.83e-44 164.0
## 1362 1.52e-55 189.0
## 1363 2.16e-53 183.0
## 1364 1.28e-51 178.0
## 1365 1.68e-51 178.0
## 1366 9.41e-51 176.0
## 1367 6.69e-50 174.0
## 1368 5.06e-41 150.0
## 1369 8.40e-34 130.0
## 1370 3.55e-09 59.3
## 1371 1.58e-55 189.0
## 1372 8.63e-55 187.0
## 1373 1.71e-54 186.0
## 1374 2.03e-54 186.0

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## 1375 1.19e-53 184.0
## 1376 5.56e-52 179.0
## 1377 2.93e-51 177.0
## 1378 9.37e-49 171.0
## 1379 2.36e-45 162.0
## 1380 1.59e-43 157.0
## 1381 2.81e-36 137.0
## 1382 1.68e-55 188.0
## 1383 7.36e-54 184.0
## 1384 1.28e-53 183.0
## 1385 1.09e-52 181.0
## 1386 3.65e-51 176.0
## 1387 5.80e-51 176.0
## 1388 3.06e-50 174.0
## 1389 1.56e-49 172.0
## 1390 1.70e-49 172.0
## 1391 3.63e-44 158.0
## 1392 1.03e-41 151.0
## 1393 4.69e-37 139.0
## 1394 1.70e-55 186.0
## 1395 1.53e-51 176.0
## 1396 2.62e-51 176.0
## 1397 8.43e-36 134.0
## 1398 1.78e-55 189.0
## 1399 7.32e-55 187.0
## 1400 1.86e-50 176.0
## 1401 2.45e-50 176.0
## 1402 1.54e-46 165.0
## 1403 2.26e-31 124.0
## 1404 1.85e-55 190.0
## 1405 5.07e-54 186.0
## 1406 2.00e-53 184.0
## 1407 3.81e-51 179.0
## 1408 6.56e-51 178.0
## 1409 7.99e-51 178.0
## 1410 5.49e-50 176.0
## 1411 1.90e-48 171.0
## 1412 1.16e-44 161.0
## 1413 1.75e-18 87.8
## 1414 1.87e-55 185.0
## 1415 2.22e-52 177.0
## 1416 9.64e-46 160.0
## 1417 1.90e-55 197.0
## 1418 1.21e-53 191.0
## 1419 2.14e-52 188.0
## 1420 3.29e-52 187.0
## 1421 1.42e-51 186.0
## 1422 7.30e-51 184.0
## 1423 1.59e-50 182.0
## 1424 2.24e-50 182.0
## 1425 4.93e-50 181.0
## 1426 5.53e-50 181.0
## 1427 6.39e-50 181.0
## 1428 3.05e-49 179.0
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## 1429  1.18e-48 177.0
## 1430  1.41e-48 177.0
## 1431  2.24e-48 176.0
## 1432  5.72e-48 175.0
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## 1434  7.33e-48 175.0
## 1435  8.07e-48 175.0
## 1436  2.69e-47 173.0
## 1437  3.17e-47 173.0
## 1438  5.41e-47 172.0
## 1439  6.87e-47 172.0
## 1440  7.41e-47 172.0
## 1441  1.26e-45 168.0
## 1442  1.42e-45 168.0
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## 1445  2.07e-41 156.0
## 1446  6.33e-18  87.0
## 1447  1.92e-55 190.0
## 1448  3.86e-55 189.0
## 1449  4.03e-55 189.0
## 1450  9.41e-55 188.0
## 1451  3.55e-54 187.0
## 1452  2.98e-52 182.0
## 1453  1.19e-51 180.0
## 1454  1.39e-51 180.0
## 1455  1.95e-49 174.0
## 1456  1.78e-32 128.0
## 1457  1.95e-55 191.0
## 1458  1.08e-54 189.0
## 1459  1.77e-54 188.0
## 1460  1.12e-53 186.0
## 1461  6.81e-53 184.0
## 1462  1.16e-52 183.0
## 1463  8.92e-52 181.0
## 1464  2.06e-50 177.0
## 1465  2.69e-50 177.0
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## 1468  1.38e-42 156.0
## 1469  2.98e-19  90.5
## 1470  2.24e-55 190.0
## 1471  1.34e-54 187.0
## 1472  1.62e-54 187.0
## 1473  8.32e-54 186.0
## 1474  1.31e-53 185.0
## 1475  1.71e-53 185.0
## 1476  1.84e-53 184.0
## 1477  1.02e-50 177.0
## 1478  1.08e-49 174.0
## 1479  9.32e-46 164.0
## 1480  2.62e-45 163.0
## 1481  2.90e-19  90.1
## 1482  2.27e-55 190.0

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## 1486 1.36e-47 169.0
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## 1488 5.87e-41 152.0
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## 1492 5.55e-53 181.0
## 1493 7.30e-53 181.0
## 1494 6.76e-52 179.0
## 1495 7.05e-52 179.0
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## 1498 2.62e-34 132.0
## 1499 6.80e-18 85.9
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## 1509 1.87e-51 185.0
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## 1511 3.51e-51 184.0
## 1512 3.95e-51 184.0
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## 1514 8.83e-51 183.0
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## 1516 2.31e-50 182.0
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## 1518 1.26e-49 180.0
## 1519 1.98e-49 179.0
## 1520 2.43e-49 179.0
## 1521 1.41e-48 177.0
## 1522 2.33e-48 176.0
## 1523 2.72e-47 173.0
## 1524 3.92e-47 172.0
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## 1526 8.10e-46 169.0
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## 1528 9.55e-08 55.5
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## 1531 8.22e-54 187.0
## 1532 3.68e-53 186.0
## 1533 1.17e-52 184.0
## 1534 7.06e-52 182.0
## 1535 1.28e-51 181.0
## 1536 2.23e-49 176.0
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## 1537 2.25e-49 176.0
## 1538 3.32e-49 175.0
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## 1544 1.91e-54 189.0
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## 1546 1.66e-53 186.0
## 1547 7.86e-53 184.0
## 1548 1.12e-52 184.0
## 1549 1.56e-52 183.0
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## 1564 5.40e-50 171.0
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## 1584 6.54e-51 174.0
## 1585 1.28e-50 173.0
## 1586 7.15e-36 134.0
## 1587 3.91e-55 184.0
## 1588 4.00e-55 184.0
## 1589 3.33e-51 174.0
## 1590 7.23e-49 168.0
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## 1591 4.22e-46 161.0
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## 1597 4.46e-55 185.0
## 1598 2.49e-53 180.0
## 1599 2.64e-52 177.0
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## 1606 2.32e-49 172.0
## 1607 4.54e-49 171.0
## 1608 2.73e-47 166.0
## 1609 4.51e-55 193.0
## 1610 3.29e-53 188.0
## 1611 1.11e-52 186.0
## 1612 3.19e-52 185.0
## 1613 1.38e-50 181.0
## 1614 1.91e-50 180.0
## 1615 2.24e-50 180.0
## 1616 2.53e-50 180.0
## 1617 5.28e-49 176.0
## 1618 8.55e-49 176.0
## 1619 1.12e-48 175.0
## 1620 1.28e-47 172.0
## 1621 1.70e-46 169.0
## 1622 4.98e-55 196.0
## 1623 2.64e-54 194.0
## 1624 5.52e-53 190.0
## 1625 1.76e-52 188.0
## 1626 1.30e-50 183.0
## 1627 1.11e-49 180.0
## 1628 1.13e-49 180.0
## 1629 1.29e-49 180.0
## 1630 1.38e-49 180.0
## 1631 1.87e-49 179.0
## 1632 2.39e-49 179.0
## 1633 7.38e-49 178.0
## 1634 1.48e-48 177.0
## 1635 3.82e-45 167.0
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## 1641 1.09e-53 184.0
## 1642 1.68e-53 183.0
## 1643 6.60e-53 182.0
## 1644 1.14e-52 181.0

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## 1645 2.76e-52 180.0
## 1646 1.49e-50 176.0
## 1647 2.87e-49 172.0
## 1648 3.09e-49 172.0
## 1649 6.19e-44 158.0
## 1650 2.70e-36 137.0
## 1651 5.86e-55 192.0
## 1652 1.25e-54 191.0
## 1653 1.31e-54 191.0
## 1654 1.13e-53 189.0
## 1655 1.08e-52 186.0
## 1656 1.65e-52 186.0
## 1657 3.44e-52 185.0
## 1658 4.25e-52 184.0
## 1659 5.21e-52 184.0
## 1660 3.96e-51 182.0
## 1661 6.06e-51 181.0
## 1662 9.85e-51 181.0
## 1663 1.07e-50 181.0
## 1664 5.28e-50 179.0
## 1665 1.23e-49 178.0
## 1666 2.21e-49 177.0
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## 1668 3.29e-42 157.0
## 1669 3.67e-38 146.0
## 1670 1.14e-36 142.0
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## 1675 8.92e-44 158.0
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## 1679 3.60e-54 183.0
## 1680 1.45e-51 176.0
## 1681 9.95e-47 163.0
## 1682 2.63e-36 135.0
## 1683 7.15e-32 124.0
## 1684 6.11e-55 196.0
## 1685 3.10e-54 194.0
## 1686 5.78e-54 193.0
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## 1688 1.04e-53 192.0
## 1689 7.33e-53 189.0
## 1690 1.28e-52 189.0
## 1691 2.42e-52 188.0
## 1692 1.41e-51 186.0
## 1693 6.21e-51 184.0
## 1694 8.42e-51 184.0
## 1695 8.59e-51 184.0
## 1696 8.75e-51 184.0
## 1697 1.95e-50 182.0
## 1698 9.32e-50 181.0
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## 1699 2.14e-49 179.0
## 1700 2.51e-49 179.0
## 1701 3.51e-49 179.0
## 1702 2.86e-48 176.0
## 1703 4.26e-48 176.0
## 1704 6.01e-48 175.0
## 1705 1.73e-47 174.0
## 1706 2.98e-47 173.0
## 1707 1.96e-46 171.0
## 1708 2.54e-46 171.0
## 1709 2.59e-46 171.0
## 1710 2.76e-46 171.0
## 1711 5.92e-46 169.0
## 1712 8.99e-46 169.0
## 1713 1.50e-45 168.0
## 1714 2.42e-45 168.0
## 1715 3.16e-45 167.0
## 1716 1.62e-44 165.0
## 1717 3.27e-43 162.0
## 1718 3.70e-40 152.0
## 1719 1.31e-35 139.0
## 1720 5.07e-23 102.0
## 1721 4.58e-21 96.7
## 1722 6.38e-55 187.0
## 1723 2.02e-53 183.0
## 1724 3.14e-53 182.0
## 1725 2.51e-52 180.0
## 1726 2.85e-52 180.0
## 1727 3.17e-51 177.0
## 1728 2.23e-48 169.0
## 1729 1.22e-36 138.0
## 1730 9.42e-18 85.5
## 1731 6.38e-55 187.0
## 1732 2.02e-53 183.0
## 1733 3.14e-53 182.0
## 1734 2.51e-52 180.0
## 1735 2.85e-52 180.0
## 1736 3.17e-51 177.0
## 1737 2.23e-48 169.0
## 1738 1.22e-36 138.0
## 1739 9.42e-18 85.5
## 1740 6.38e-55 187.0
## 1741 2.02e-53 183.0
## 1742 3.14e-53 182.0
## 1743 2.51e-52 180.0
## 1744 2.85e-52 180.0
## 1745 3.17e-51 177.0
## 1746 2.23e-48 169.0
## 1747 1.22e-36 138.0
## 1748 9.42e-18 85.5
## 1749 6.45e-55 187.0
## 1750 2.15e-53 182.0
## 1751 3.24e-53 182.0
## 1752 2.53e-52 180.0

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## 1753 3.00e-52 180.0
## 1754 3.24e-51 177.0
## 1755 2.30e-48 169.0
## 1756 1.31e-36 138.0
## 1757 9.88e-18 85.1
## 1758 6.45e-55 187.0
## 1759 2.15e-53 182.0
## 1760 3.24e-53 182.0
## 1761 2.53e-52 180.0
## 1762 3.00e-52 180.0
## 1763 3.24e-51 177.0
## 1764 2.30e-48 169.0
## 1765 1.31e-36 138.0
## 1766 9.88e-18 85.1
## 1767 6.45e-55 187.0
## 1768 2.15e-53 182.0
## 1769 3.24e-53 182.0
## 1770 2.53e-52 180.0
## 1771 3.00e-52 180.0
## 1772 3.24e-51 177.0
## 1773 2.30e-48 169.0
## 1774 1.31e-36 138.0
## 1775 9.88e-18 85.1
## 1776 6.45e-55 187.0
## 1777 2.15e-53 182.0
## 1778 3.24e-53 182.0
## 1779 2.53e-52 180.0
## 1780 3.00e-52 180.0
## 1781 3.24e-51 177.0
## 1782 2.30e-48 169.0
## 1783 1.31e-36 138.0
## 1784 9.88e-18 85.1
## 1785 6.45e-55 187.0
## 1786 2.15e-53 182.0
## 1787 3.24e-53 182.0
## 1788 2.53e-52 180.0
## 1789 3.00e-52 180.0
## 1790 3.24e-51 177.0
## 1791 2.30e-48 169.0
## 1792 1.31e-36 138.0
## 1793 9.88e-18 85.1
## 1794 6.45e-55 187.0
## 1795 2.15e-53 182.0
## 1796 3.24e-53 182.0
## 1797 2.53e-52 180.0
## 1798 3.00e-52 180.0
## 1799 3.24e-51 177.0
## 1800 2.30e-48 169.0
## 1801 1.31e-36 138.0
## 1802 9.88e-18 85.1
## 1803 6.45e-55 187.0
## 1804 2.15e-53 182.0
## 1805 3.24e-53 182.0
## 1806 2.53e-52 180.0
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## 1807 3.00e-52 180.0
## 1808 3.24e-51 177.0
## 1809 2.30e-48 169.0
## 1810 1.31e-36 138.0
## 1811 9.88e-18 85.1
## 1812 6.45e-55 187.0
## 1813 2.15e-53 182.0
## 1814 3.24e-53 182.0
## 1815 2.53e-52 180.0
## 1816 3.00e-52 180.0
## 1817 3.24e-51 177.0
## 1818 2.30e-48 169.0
## 1819 1.31e-36 138.0
## 1820 9.88e-18 85.1
## 1821 6.45e-55 187.0
## 1822 2.15e-53 182.0
## 1823 3.24e-53 182.0
## 1824 2.53e-52 180.0
## 1825 3.00e-52 180.0
## 1826 3.24e-51 177.0
## 1827 2.30e-48 169.0
## 1828 1.31e-36 138.0
## 1829 9.88e-18 85.1
## 1830 6.45e-55 187.0
## 1831 2.15e-53 182.0
## 1832 3.24e-53 182.0
## 1833 2.53e-52 180.0
## 1834 3.00e-52 180.0
## 1835 3.24e-51 177.0
## 1836 2.30e-48 169.0
## 1837 1.31e-36 138.0
## 1838 9.88e-18 85.1
## 1839 6.45e-55 187.0
## 1840 2.15e-53 182.0
## 1841 3.24e-53 182.0
## 1842 2.53e-52 180.0
## 1843 3.00e-52 180.0
## 1844 3.24e-51 177.0
## 1845 2.30e-48 169.0
## 1846 1.31e-36 138.0
## 1847 9.88e-18 85.1
## 1848 6.79e-55 190.0
## 1849 2.02e-54 189.0
## 1850 2.96e-53 186.0
## 1851 7.00e-53 185.0
## 1852 8.09e-53 184.0
## 1853 5.21e-52 182.0
## 1854 1.18e-51 181.0
## 1855 2.38e-51 181.0
## 1856 3.49e-51 180.0
## 1857 1.04e-48 173.0
## 1858 1.05e-46 168.0
## 1859 3.46e-46 167.0
## 1860 6.85e-55 185.0
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## 1861 1.31e-49 171.0
## 1862 2.10e-48 168.0
## 1863 5.65e-30 119.0
## 1864 6.95e-55 186.0
## 1865 2.80e-51 176.0
## 1866 1.38e-50 174.0
## 1867 3.38e-50 173.0
## 1868 6.67e-38 141.0
## 1869 6.97e-55 195.0
## 1870 4.24e-54 193.0
## 1871 1.39e-52 189.0
## 1872 5.33e-52 187.0
## 1873 1.42e-51 186.0
## 1874 1.97e-51 185.0
## 1875 2.09e-51 185.0
## 1876 1.07e-50 183.0
## 1877 1.39e-49 180.0
## 1878 6.76e-49 178.0
## 1879 1.43e-48 177.0
## 1880 1.64e-48 177.0
## 1881 3.29e-48 176.0
## 1882 3.41e-48 176.0
## 1883 4.21e-48 176.0
## 1884 8.44e-48 175.0
## 1885 1.31e-47 174.0
## 1886 1.74e-47 174.0
## 1887 2.13e-47 174.0
## 1888 9.95e-47 172.0
## 1889 1.59e-46 171.0
## 1890 1.60e-46 171.0
## 1891 5.79e-46 169.0
## 1892 1.30e-45 169.0
## 1893 1.65e-45 168.0
## 1894 1.71e-45 168.0
## 1895 2.09e-45 168.0
## 1896 2.15e-45 168.0
## 1897 2.58e-45 167.0
## 1898 4.65e-45 167.0
## 1899 6.48e-44 164.0
## 1900 1.21e-43 163.0
## 1901 1.51e-43 162.0
## 1902 1.15e-42 160.0
## 1903 2.73e-39 150.0
## 1904 1.03e-33 134.0
## 1905 4.80e-21 96.3
## 1906 3.09e-16 82.0
## 1907 7.21e-55 187.0
## 1908 7.44e-55 187.0
## 1909 3.29e-54 185.0
## 1910 3.49e-53 182.0
## 1911 4.51e-52 179.0
## 1912 9.51e-52 179.0
## 1913 1.09e-50 176.0
## 1914 8.50e-43 155.0
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## 1915 1.11e-36 139.0
## 1916 3.66e-36 137.0
## 1917 9.10e-01 33.1
## 1918 8.06e-55 185.0
## 1919 2.48e-53 181.0
## 1920 2.47e-52 179.0
## 1921 1.61e-50 174.0
## 1922 7.61e-41 149.0
## 1923 8.08e-55 189.0
## 1924 2.20e-54 188.0
## 1925 3.41e-53 185.0
## 1926 8.25e-53 184.0
## 1927 9.25e-53 184.0
## 1928 6.23e-52 182.0
## 1929 1.41e-51 181.0
## 1930 2.42e-51 180.0
## 1931 4.19e-51 179.0
## 1932 1.25e-48 173.0
## 1933 1.21e-46 167.0
## 1934 3.94e-46 166.0
## 1935 8.38e-55 186.0
## 1936 1.15e-54 186.0
## 1937 1.63e-54 186.0
## 1938 4.74e-54 184.0
## 1939 1.68e-53 183.0
## 1940 2.96e-52 180.0
## 1941 7.73e-52 179.0
## 1942 5.25e-50 174.0
## 1943 5.88e-49 171.0
## 1944 8.97e-55 195.0
## 1945 1.38e-53 191.0
## 1946 1.17e-52 189.0
## 1947 1.54e-52 188.0
## 1948 4.52e-52 187.0
## 1949 1.42e-51 186.0
## 1950 1.93e-51 185.0
## 1951 2.00e-51 185.0
## 1952 2.67e-51 185.0
## 1953 8.19e-51 183.0
## 1954 8.59e-51 183.0
## 1955 2.16e-50 182.0
## 1956 2.77e-50 182.0
## 1957 1.80e-49 179.0
## 1958 7.22e-49 178.0
## 1959 8.33e-49 177.0
## 1960 1.55e-48 177.0
## 1961 8.18e-48 175.0
## 1962 9.43e-48 174.0
## 1963 7.17e-46 169.0
## 1964 1.34e-45 168.0
## 1965 2.86e-44 164.0
## 1966 2.22e-38 147.0
## 1967 6.45e-34 134.0
## 1968 3.00e-19 90.9

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## 1969  9.15e-55 195.0
## 1970  1.02e-54 195.0
## 1971  3.26e-54 193.0
## 1972  5.26e-54 193.0
## 1973  1.06e-53 192.0
## 1974  1.13e-53 192.0
## 1975  6.06e-53 190.0
## 1976  8.23e-53 189.0
## 1977  8.97e-53 189.0
## 1978  8.30e-52 186.0
## 1979  1.76e-51 186.0
## 1980  1.03e-50 183.0
## 1981  1.28e-50 183.0
## 1982  1.33e-50 183.0
## 1983  1.57e-50 183.0
## 1984  1.74e-50 182.0
## 1985  2.58e-50 182.0
## 1986  4.31e-50 181.0
## 1987  6.62e-50 181.0
## 1988  8.01e-50 181.0
## 1989  9.89e-50 181.0
## 1990  1.45e-49 180.0
## 1991  5.05e-49 178.0
## 1992  5.61e-49 178.0
## 1993  1.07e-48 177.0
## 1994  2.63e-48 176.0
## 1995  3.53e-48 176.0
## 1996  4.75e-47 172.0
## 1997  6.90e-46 169.0
## 1998  7.66e-46 169.0
## 1999  2.53e-43 162.0
## 2000  1.90e-31 127.0
## 2001  9.15e-55 195.0
## 2002  1.02e-54 195.0
## 2003  3.26e-54 193.0
## 2004  5.26e-54 193.0
## 2005  1.06e-53 192.0
## 2006  1.13e-53 192.0
## 2007  6.06e-53 190.0
## 2008  8.23e-53 189.0
## 2009  8.97e-53 189.0
## 2010  8.30e-52 186.0
## 2011  1.76e-51 186.0
## 2012  1.03e-50 183.0
## 2013  1.28e-50 183.0
## 2014  1.33e-50 183.0
## 2015  1.57e-50 183.0
## 2016  1.74e-50 182.0
## 2017  2.58e-50 182.0
## 2018  4.31e-50 181.0
## 2019  6.62e-50 181.0
## 2020  8.01e-50 181.0
## 2021  9.89e-50 181.0
## 2022  1.45e-49 180.0
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## 2023 5.05e-49 178.0
## 2024 5.61e-49 178.0
## 2025 1.07e-48 177.0
## 2026 2.63e-48 176.0
## 2027 3.53e-48 176.0
## 2028 4.75e-47 172.0
## 2029 6.90e-46 169.0
## 2030 7.66e-46 169.0
## 2031 2.53e-43 162.0
## 2032 1.90e-31 127.0
## 2033 9.50e-55 184.0
## 2034 2.82e-54 182.0
## 2035 6.19e-54 181.0
## 2036 7.07e-50 171.0
## 2037 6.27e-41 147.0
## 2038 1.15e-15 78.2
## 2039 1.11e-54 186.0
## 2040 9.27e-54 183.0
## 2041 2.50e-53 182.0
## 2042 3.74e-53 182.0
## 2043 1.66e-51 177.0
## 2044 3.19e-51 176.0
## 2045 1.06e-37 140.0
## 2046 2.20e-01 35.0
## 2047 1.17e-54 181.0
## 2048 5.88e-51 171.0
## 2049 4.83e-14 72.4
## 2050 1.18e-54 183.0
## 2051 8.43e-33 125.0
## 2052 1.24e-54 181.0
## 2053 2.10e-54 181.0
## 2054 6.58e-53 177.0
## 2055 8.59e-41 145.0
## 2056 1.31e-54 189.0
## 2057 2.78e-54 189.0
## 2058 3.50e-54 188.0
## 2059 2.87e-51 181.0
## 2060 7.72e-51 179.0
## 2061 9.93e-49 174.0
## 2062 2.21e-48 173.0
## 2063 2.88e-48 172.0
## 2064 3.19e-48 172.0
## 2065 1.88e-46 167.0
## 2066 5.10e-46 166.0
## 2067 6.12e-46 166.0
## 2068 2.86e-35 137.0
## 2069 1.31e-54 185.0
## 2070 9.47e-54 183.0
## 2071 2.20e-50 174.0
## 2072 1.85e-48 169.0
## 2073 1.39e-54 180.0
## 2074 7.25e-50 167.0
## 2075 2.70e-44 153.0
## 2076 1.61e-34 127.0
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## 2077 1.76e-27 108.0
## 2078 1.49e-22 95.9
## 2079 1.42e-54 186.0
## 2080 2.04e-53 183.0
## 2081 2.35e-52 180.0
## 2082 3.77e-52 180.0
## 2083 4.32e-52 179.0
## 2084 1.41e-49 173.0
## 2085 1.54e-54 188.0
## 2086 1.96e-54 188.0
## 2087 2.44e-54 187.0
## 2088 1.23e-53 186.0
## 2089 2.48e-53 185.0
## 2090 1.36e-52 183.0
## 2091 5.56e-51 179.0
## 2092 9.84e-51 178.0
## 2093 8.85e-49 173.0
## 2094 9.04e-49 173.0
## 2095 4.95e-46 165.0
## 2096 1.26e-45 164.0
## 2097 3.31e-33 130.0
## 2098 2.66e-19 90.5
## 2099 1.65e-54 193.0
## 2100 1.67e-54 193.0
## 2101 1.92e-54 193.0
## 2102 3.71e-53 190.0
## 2103 4.13e-53 189.0
## 2104 4.88e-53 189.0
## 2105 8.62e-53 189.0
## 2106 2.41e-52 187.0
## 2107 2.84e-52 187.0
## 2108 8.66e-52 186.0
## 2109 1.56e-51 185.0
## 2110 1.57e-51 185.0
## 2111 1.65e-51 185.0
## 2112 5.02e-51 184.0
## 2113 5.81e-51 183.0
## 2114 1.05e-50 183.0
## 2115 1.16e-49 180.0
## 2116 1.57e-49 179.0
## 2117 7.50e-49 177.0
## 2118 6.70e-48 175.0
## 2119 1.29e-46 171.0
## 2120 9.98e-44 163.0
## 2121 3.93e-31 126.0
## 2122 5.56e-28 117.0
## 2123 1.68e-54 184.0
## 2124 1.07e-50 174.0
## 2125 6.48e-33 127.0
## 2126 1.68e-54 184.0
## 2127 1.07e-50 174.0
## 2128 6.48e-33 127.0
## 2129 1.68e-54 184.0
## 2130 1.07e-50 174.0

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## 2131 6.48e-33 127.0
## 2132 1.68e-54 184.0
## 2133 1.07e-50 174.0
## 2134 6.48e-33 127.0
## 2135 1.72e-54 186.0
## 2136 4.64e-52 179.0
## 2137 2.42e-49 172.0
## 2138 1.03e-48 171.0
## 2139 5.10e-47 166.0
## 2140 3.38e-46 164.0
## 2141 1.68e-44 159.0
## 2142 4.93e-29 117.0
## 2143 1.90e-54 184.0
## 2144 1.68e-53 181.0
## 2145 1.80e-49 171.0
## 2146 3.22e-48 167.0
## 2147 1.97e-54 194.0
## 2148 4.12e-54 193.0
## 2149 9.83e-54 192.0
## 2150 1.51e-53 191.0
## 2151 7.74e-53 189.0
## 2152 1.03e-52 189.0
## 2153 1.92e-52 188.0
## 2154 7.88e-52 186.0
## 2155 9.72e-52 186.0
## 2156 1.04e-51 186.0
## 2157 2.78e-51 185.0
## 2158 2.38e-50 182.0
## 2159 7.91e-50 181.0
## 2160 9.12e-50 181.0
## 2161 9.30e-50 181.0
## 2162 1.56e-49 180.0
## 2163 2.65e-49 179.0
## 2164 2.73e-49 179.0
## 2165 3.21e-49 179.0
## 2166 1.17e-48 177.0
## 2167 1.32e-48 177.0
## 2168 2.04e-48 177.0
## 2169 2.52e-48 176.0
## 2170 3.29e-48 176.0
## 2171 1.10e-47 174.0
## 2172 4.43e-47 173.0
## 2173 2.39e-46 171.0
## 2174 1.10e-45 169.0
## 2175 1.27e-42 160.0
## 2176 2.76e-42 159.0
## 2177 2.15e-40 153.0
## 2178 1.92e-34 136.0
## 2179 2.21e-54 182.0
## 2180 7.44e-53 179.0
## 2181 2.10e-50 172.0
## 2182 2.30e-54 183.0
## 2183 5.51e-54 182.0
## 2184 6.83e-52 177.0
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## 2185 3.04e-46 162.0
## 2186 2.60e-41 149.0
## 2187 2.50e-54 189.0
## 2188 3.82e-54 188.0
## 2189 1.54e-53 187.0
## 2190 7.64e-53 185.0
## 2191 8.74e-53 185.0
## 2192 4.61e-50 177.0
## 2193 2.28e-47 170.0
## 2194 1.90e-46 168.0
## 2195 1.69e-45 165.0
## 2196 2.55e-54 186.0
## 2197 1.89e-53 183.0
## 2198 2.59e-51 177.0
## 2199 3.37e-51 177.0
## 2200 6.87e-51 177.0
## 2201 1.48e-49 173.0
## 2202 7.76e-49 171.0
## 2203 2.55e-54 189.0
## 2204 1.10e-53 187.0
## 2205 2.09e-52 184.0
## 2206 1.19e-51 182.0
## 2207 7.12e-51 180.0
## 2208 9.79e-51 179.0
## 2209 7.10e-49 174.0
## 2210 1.69e-48 173.0
## 2211 2.55e-48 173.0
## 2212 4.60e-48 172.0
## 2213 3.47e-47 170.0
## 2214 8.03e-46 166.0
## 2215 1.22e-45 166.0
## 2216 1.28e-29 121.0
## 2217 2.67e-54 183.0
## 2218 1.87e-53 181.0
## 2219 2.04e-49 170.0
## 2220 3.82e-48 167.0
## 2221 2.70e-54 183.0
## 2222 2.01e-53 181.0
## 2223 1.32e-50 174.0
## 2224 4.11e-48 167.0
## 2225 2.99e-54 184.0
## 2226 1.59e-53 182.0
## 2227 1.96e-52 180.0
## 2228 2.50e-52 179.0
## 2229 7.96e-50 173.0
## 2230 3.49e-26 109.0
## 2231 3.07e-54 182.0
## 2232 1.89e-53 180.0
## 2233 2.39e-51 175.0
## 2234 4.25e-50 171.0
## 2235 4.98e-50 171.0
## 2236 2.37e-06 50.1
## 2237 3.11e-54 181.0
## 2238 3.23e-49 168.0
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## 2239 9.53e-47 162.0
## 2240 3.68e-36 134.0
## 2241 3.16e-11 64.7
## 2242 3.13e-54 193.0
## 2243 4.79e-54 192.0
## 2244 5.38e-54 192.0
## 2245 1.05e-52 189.0
## 2246 3.66e-52 187.0
## 2247 7.92e-52 186.0
## 2248 2.04e-51 185.0
## 2249 6.27e-51 184.0
## 2250 1.88e-50 182.0
## 2251 3.79e-50 181.0
## 2252 7.63e-50 181.0
## 2253 1.12e-49 180.0
## 2254 1.69e-49 179.0
## 2255 8.61e-48 175.0
## 2256 2.00e-47 174.0
## 2257 2.93e-47 173.0
## 2258 1.40e-45 168.0
## 2259 1.42e-45 168.0
## 2260 2.39e-43 162.0
## 2261 4.14e-42 158.0
## 2262 2.35e-38 147.0
## 2263 2.61e-36 141.0
## 2264 3.30e-54 181.0
## 2265 1.41e-53 179.0
## 2266 7.89e-40 143.0
## 2267 3.42e-54 189.0
## 2268 2.45e-51 182.0
## 2269 5.50e-50 178.0
## 2270 8.52e-50 177.0
## 2271 2.50e-49 176.0
## 2272 6.00e-49 175.0
## 2273 7.27e-49 175.0
## 2274 8.38e-48 172.0
## 2275 6.81e-47 170.0
## 2276 2.38e-46 168.0
## 2277 4.42e-45 165.0
## 2278 1.93e-28 117.0
## 2279 3.50e-54 184.0
## 2280 1.14e-52 180.0
## 2281 2.47e-28 115.0
## 2282 4.19e-54 181.0
## 2283 2.26e-53 179.0
## 2284 3.07e-51 174.0
## 2285 6.89e-51 173.0
## 2286 6.37e-43 152.0
## 2287 1.96e-06 50.4
## 2288 4.29e-54 181.0
## 2289 1.98e-44 155.0
## 2290 4.42e-54 186.0
## 2291 1.30e-52 182.0
## 2292 2.09e-52 181.0
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## 2293 5.09e-52 181.0
## 2294 5.71e-52 180.0
## 2295 1.08e-51 179.0
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## 2297 2.21e-50 176.0
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## 2299 3.03e-49 173.0
## 2300 5.01e-47 167.0
## 2301 2.51e-39 146.0
## 2302 9.49e-37 139.0
## 2303 4.57e-54 193.0
## 2304 1.13e-53 192.0
## 2305 1.28e-53 192.0
## 2306 7.15e-53 190.0
## 2307 1.41e-52 189.0
## 2308 2.72e-52 188.0
## 2309 7.71e-52 187.0
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## 2314 7.30e-50 181.0
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## 2319 1.65e-48 177.0
## 2320 1.73e-48 177.0
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## 2322 3.89e-48 176.0
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## 2324 1.48e-47 174.0
## 2325 3.90e-47 173.0
## 2326 6.05e-47 172.0
## 2327 7.60e-47 172.0
## 2328 7.74e-47 172.0
## 2329 8.68e-47 172.0
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## 2332 1.39e-45 169.0
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## 2334 2.47e-44 165.0
## 2335 2.54e-44 165.0
## 2336 7.10e-44 164.0
## 2337 1.39e-43 162.0
## 2338 2.07e-42 159.0
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## 2340 5.65e-54 192.0
## 2341 4.64e-53 189.0
## 2342 5.52e-53 189.0
## 2343 1.63e-50 182.0
## 2344 9.22e-50 180.0
## 2345 9.68e-50 180.0
## 2346 1.49e-49 179.0
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## 2347 2.18e-49 179.0
## 2348 2.24e-49 179.0
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## 2350 3.11e-49 179.0
## 2351 3.60e-49 179.0
## 2352 1.16e-48 177.0
## 2353 4.33e-48 175.0
## 2354 4.86e-48 175.0
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## 2357 6.92e-46 169.0
## 2358 9.40e-46 169.0
## 2359 6.60e-41 154.0
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## 2362 1.08e-52 184.0
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## 2368 5.23e-54 188.0
## 2369 1.08e-52 184.0
## 2370 6.04e-51 179.0
## 2371 2.17e-50 178.0
## 2372 1.18e-45 165.0
## 2373 2.69e-44 162.0
## 2374 6.89e-38 144.0
## 2375 5.25e-54 184.0
## 2376 1.34e-53 183.0
## 2377 6.04e-50 174.0
## 2378 1.04e-46 165.0
## 2379 3.25e-45 161.0
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## 2389 2.88e-50 182.0
## 2390 3.39e-50 182.0
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## 2392 1.01e-49 180.0
## 2393 1.05e-49 180.0
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## 2395 4.39e-49 178.0
## 2396 4.83e-49 178.0
## 2397 9.90e-49 177.0
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## 2415 2.25e-46 164.0
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## 2419 1.04e-50 175.0
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## 2422 6.03e-46 162.0
## 2423 2.41e-40 147.0
## 2424 4.06e-29 117.0
## 2425 6.96e-54 185.0
## 2426 6.34e-50 174.0
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## 2430 1.37e-44 160.0
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## 2433 1.57e-51 178.0
## 2434 5.35e-51 177.0
## 2435 5.74e-29 117.0
## 2436 7.65e-54 182.0
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## 2438 5.84e-53 179.0
## 2439 1.16e-52 179.0
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## 2444 6.28e-52 186.0
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## 2447 1.15e-50 182.0
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## 2451 2.48e-48 176.0
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## 2453 3.36e-46 170.0
## 2454 2.89e-44 164.0
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## 2459 1.40e-52 177.0
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## 2462 8.23e-54 179.0
## 2463 1.62e-52 176.0
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## 2466 8.65e-54 181.0
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## 2468 5.16e-48 166.0
## 2469 3.09e-47 164.0
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## 2491 1.49e-46 168.0
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## 2494 2.92e-36 140.0
## 2495 8.09e-32 127.0
## 2496 9.09e-32 127.0
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## 2501 1.26e-53 179.0
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## 2504 1.26e-53 182.0
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## 2517 1.38e-49 180.0
## 2518 1.72e-49 179.0
## 2519 4.48e-49 178.0
## 2520 1.19e-48 177.0
## 2521 1.44e-48 177.0
## 2522 2.59e-48 176.0
## 2523 7.70e-48 175.0
## 2524 9.25e-48 174.0
## 2525 1.36e-47 174.0
## 2526 1.90e-47 174.0
## 2527 2.97e-46 170.0
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## 2529 1.41e-44 165.0
## 2530 2.11e-44 165.0
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## 2532 2.48e-52 178.0
## 2533 5.94e-51 175.0
## 2534 1.79e-35 134.0
## 2535 1.64e-53 184.0
## 2536 7.82e-51 177.0
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## 2538 1.27e-45 163.0
## 2539 3.40e-44 159.0
## 2540 6.72e-29 117.0
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## 2542 2.11e-51 178.0
## 2543 9.54e-50 174.0
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## 2547 2.40e-53 189.0
## 2548 2.72e-52 186.0
## 2549 1.56e-50 181.0
## 2550 1.96e-50 181.0
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## 2552 5.73e-49 177.0
## 2553 9.77e-49 176.0
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## 2556 2.79e-47 172.0
## 2557 3.43e-47 172.0
## 2558 1.88e-46 170.0
## 2559 2.26e-46 170.0
## 2560 1.55e-43 162.0
## 2561 3.90e-43 160.0
## 2562 7.61e-38 145.0
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## 2569 1.86e-53 180.0
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## 2581 1.82e-50 182.0
## 2582 2.22e-50 182.0
## 2583 8.14e-50 181.0
## 2584 1.08e-49 180.0
## 2585 1.10e-49 180.0
## 2586 2.53e-49 179.0
## 2587 4.32e-49 179.0
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## 2615 1.57e-49 176.0
## 2616 2.05e-49 176.0
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## 2626 1.56e-47 171.0
## 2627 1.41e-45 166.0
## 2628 2.37e-45 165.0
## 2629 3.15e-45 165.0
## 2630 8.79e-38 144.0
## 2631 3.70e-16 81.3
## 2632 2.45e-53 177.0
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## 2635 1.11e-52 178.0
## 2636 9.35e-52 176.0
## 2637 2.04e-50 172.0
## 2638 2.52e-48 167.0
## 2639 6.29e-43 152.0
## 2640 7.37e-36 134.0
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## 2642 4.26e-53 183.0
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## 2644 2.77e-51 178.0
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## 2646 4.52e-47 167.0
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## 2664 1.53e-43 162.0
## 2665 2.04e-43 162.0
## 2666 4.14e-43 161.0
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## 2669 5.35e-07 53.1
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## 2678 1.68e-52 182.0
## 2679 1.90e-52 182.0
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## 2682 4.97e-41 151.0
## 2683 2.41e-36 139.0
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## 2690 5.92e-49 171.0
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## 2692 4.40e-33 128.0
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## 2695 2.28e-52 179.0
## 2696 5.47e-52 178.0
## 2697 3.38e-50 174.0
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## 2699 5.92e-49 171.0
## 2700 1.06e-33 130.0
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## 2702 9.63e-24 102.0
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## 2706 3.38e-50 174.0
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## 2717 5.92e-49 171.0
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## 2719 4.40e-33 128.0
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## 2725 5.92e-49 171.0
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## 2727 1.06e-33 130.0
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## 2735 5.92e-49 171.0
## 2736 1.06e-33 130.0
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## 2738 9.63e-24 102.0
## 2739 2.84e-53 182.0
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## 2744 5.92e-49 171.0
## 2745 1.06e-33 130.0
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## 2748 2.84e-53 182.0
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## 2754 1.06e-33 130.0
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## 2773 4.40e-33 128.0
## 2774 9.63e-24 102.0
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## 2779 5.92e-49 171.0
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## 2789 5.92e-49 171.0
## 2790 1.06e-33 130.0
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## 2795 7.66e-49 171.0
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## 2797 2.92e-46 164.0
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## 2799 6.97e-53 184.0
## 2800 5.69e-51 179.0
## 2801 4.63e-50 176.0
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## 2808 8.69e-52 186.0
## 2809 1.17e-51 185.0
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## 2811 3.33e-51 184.0
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## 2817 4.58e-50 181.0
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## 2819 1.42e-49 179.0
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## 2823 7.89e-49 177.0
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## 2832 8.33e-47 166.0
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## 2842 4.77e-51 184.0
## 2843 6.61e-51 184.0
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## 2853 4.54e-48 176.0
## 2854 4.59e-48 176.0
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## 2856 2.01e-47 174.0
## 2857 5.37e-47 172.0
## 2858 1.39e-46 171.0
## 2859 2.00e-46 171.0
## 2860 6.27e-46 169.0
## 2861 7.38e-46 169.0
## 2862 8.27e-44 163.0
## 2863 5.18e-17 84.3
## 2864 3.36e-53 182.0
## 2865 2.74e-52 180.0
## 2866 6.94e-52 179.0
## 2867 4.25e-50 174.0
## 2868 6.58e-49 171.0
## 2869 7.31e-49 171.0
## 2870 1.33e-33 130.0
## 2871 4.76e-33 128.0
## 2872 1.14e-23 102.0
## 2873 3.36e-53 182.0
## 2874 2.74e-52 180.0
## 2875 6.94e-52 179.0
## 2876 4.25e-50 174.0
## 2877 6.58e-49 171.0
## 2878 7.31e-49 171.0
## 2879 1.33e-33 130.0
## 2880 4.76e-33 128.0
## 2881 1.14e-23 102.0
## 2882 3.36e-53 182.0
## 2883 2.74e-52 180.0
## 2884 6.94e-52 179.0
## 2885 4.25e-50 174.0
## 2886 6.58e-49 171.0
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## 2887 7.31e-49 171.0
## 2888 1.33e-33 130.0
## 2889 4.76e-33 128.0
## 2890 1.14e-23 102.0
## 2891 3.36e-53 182.0
## 2892 2.74e-52 180.0
## 2893 6.94e-52 179.0
## 2894 4.25e-50 174.0
## 2895 6.58e-49 171.0
## 2896 7.31e-49 171.0
## 2897 1.33e-33 130.0
## 2898 4.76e-33 128.0
## 2899 1.14e-23 102.0
## 2900 3.36e-53 182.0
## 2901 2.74e-52 180.0
## 2902 6.94e-52 179.0
## 2903 4.25e-50 174.0
## 2904 6.58e-49 171.0
## 2905 7.31e-49 171.0
## 2906 1.33e-33 130.0
## 2907 4.76e-33 128.0
## 2908 1.14e-23 102.0
## 2909 3.36e-53 182.0
## 2910 2.74e-52 180.0
## 2911 6.94e-52 179.0
## 2912 4.25e-50 174.0
## 2913 6.58e-49 171.0
## 2914 7.31e-49 171.0
## 2915 1.33e-33 130.0
## 2916 4.76e-33 128.0
## 2917 1.14e-23 102.0
## 2918 3.36e-53 182.0
## 2919 2.74e-52 180.0
## 2920 6.94e-52 179.0
## 2921 4.25e-50 174.0
## 2922 6.58e-49 171.0
## 2923 7.31e-49 171.0
## 2924 1.33e-33 130.0
## 2925 4.76e-33 128.0
## 2926 1.14e-23 102.0
## 2927 3.36e-53 182.0
## 2928 2.74e-52 180.0
## 2929 6.94e-52 179.0
## 2930 4.25e-50 174.0
## 2931 6.58e-49 171.0
## 2932 7.31e-49 171.0
## 2933 1.33e-33 130.0
## 2934 4.76e-33 128.0
## 2935 1.14e-23 102.0
## 2936 3.36e-53 182.0
## 2937 2.74e-52 180.0
## 2938 6.94e-52 179.0
## 2939 4.25e-50 174.0
## 2940 6.58e-49 171.0
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## 2941 7.31e-49 171.0
## 2942 1.33e-33 130.0
## 2943 4.76e-33 128.0
## 2944 1.14e-23 102.0
## 2945 3.36e-53 182.0
## 2946 2.74e-52 180.0
## 2947 6.94e-52 179.0
## 2948 4.25e-50 174.0
## 2949 6.58e-49 171.0
## 2950 7.31e-49 171.0
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## 2952 4.76e-33 128.0
## 2953 1.14e-23 102.0
## 2954 3.36e-53 182.0
## 2955 2.74e-52 180.0
## 2956 6.94e-52 179.0
## 2957 4.25e-50 174.0
## 2958 6.58e-49 171.0
## 2959 7.31e-49 171.0
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## 2961 4.76e-33 128.0
## 2962 1.14e-23 102.0
## 2963 3.36e-53 182.0
## 2964 2.74e-52 180.0
## 2965 6.94e-52 179.0
## 2966 4.25e-50 174.0
## 2967 6.58e-49 171.0
## 2968 7.31e-49 171.0
## 2969 1.33e-33 130.0
## 2970 4.76e-33 128.0
## 2971 1.14e-23 102.0
## 2972 3.36e-53 182.0
## 2973 2.74e-52 180.0
## 2974 6.94e-52 179.0
## 2975 4.25e-50 174.0
## 2976 6.58e-49 171.0
## 2977 7.31e-49 171.0
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## 2979 4.76e-33 128.0
## 2980 1.14e-23 102.0
## 2981 3.36e-53 182.0
## 2982 2.74e-52 180.0
## 2983 6.94e-52 179.0
## 2984 4.25e-50 174.0
## 2985 6.58e-49 171.0
## 2986 7.31e-49 171.0
## 2987 1.33e-33 130.0
## 2988 4.76e-33 128.0
## 2989 1.14e-23 102.0
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## 2991 2.55e-52 175.0
## 2992 3.07e-42 149.0
## 2993 4.17e-53 186.0
## 2994 7.81e-52 182.0
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## 3005 2.73e-45 162.0
## 3006 4.79e-45 161.0
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## 3009 1.52e-52 189.0
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## 3012 7.16e-51 184.0
## 3013 9.63e-51 183.0
## 3014 1.57e-50 182.0
## 3015 2.39e-50 182.0
## 3016 2.63e-50 182.0
## 3017 1.55e-49 180.0
## 3018 2.13e-49 179.0
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## 3029 4.85e-46 170.0
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## 3031 2.06e-44 165.0
## 3032 3.60e-43 161.0
## 3033 1.15e-42 160.0
## 3034 1.63e-36 142.0
## 3035 3.20e+00 31.6
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## 3038 8.15e-51 184.0
## 3039 1.17e-50 183.0
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## 3043 8.51e-50 181.0
## 3044 2.13e-49 179.0
## 3045 3.80e-49 179.0
## 3046 5.21e-49 178.0
## 3047 1.12e-48 177.0
## 3048 1.14e-48 177.0
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## 3050 1.28e-48 177.0
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## 3053 1.80e-48 177.0
## 3054 2.63e-48 176.0
## 3055 3.54e-48 176.0
## 3056 7.10e-48 175.0
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## 3058 9.00e-48 175.0
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## 3091 6.29e-48 168.0
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## 3096 3.05e-52 182.0
## 3097 5.83e-52 181.0
## 3098 2.64e-51 179.0
## 3099 3.60e-51 179.0
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## 3101 7.55e-49 173.0
## 3102 3.03e-47 169.0
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## 3107 2.70e-49 175.0
## 3108 5.58e-49 174.0
## 3109 4.29e-45 164.0
## 3110 2.22e-44 162.0
## 3111 2.01e-31 126.0
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## 3113 3.65e-51 176.0
## 3114 4.85e-51 176.0
## 3115 3.35e-48 168.0
## 3116 5.66e-48 167.0
## 3117 3.00e-39 144.0
## 3118 6.92e-53 179.0
## 3119 1.34e-50 173.0
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## 3121 3.11e-47 164.0
## 3122 7.27e-53 181.0
## 3123 6.11e-52 179.0
## 3124 4.11e-49 171.0
## 3125 5.83e-48 168.0
## 3126 2.78e-41 150.0
## 3127 7.43e-53 181.0
## 3128 2.20e-52 180.0
## 3129 2.95e-49 172.0
## 3130 3.22e-47 166.0
## 3131 1.28e-45 162.0
## 3132 4.68e-31 123.0
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## 3134 2.20e-52 180.0
## 3135 2.95e-49 172.0
## 3136 3.22e-47 166.0
## 3137 1.28e-45 162.0
## 3138 4.68e-31 123.0
## 3139 7.54e-53 180.0
## 3140 4.14e-50 173.0
## 3141 7.64e-50 172.0
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## 3143 2.65e-36 136.0
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## 3148 2.14e-52 180.0
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## 3150 1.38e-51 178.0
## 3151 7.63e-53 187.0
## 3152 5.78e-48 174.0
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## 3156 1.37e-46 170.0
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## 3177 1.23e-47 165.0
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## 3209 7.89e-08 55.1
## 3210 1.22e-52 181.0

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## 3219 6.71e-49 174.0
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## 3223 1.72e-42 156.0
## 3224 8.41e-42 154.0
## 3225 4.08e-38 144.0
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## 3227 1.38e-35 137.0
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## 3229 4.91e-52 182.0
## 3230 4.13e-49 174.0
## 3231 6.71e-49 174.0
## 3232 3.11e-48 172.0
## 3233 6.54e-48 171.0
## 3234 8.37e-47 168.0
## 3235 1.72e-42 156.0
## 3236 8.41e-42 154.0
## 3237 4.08e-38 144.0
## 3238 1.03e-35 137.0
## 3239 1.38e-35 137.0
## 3240 1.22e-52 184.0
## 3241 4.91e-52 182.0
## 3242 4.13e-49 174.0
## 3243 6.71e-49 174.0
## 3244 3.11e-48 172.0
## 3245 6.54e-48 171.0
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## 3247 1.72e-42 156.0
## 3248 8.41e-42 154.0
## 3249 4.08e-38 144.0
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## 3251 1.38e-35 137.0
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## 3264 3.60e-45 162.0
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## 3272 5.45e-43 154.0
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## 3274 2.41e-40 147.0
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## 3276 2.68e-19 89.4
## 3277 7.02e-19 88.2
## 3278 1.42e-52 179.0
## 3279 8.47e-52 177.0
## 3280 1.46e-48 169.0
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## 3282 5.45e-43 154.0
## 3283 1.82e-40 147.0
## 3284 2.41e-40 147.0
## 3285 1.22e-32 126.0
## 3286 2.68e-19 89.4
## 3287 7.02e-19 88.2
## 3288 1.53e-52 174.0
## 3289 1.23e-45 156.0
## 3290 1.02e-34 127.0
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## 3292 5.18e-52 184.0
## 3293 5.85e-52 184.0
## 3294 3.41e-51 182.0
## 3295 7.45e-50 178.0
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## 3297 7.81e-49 176.0
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## 3300 2.09e-47 172.0
## 3301 3.38e-47 171.0
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## 3303 3.28e-46 168.0
## 3304 4.94e-46 168.0
## 3305 6.87e-46 167.0
## 3306 7.44e-46 167.0
## 3307 7.57e-41 153.0
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## 3314 3.09e-50 179.0
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## 3317 4.21e-49 176.0
## 3318 9.66e-49 175.0
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## 3326 2.74e-48 169.0
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## 3328 1.94e-40 148.0
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## 3330 1.61e-52 189.0
## 3331 2.00e-52 188.0
## 3332 1.78e-51 186.0
## 3333 2.26e-51 185.0
## 3334 1.07e-50 183.0
## 3335 1.25e-50 183.0
## 3336 1.63e-50 183.0
## 3337 3.03e-50 182.0
## 3338 4.57e-50 181.0
## 3339 7.72e-50 181.0
## 3340 9.80e-50 181.0
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## 3343 6.29e-49 178.0
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## 3345 1.24e-48 177.0
## 3346 1.63e-48 177.0
## 3347 1.63e-48 177.0
## 3348 2.09e-48 177.0
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## 3354 2.93e-46 171.0
## 3355 7.38e-46 169.0
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## 3357 1.93e-45 168.0
## 3358 5.29e-45 167.0
## 3359 6.65e-45 166.0
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## 3361 1.09e-44 166.0
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## 3363 6.70e-44 164.0
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## 3369 4.41e-50 176.0
## 3370 7.12e-50 175.0
## 3371 1.78e-48 172.0
## 3372 1.09e-47 169.0
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## 3374 1.13e-46 167.0
## 3375 1.06e-45 164.0
## 3376 4.25e-44 160.0
## 3377 3.47e-41 152.0
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## 3381 2.44e-50 174.0
## 3382 1.57e-48 169.0
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## 3384 1.82e-52 177.0
## 3385 1.70e-50 172.0
## 3386 4.01e-46 161.0
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## 3389 3.50e-52 182.0
## 3390 5.43e-52 181.0
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## 3392 5.83e-51 178.0
## 3393 6.60e-51 178.0
## 3394 2.72e-50 177.0
## 3395 3.56e-50 176.0
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## 3413 8.46e-48 166.0
## 3414 5.84e-46 161.0
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## 3418 5.41e-52 187.0
## 3419 7.20e-52 187.0
## 3420 7.20e-52 187.0
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## 3422 1.46e-50 183.0
## 3423 2.01e-50 182.0
## 3424 2.56e-50 182.0
## 3425 7.16e-50 181.0
## 3426 1.28e-49 180.0
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## 3427 1.37e-49 180.0
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## 3431 7.38e-47 172.0
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## 3434 5.35e-45 167.0
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## 3436 3.90e-44 164.0
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## 3438 1.82e-41 156.0
## 3439 5.17e-41 155.0
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## 3449 2.36e-50 181.0
## 3450 3.06e-50 181.0
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## 3472 6.09e-47 172.0
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## 3479 2.07e-44 165.0
## 3480 1.40e-43 162.0

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## 3508 1.13e-51 178.0
## 3509 3.44e-49 172.0
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## 3513 3.87e-24 103.0
## 3514 2.80e-52 180.0
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## 3516 1.13e-51 178.0
## 3517 3.44e-49 172.0
## 3518 2.18e-48 169.0
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## 3526 2.18e-48 169.0
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## 3528 9.18e-33 127.0
## 3529 3.87e-24 103.0
## 3530 2.80e-52 180.0
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## 3532 1.13e-51 178.0
## 3533 3.44e-49 172.0
## 3534 2.18e-48 169.0
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## 3535 5.53e-48 168.0
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## 3566 3.13e-52 179.0
## 3567 3.30e-52 179.0
## 3568 9.11e-52 178.0
## 3569 6.42e-51 176.0
## 3570 2.58e-50 174.0
## 3571 2.69e-50 174.0
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## 3614 1.15e-47 174.0
## 3615 1.78e-47 174.0
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## 3623 4.81e-45 167.0
## 3624 5.34e-45 167.0
## 3625 1.27e-44 166.0
## 3626 1.53e-44 166.0
## 3627 2.08e-44 165.0
## 3628 1.65e-43 162.0
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## 3631 3.32e-52 179.0
## 3632 2.29e-47 166.0
## 3633 3.31e-44 158.0
## 3634 1.09e-38 143.0
## 3635 9.90e-29 116.0
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## 3637 7.43e-52 179.0
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## 3669 1.26e-43 151.0
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## 3679 6.28e-43 153.0
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## 3685 5.65e-49 178.0
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## 3717 1.10e-29 118.0
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## 3724 2.28e-51 176.0
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## 3727 2.23e-26 109.0
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## 3731 5.29e-44 157.0
## 3732 1.26e-43 156.0
## 3733 2.63e-30 120.0
## 3734 5.46e-52 176.0
## 3735 1.66e-48 167.0
## 3736 2.55e-45 159.0
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## 3740 9.58e-51 177.0
## 3741 4.89e-49 173.0
## 3742 1.33e-47 169.0
## 3743 7.12e-45 162.0
## 3744 1.36e-44 161.0
## 3745 8.55e-31 123.0
## 3746 5.65e-52 186.0
## 3747 1.82e-49 179.0
## 3748 8.00e-48 174.0
## 3749 2.69e-47 173.0
## 3750 1.66e-46 171.0
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## 3757 2.93e-44 164.0
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## 3792 1.30e-33 129.0
## 3793 7.67e-52 178.0
## 3794 7.25e-50 172.0
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## 3797 2.69e-25 106.0
## 3798 8.09e-52 175.0
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## 3804 2.32e-51 178.0
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## 3806 2.63e-49 173.0
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## 3819 9.25e-48 169.0
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## 3827 9.76e-49 171.0
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## 3833 2.90e-51 185.0
## 3834 1.32e-50 183.0
## 3835 1.52e-50 182.0
## 3836 1.58e-50 182.0
## 3837 5.43e-50 181.0
## 3838 1.96e-49 179.0
## 3839 2.30e-49 179.0
## 3840 3.24e-49 179.0
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## 3842 5.38e-49 178.0
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## 3845 9.92e-49 177.0
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## 3847 1.13e-48 177.0
## 3848 1.18e-48 177.0
## 3849 1.55e-48 177.0
## 3850 1.57e-48 177.0
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## 3853 2.34e-47 173.0
## 3854 3.33e-47 173.0
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## 3857 1.17e-46 171.0
## 3858 1.60e-46 171.0
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## 3864  3.60e-46 164.0
## 3865  9.34e-45 161.0
## 3866  1.73e-39 147.0
## 3867  3.24e-39 146.0
## 3868  9.02e-38 142.0
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## 3876  1.41e-13 72.4
## 3877  1.02e-51 177.0
## 3878  5.66e-48 167.0
## 3879  2.53e-46 162.0
## 3880  9.15e-44 156.0
## 3881  1.06e-51 178.0
## 3882  1.10e-51 178.0
## 3883  9.16e-49 171.0
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## 3885  2.11e-46 164.0
## 3886  1.18e-44 160.0
## 3887  1.95e-28 115.0
## 3888  1.11e-51 177.0
## 3889  2.85e-51 176.0
## 3890  1.49e-48 169.0
## 3891  2.14e-28 115.0
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## 3894  5.69e-48 170.0
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## 3898  9.45e-48 166.0
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## 3901  1.14e-51 176.0
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## 3903  1.42e-38 141.0
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## 3905  4.40e-25 105.0
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## 3907  2.35e-51 176.0
## 3908  2.13e-49 171.0
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## 3911  1.23e-51 180.0
## 3912  5.80e-48 170.0
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## 3928 1.38e-47 166.0
## 3929 2.66e-45 160.0
## 3930 1.08e-34 132.0
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## 3933 1.38e-47 166.0
## 3934 2.66e-45 160.0
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## 3959 9.40e-31 120.0
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## 3966 1.07e-35 132.0
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## 3975 2.89e-46 168.0
## 3976 1.08e-44 164.0
## 3977 5.40e-44 162.0
## 3978 1.19e-43 161.0
## 3979 2.17e-43 160.0
## 3980 2.78e-43 160.0
## 3981 2.79e-39 149.0
## 3982 3.67e-39 149.0
## 3983 4.74e-39 148.0
## 3984 1.07e-35 139.0
## 3985 1.96e-51 177.0
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## 3988 5.42e-45 160.0
## 3989 6.39e-43 154.0
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## 4005 7.40e-48 167.0
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## 4011 2.89e-47 167.0
## 4012 2.09e-46 165.0
## 4013 9.77e-44 158.0
## 4014 1.82e-42 154.0
## 4015 1.72e-27 113.0
## 4016 2.17e-51 176.0
## 4017 5.86e-50 172.0
## 4018 2.58e-45 160.0
## 4019 2.20e-51 175.0
## 4020 1.65e-50 172.0
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## 4021 1.19e-44 157.0
## 4022 2.26e-40 146.0
## 4023 3.42e-29 116.0
## 4024 1.51e-15 77.8
## 4025 2.23e-51 175.0
## 4026 1.23e-44 157.0
## 4027 3.04e-43 154.0
## 4028 3.29e-10 62.0
## 4029 2.27e-51 174.0
## 4030 1.49e-50 172.0
## 4031 1.08e-44 157.0
## 4032 2.62e-40 145.0
## 4033 2.58e-29 116.0
## 4034 1.16e-15 78.2
## 4035 2.39e-51 180.0
## 4036 3.42e-50 177.0
## 4037 6.80e-48 171.0
## 4038 1.43e-47 170.0
## 4039 5.53e-46 166.0
## 4040 7.69e-45 162.0
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## 4042 1.76e-31 125.0
## 4043 6.46e-31 124.0
## 4044 9.01e-12 67.8
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## 4046 2.56e-47 166.0
## 4047 2.62e-46 163.0
## 4048 2.28e-43 155.0
## 4049 6.14e-34 130.0
## 4050 9.74e-14 73.2
## 4051 1.23e-09 60.5
## 4052 2.39e-51 177.0
## 4053 2.56e-47 166.0
## 4054 2.62e-46 163.0
## 4055 2.28e-43 155.0
## 4056 6.14e-34 130.0
## 4057 9.74e-14 73.2
## 4058 1.23e-09 60.5
## 4059 2.47e-51 177.0
## 4060 8.01e-49 171.0
## 4061 6.19e-48 168.0
## 4062 4.60e-45 160.0
## 4063 2.47e-51 177.0
## 4064 8.01e-49 171.0
## 4065 6.19e-48 168.0
## 4066 4.60e-45 160.0
## 4067 2.48e-51 180.0
## 4068 3.47e-50 177.0
## 4069 7.79e-48 171.0
## 4070 1.62e-47 170.0
## 4071 6.12e-46 166.0
## 4072 7.83e-45 162.0
## 4073 8.12e-42 154.0
## 4074 4.31e-33 130.0
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## 4076 2.48e-51 176.0
## 4077 2.44e-49 171.0
## 4078 1.53e-46 163.0
## 4079 3.73e-37 138.0
## 4080 9.51e-31 121.0
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## 4082 1.58e-50 173.0
## 4083 7.04e-45 159.0
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## 4096 3.20e-43 162.0
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## 4098 1.87e-42 159.0
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## 4100 2.06e-42 159.0
## 4101 2.56e-42 159.0
## 4102 2.61e-42 159.0
## 4103 4.12e-42 158.0
## 4104 6.14e-42 158.0
## 4105 6.94e-42 157.0
## 4106 1.73e-41 156.0
## 4107 4.17e-41 155.0
## 4108 4.25e-41 155.0
## 4109 4.38e-41 155.0
## 4110 5.99e-41 155.0
## 4111 1.18e-40 154.0
## 4112 6.91e-40 152.0
## 4113 7.97e-40 152.0
## 4114 1.11e-39 151.0
## 4115 1.11e-39 151.0
## 4116 2.30e-39 150.0
## 4117 2.68e-39 150.0
## 4118 7.16e-38 146.0
## 4119 2.61e-51 177.0
## 4120 3.26e-51 177.0
## 4121 3.66e-51 177.0
## 4122 2.75e-50 174.0
## 4123 4.22e-47 166.0
## 4124 5.78e-47 166.0
## 4125 2.77e-51 179.0
## 4126 1.09e-49 174.0
## 4127 2.68e-48 171.0
## 4128 4.85e-48 170.0

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## 4129 1.30e-47 169.0
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## 4131 6.79e-44 159.0
## 4132 1.01e-43 159.0
## 4133 3.05e-43 157.0
## 4134 2.84e-51 177.0
## 4135 1.06e-43 157.0
## 4136 4.29e-38 142.0
## 4137 4.61e-38 142.0
## 4138 1.63e-35 135.0
## 4139 2.84e-51 177.0
## 4140 1.06e-43 157.0
## 4141 4.29e-38 142.0
## 4142 4.61e-38 142.0
## 4143 1.63e-35 135.0
## 4144 2.96e-51 173.0
## 4145 2.97e-51 176.0
## 4146 2.70e-47 165.0
## 4147 4.00e-45 159.0
## 4148 2.12e-34 131.0
## 4149 1.76e-29 117.0
## 4150 2.97e-51 176.0
## 4151 2.70e-47 165.0
## 4152 4.00e-45 159.0
## 4153 2.12e-34 131.0
## 4154 1.76e-29 117.0
## 4155 3.01e-51 178.0
## 4156 2.71e-48 170.0
## 4157 1.35e-45 163.0
## 4158 4.93e-45 161.0
## 4159 7.46e-44 158.0
## 4160 1.79e-40 149.0
## 4161 4.18e-29 118.0
## 4162 3.07e-51 178.0
## 4163 6.44e-48 169.0
## 4164 6.26e-44 158.0
## 4165 1.14e-40 149.0
## 4166 2.10e-28 116.0
## 4167 3.33e-51 174.0
## 4168 5.56e-40 145.0
## 4169 3.11e-13 71.2
## 4170 3.33e-51 174.0
## 4171 5.56e-40 145.0
## 4172 3.11e-13 71.2
## 4173 3.38e-51 172.0
## 4174 1.65e-47 163.0
## 4175 1.82e-46 160.0
## 4176 3.61e-51 175.0
## 4177 7.30e-47 164.0
## 4178 1.87e-38 142.0
## 4179 3.83e-28 114.0
## 4180 5.08e-13 70.9
## 4181 3.79e-51 173.0
## 4182 3.72e-33 125.0
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## 4185 2.11e-45 160.0
## 4186 2.47e-44 157.0
## 4187 3.59e-42 152.0
## 4188 1.07e-39 145.0
## 4189 1.63e-31 123.0
## 4190 8.70e-01 33.1
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## 4193 9.56e-51 182.0
## 4194 2.86e-50 181.0
## 4195 7.52e-50 180.0
## 4196 1.06e-48 176.0
## 4197 4.29e-48 175.0
## 4198 1.79e-47 173.0
## 4199 4.77e-47 172.0
## 4200 4.96e-47 172.0
## 4201 7.07e-46 169.0
## 4202 1.11e-45 168.0
## 4203 9.42e-45 165.0
## 4204 9.88e-43 159.0
## 4205 9.37e-42 157.0
## 4206 2.25e-38 147.0
## 4207 2.74e-37 144.0
## 4208 9.17e-37 142.0
## 4209 1.15e-33 133.0
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## 4211 4.83e-49 168.0
## 4212 4.88e-49 168.0
## 4213 3.57e-34 129.0
## 4214 4.70e-51 174.0
## 4215 3.80e-50 172.0
## 4216 4.36e-50 172.0
## 4217 8.36e-36 134.0
## 4218 4.88e-51 177.0
## 4219 1.48e-49 173.0
## 4220 5.52e-47 166.0
## 4221 2.16e-46 165.0
## 4222 8.27e-46 163.0
## 4223 2.25e-42 154.0
## 4224 1.10e-29 119.0
## 4225 5.52e-51 176.0
## 4226 8.69e-51 176.0
## 4227 1.02e-48 170.0
## 4228 8.91e-46 162.0
## 4229 2.84e-45 161.0
## 4230 5.91e-51 179.0
## 4231 5.61e-50 177.0
## 4232 1.26e-48 173.0
## 4233 1.58e-47 170.0
## 4234 1.18e-46 168.0
## 4235 2.54e-46 167.0
## 4236 1.38e-22 100.0
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## 4240 2.54e-47 172.0
## 4241 1.61e-46 169.0
## 4242 6.16e-45 165.0
## 4243 1.11e-44 164.0
## 4244 1.96e-42 158.0
## 4245 1.76e-41 155.0
## 4246 7.03e-37 142.0
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## 4248 1.03e-34 136.0
## 4249 1.26e-33 133.0
## 4250 6.10e-51 175.0
## 4251 5.26e-50 173.0
## 4252 5.54e-50 172.0
## 4253 2.36e-48 168.0
## 4254 2.41e-48 168.0
## 4255 1.94e-46 163.0
## 4256 7.08e-41 149.0
## 4257 1.54e-27 112.0
## 4258 3.10e-15 77.4
## 4259 6.10e-51 178.0
## 4260 2.38e-46 166.0
## 4261 1.95e-45 163.0
## 4262 2.96e-42 155.0
## 4263 6.48e-40 149.0
## 4264 5.97e-38 143.0
## 4265 6.73e-35 135.0
## 4266 1.97e-05 47.8
## 4267 6.22e-51 176.0
## 4268 1.31e-49 172.0
## 4269 2.77e-47 166.0
## 4270 2.04e-44 159.0
## 4271 8.81e-21 94.0
## 4272 6.44e-51 174.0
## 4273 1.00e-46 163.0
## 4274 1.03e-43 155.0
## 4275 1.48e-28 114.0
## 4276 3.22e-13 71.2
## 4277 6.82e-51 175.0
## 4278 1.24e-49 172.0
## 4279 1.49e-46 164.0
## 4280 3.11e-43 155.0
## 4281 6.82e-51 175.0
## 4282 1.24e-49 172.0
## 4283 1.49e-46 164.0
## 4284 3.11e-43 155.0
## 4285 7.03e-51 172.0
## 4286 1.22e-50 172.0
## 4287 9.71e-46 159.0
## 4288 7.27e-51 176.0
## 4289 1.52e-50 175.0
## 4290 4.75e-49 171.0
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## 4291 5.87e-49 171.0
## 4292 2.72e-48 169.0
## 4293 1.26e-47 167.0
## 4294 4.61e-33 128.0
## 4295 8.51e-51 171.0
## 4296 1.28e-31 121.0
## 4297 1.60e-21 94.0
## 4298 8.66e-51 174.0
## 4299 3.15e-48 167.0
## 4300 1.32e-45 160.0
## 4301 1.15e-43 155.0
## 4302 3.58e-42 152.0
## 4303 8.87e-51 176.0
## 4304 2.02e-50 174.0
## 4305 1.26e-49 172.0
## 4306 2.17e-47 167.0
## 4307 8.94e-51 175.0
## 4308 3.81e-44 157.0
## 4309 4.28e-40 146.0
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## 4311 7.60e-30 119.0
## 4312 2.45e-06 50.4
## 4313 8.95e-51 173.0
## 4314 2.79e-39 143.0
## 4315 2.08e-30 119.0
## 4316 1.15e-25 106.0
## 4317 1.60e-01 35.0
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## 4319 1.37e-46 163.0
## 4320 9.77e-45 158.0
## 4321 9.22e-35 132.0
## 4322 3.71e-29 117.0
## 4323 9.38e-51 175.0
## 4324 4.98e-49 171.0
## 4325 4.73e-45 160.0
## 4326 2.39e-40 147.0
## 4327 4.35e-31 122.0
## 4328 6.90e+00 30.0
## 4329 9.70e-51 180.0
## 4330 1.68e-46 168.0
## 4331 8.78e-41 152.0
## 4332 1.76e-39 149.0
## 4333 1.15e-38 147.0
## 4334 2.29e-38 145.0
## 4335 4.03e-34 134.0
## 4336 9.78e-51 170.0
## 4337 2.02e-46 159.0
## 4338 1.64e-40 143.0
## 4339 6.60e-38 136.0
## 4340 9.80e-51 176.0
## 4341 1.32e-48 170.0
## 4342 4.50e-48 169.0
## 4343 6.60e-45 160.0
## 4344 4.68e-44 158.0
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## 4348 4.69e-49 171.0
## 4349 4.94e-45 160.0
## 4350 4.59e-41 149.0
## 4351 1.54e-27 113.0
## 4352 1.04e-50 174.0
## 4353 3.54e-46 162.0
## 4354 1.37e-42 153.0
## 4355 7.52e-38 140.0
## 4356 9.18e-28 113.0
## 4357 1.05e-50 174.0
## 4358 2.68e-45 159.0
## 4359 3.27e-32 124.0
## 4360 8.70e+00 29.6
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## 4362 9.37e-47 164.0
## 4363 1.28e-44 158.0
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## 4365 5.13e-29 116.0
## 4366 1.08e-50 183.0
## 4367 1.28e-50 182.0
## 4368 1.24e-49 180.0
## 4369 2.37e-49 179.0
## 4370 2.51e-49 179.0
## 4371 1.81e-48 176.0
## 4372 2.58e-48 176.0
## 4373 3.07e-48 176.0
## 4374 9.48e-48 174.0
## 4375 1.02e-47 174.0
## 4376 1.33e-47 174.0
## 4377 1.75e-47 174.0
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## 4380 6.79e-47 172.0
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## 4384 4.07e-36 140.0
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## 4390 4.76e-42 153.0
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## 4392 4.75e-35 134.0
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## 4394 1.23e-50 176.0
## 4395 2.97e-46 164.0
## 4396 2.31e-43 157.0
## 4397 2.07e-42 154.0
## 4398 4.44e-42 153.0
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## 4400 4.25e-35 134.0
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## 4403 8.12e-49 169.0
## 4404 1.84e-43 155.0
## 4405 5.18e-32 124.0
## 4406 1.32e-50 173.0
## 4407 6.88e-32 124.0
## 4408 1.34e-50 172.0
## 4409 6.66e-48 165.0
## 4410 7.39e-47 162.0
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## 4412 1.73e-20 91.7
## 4413 4.55e-13 70.5
## 4414 1.35e-50 171.0
## 4415 1.80e-48 166.0
## 4416 4.24e-39 141.0
## 4417 4.86e-31 120.0
## 4418 8.49e-16 78.2
## 4419 1.35e-50 175.0
## 4420 2.96e-49 171.0
## 4421 1.26e-47 167.0
## 4422 7.47e-44 157.0
## 4423 1.38e-50 171.0
## 4424 2.03e-43 152.0
## 4425 3.84e-40 143.0
## 4426 1.11e-35 132.0
## 4427 1.42e-50 177.0
## 4428 4.16e-45 162.0
## 4429 2.11e-41 152.0
## 4430 2.43e-40 150.0
## 4431 1.66e-39 147.0
## 4432 3.65e-38 144.0
## 4433 1.07e-32 129.0
## 4434 1.89e-05 47.8
## 4435 1.53e-50 170.0
## 4436 1.73e-45 157.0
## 4437 7.52e-45 155.0
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## 4440 1.20e+00 32.0
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## 4442 1.73e-45 157.0
## 4443 7.52e-45 155.0
## 4444 9.73e-43 149.0
## 4445 1.50e-32 122.0
## 4446 1.20e+00 32.0
## 4447 1.59e-50 182.0
## 4448 6.29e-46 169.0
## 4449 4.08e-45 167.0
## 4450 2.03e-43 162.0
## 4451 1.86e-42 159.0
## 4452 8.10e-42 157.0

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## 4453 4.97e-41 155.0
## 4454 3.19e-40 152.0
## 4455 8.26e-40 151.0
## 4456 6.09e-39 149.0
## 4457 8.41e-39 148.0
## 4458 8.95e-35 137.0
## 4459 3.69e-34 135.0
## 4460 3.76e-34 135.0
## 4461 1.24e-28 119.0
## 4462 8.70e-27 113.0
## 4463 1.62e-25 109.0
## 4464 1.63e-50 174.0
## 4465 1.60e-47 166.0
## 4466 6.50e-46 161.0
## 4467 6.30e-45 159.0
## 4468 1.92e-44 157.0
## 4469 8.26e-43 153.0
## 4470 6.30e-36 135.0
## 4471 2.61e-35 133.0
## 4472 9.33e-30 118.0
## 4473 3.32e-08 56.2
## 4474 1.76e-50 173.0
## 4475 1.76e-45 160.0
## 4476 1.01e-30 120.0
## 4477 1.92e-50 181.0
## 4478 3.98e-47 172.0
## 4479 2.73e-46 169.0
## 4480 4.61e-46 169.0
## 4481 5.19e-46 169.0
## 4482 8.76e-46 168.0
## 4483 8.19e-45 165.0
## 4484 9.21e-45 165.0
## 4485 2.88e-44 164.0
## 4486 4.39e-43 160.0
## 4487 6.12e-43 160.0
## 4488 1.07e-42 159.0
## 4489 9.22e-42 156.0
## 4490 9.96e-42 156.0
## 4491 6.08e-41 154.0
## 4492 3.32e-37 143.0
## 4493 4.26e-37 143.0
## 4494 2.01e-50 174.0
## 4495 3.69e-47 165.0
## 4496 1.12e-44 159.0
## 4497 1.72e-39 145.0
## 4498 3.75e-35 133.0
## 4499 6.14e-34 130.0
## 4500 2.30e-32 125.0
## 4501 2.03e-50 176.0
## 4502 1.24e-48 171.0
## 4503 3.60e-47 167.0
## 4504 1.01e-44 160.0
## 4505 1.20e-42 155.0
## 4506 3.92e-42 154.0
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## 4507 5.29e-33 129.0
## 4508 9.19e-28 114.0
## 4509 4.05e-27 112.0
## 4510 2.17e-04 44.3
## 4511 2.24e-50 171.0
## 4512 1.37e-48 167.0
## 4513 1.12e-42 151.0
## 4514 8.95e-34 128.0
## 4515 2.32e-50 170.0
## 4516 3.91e-31 119.0
## 4517 1.32e-21 94.0
## 4518 2.40e-50 171.0
## 4519 8.00e-50 170.0
## 4520 2.45e-44 155.0
## 4521 8.54e-30 117.0
## 4522 2.42e-50 173.0
## 4523 1.62e-49 171.0
## 4524 4.11e-47 165.0
## 4525 3.92e-44 157.0
## 4526 6.36e-26 108.0
## 4527 8.00e-03 39.3
## 4528 2.44e-50 173.0
## 4529 1.17e-49 171.0
## 4530 2.39e-44 157.0
## 4531 1.64e-29 117.0
## 4532 2.60e-50 173.0
## 4533 6.84e-46 162.0
## 4534 3.10e-45 160.0
## 4535 4.37e-36 135.0
## 4536 1.65e-30 120.0
## 4537 5.43e-26 108.0
## 4538 2.60e-50 173.0
## 4539 6.84e-46 162.0
## 4540 3.10e-45 160.0
## 4541 4.37e-36 135.0
## 4542 1.65e-30 120.0
## 4543 5.43e-26 108.0
## 4544 2.69e-50 174.0
## 4545 1.43e-49 172.0
## 4546 5.81e-49 171.0
## 4547 6.34e-47 165.0
## 4548 1.20e-46 164.0
## 4549 6.43e-46 162.0
## 4550 1.83e-39 145.0
## 4551 1.04e-16 82.0
## 4552 2.73e-50 174.0
## 4553 3.83e-49 171.0
## 4554 1.05e-44 159.0
## 4555 3.66e-35 134.0
## 4556 3.62e-29 117.0
## 4557 2.99e-50 171.0
## 4558 5.66e-45 157.0
## 4559 3.00e-50 174.0
## 4560 4.45e-48 168.0
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## 4561 1.83e-45 161.0
## 4562 5.78e-38 141.0
## 4563 1.52e-28 115.0
## 4564 3.01e-50 174.0
## 4565 6.49e-50 173.0
## 4566 4.70e-49 171.0
## 4567 1.06e-47 167.0
## 4568 1.67e-47 167.0
## 4569 9.55e-40 146.0
## 4570 9.48e-17 82.0
## 4571 3.18e-50 171.0
## 4572 5.60e-46 159.0
## 4573 9.22e-30 117.0
## 4574 1.94e-15 77.0
## 4575 3.54e-50 171.0
## 4576 1.41e-42 151.0
## 4577 3.72e-50 169.0
## 4578 9.40e-45 155.0
## 4579 4.62e-44 153.0
## 4580 1.42e-39 141.0
## 4581 1.38e-26 107.0
## 4582 3.72e-50 169.0
## 4583 9.40e-45 155.0
## 4584 4.62e-44 153.0
## 4585 1.42e-39 141.0
## 4586 1.38e-26 107.0
## 4587 4.30e-50 173.0
## 4588 1.14e-45 161.0
## 4589 4.80e-45 159.0
## 4590 4.86e-36 135.0
## 4591 4.18e-30 119.0
## 4592 5.60e-26 108.0
## 4593 4.40e-50 174.0
## 4594 3.80e-49 171.0
## 4595 1.19e-43 157.0
## 4596 2.72e-43 155.0
## 4597 6.40e-40 147.0
## 4598 7.32e-36 135.0
## 4599 1.09e-32 127.0
## 4600 4.57e-50 172.0
## 4601 1.08e-49 171.0
## 4602 6.51e-49 169.0
## 4603 1.29e-47 166.0
## 4604 2.44e-47 165.0
## 4605 4.58e-39 143.0
## 4606 1.35e-30 120.0
## 4607 4.58e-50 172.0
## 4608 3.98e-49 169.0
## 4609 4.13e-44 156.0
## 4610 7.93e-08 54.7
## 4611 4.98e-50 170.0
## 4612 1.59e-47 163.0
## 4613 2.66e-39 142.0
## 4614 5.42e-50 171.0
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## 4615 1.12e-44 157.0
## 4616 3.47e-103 309.0
## 4617 3.19e-99 299.0
## 4618 1.44e-96 292.0
## 4619 4.94e-95 288.0
## 4620 1.52e-92 281.0
## 4621 2.26e-71 227.0
## 4622 1.33e-19 90.1
## 4623 8.58e-103 310.0
## 4624 1.48e-94 289.0
## 4625 5.92e-93 285.0
## 4626 2.26e-92 283.0
## 4627 6.64e-90 277.0
## 4628 9.16e-89 274.0
## 4629 6.98e-66 215.0
## 4630 1.15e-13 72.8
## 4631 1.00e-102 313.0
## 4632 9.53e-101 308.0
## 4633 2.44e-100 306.0
## 4634 2.79e-99 304.0
## 4635 2.01e-98 301.0
## 4636 3.24e-98 301.0
## 4637 6.11e-96 295.0
## 4638 3.68e-90 280.0
## 4639 1.09e-88 276.0
## 4640 2.72e-86 270.0
## 4641 1.31e-69 227.0
## 4642 1.25e-15 79.3
## 4643 1.98e-102 309.0
## 4644 1.75e-99 301.0
## 4645 9.47e-99 300.0
## 4646 1.14e-98 300.0
## 4647 1.60e-97 296.0
## 4648 2.68e-87 270.0
## 4649 1.15e-50 175.0
## 4650 1.49e-28 116.0
## 4651 1.01e-101 309.0
## 4652 2.13e-98 301.0
## 4653 5.90e-96 295.0
## 4654 2.82e-95 293.0
## 4655 3.11e-93 288.0
## 4656 1.67e-92 286.0
## 4657 4.30e-86 269.0
## 4658 3.99e-81 256.0
## 4659 1.94e-101 309.0
## 4660 3.83e-97 298.0
## 4661 2.37e-96 296.0
## 4662 2.89e-95 293.0
## 4663 1.03e-91 284.0
## 4664 2.75e-88 275.0
## 4665 6.85e-87 271.0
## 4666 2.54e-101 308.0
## 4667 2.56e-98 300.0
## 4668 7.17e-96 294.0
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## 4669  3.39e-95 293.0
## 4670  3.74e-93 287.0
## 4671  2.01e-92 285.0
## 4672  4.95e-86 269.0
## 4673  5.15e-82 259.0
## 4674  3.12e-101 304.0
## 4675  7.04e-101 303.0
## 4676  4.38e-97 294.0
## 4677  2.61e-92 281.0
## 4678  2.76e-76 240.0
## 4679  5.96e-50 172.0
## 4680  1.95e-100 303.0
## 4681  2.27e-100 303.0
## 4682  2.23e-98 298.0
## 4683  1.19e-91 281.0
## 4684  3.18e-86 267.0
## 4685  1.10e-57 193.0
## 4686  3.15e-100 303.0
## 4687  3.16e-98 298.0
## 4688  1.63e-91 281.0
## 4689  1.52e-88 273.0
## 4690  3.26e-88 272.0
## 4691  9.11e-88 271.0
## 4692  1.34e-62 206.0
## 4693  3.43e-52 179.0
## 4694  4.48e-100 307.0
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## 4696  8.89e-96 296.0
## 4697  1.75e-95 295.0
## 4698  2.06e-95 295.0
## 4699  6.64e-95 293.0
## 4700  3.09e-94 292.0
## 4701  1.45e-93 290.0
## 4702  7.86e-93 288.0
## 4703  1.50e-92 288.0
## 4704  1.99e-91 285.0
## 4705  7.96e-89 278.0
## 4706  6.69e-82 260.0
## 4707  4.70e-26 110.0
## 4708  4.65e-100 303.0
## 4709  9.51e-100 302.0
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## 4711  7.69e-99 300.0
## 4712  1.08e-97 297.0
## 4713  1.31e-87 271.0
## 4714  2.37e-83 260.0
## 4715  5.27e-100 302.0
## 4716  1.20e-92 283.0
## 4717  7.39e-91 278.0
## 4718  3.89e-72 230.0
## 4719  5.85e-100 303.0
## 4720  5.11e-99 300.0
## 4721  1.05e-97 297.0
## 4722  1.21e-96 294.0
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## 4723 8.77e-96 292.0
## 4724 7.48e-94 287.0
## 4725 1.92e-92 283.0
## 4726 1.59e-82 258.0
## 4727 8.96e-69 223.0
## 4728 3.96e-62 205.0
## 4729 7.75e-100 303.0
## 4730 9.83e-100 303.0
## 4731 2.10e-96 295.0
## 4732 7.20e-96 293.0
## 4733 9.96e-96 293.0
## 4734 6.29e-93 286.0
## 4735 1.81e-86 269.0
## 4736 3.29e-60 201.0
## 4737 8.86e-100 305.0
## 4738 1.29e-93 289.0
## 4739 3.70e-93 288.0
## 4740 5.02e-90 280.0
## 4741 8.97e-90 279.0
## 4742 9.98e-86 269.0
## 4743 5.87e-85 267.0
## 4744 8.73e-85 266.0
## 4745 3.52e-56 192.0
## 4746 1.60e-99 300.0
## 4747 1.86e-95 290.0
## 4748 3.18e-86 266.0
## 4749 6.22e-85 263.0
## 4750 7.98e-74 234.0
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## 4752 2.18e-96 291.0
## 4753 2.56e-94 286.0
## 4754 2.81e-99 302.0
## 4755 1.91e-96 295.0
## 4756 5.93e-96 293.0
## 4757 9.33e-96 293.0
## 4758 2.78e-94 289.0
## 4759 5.71e-93 286.0
## 4760 1.51e-86 270.0
## 4761 2.04e-56 191.0
## 4762 7.62e-99 301.0
## 4763 6.29e-97 296.0
## 4764 2.92e-94 289.0
## 4765 7.63e-94 288.0
## 4766 2.17e-93 287.0
## 4767 2.59e-93 286.0
## 4768 1.02e-89 277.0
## 4769 1.23e-98 296.0
## 4770 1.39e-92 281.0
## 4771 6.32e-90 274.0
## 4772 1.03e-85 263.0
## 4773 2.89e-82 254.0
## 4774 1.49e-98 297.0
## 4775 2.51e-89 273.0
## 4776 3.47e-34 130.0
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## 4777 2.23e-32 125.0
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## 4779 9.67e-98 301.0
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## 4781 2.75e-95 295.0
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## 4783 1.97e-94 292.0
## 4784 1.37e-92 288.0
## 4785 7.35e-92 286.0
## 4786 1.68e-85 269.0
## 4787 3.94e-58 198.0
## 4788 1.78e-98 302.0
## 4789 1.91e-97 299.0
## 4790 2.63e-95 293.0
## 4791 2.08e-94 291.0
## 4792 7.34e-94 290.0
## 4793 1.45e-93 289.0
## 4794 2.98e-93 288.0
## 4795 2.92e-92 286.0
## 4796 6.82e-90 280.0
## 4797 1.83e-98 302.0
## 4798 1.20e-95 295.0
## 4799 9.71e-93 287.0
## 4800 5.64e-90 280.0
## 4801 1.08e-88 277.0
## 4802 1.84e-84 266.0
## 4803 2.31e-82 261.0
## 4804 2.41e-77 248.0
## 4805 1.18e-62 209.0
## 4806 1.85e-98 303.0
## 4807 1.18e-97 301.0
## 4808 3.54e-95 294.0
## 4809 1.46e-94 293.0
## 4810 1.69e-92 287.0
## 4811 1.77e-92 287.0
## 4812 5.70e-92 286.0
## 4813 8.67e-92 286.0
## 4814 2.13e-85 269.0
## 4815 2.77e-55 190.0
## 4816 2.31e-98 303.0
## 4817 1.33e-97 301.0
## 4818 4.46e-95 295.0
## 4819 9.07e-95 294.0
## 4820 1.75e-94 293.0
## 4821 4.79e-94 292.0
## 4822 1.96e-92 288.0
## 4823 1.02e-91 286.0
## 4824 4.70e-89 279.0
## 4825 2.14e-85 270.0
## 4826 7.55e-55 189.0
## 4827 2.44e-98 300.0
## 4828 9.02e-98 299.0
## 4829 1.56e-96 296.0
## 4830 1.54e-95 293.0
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## 4831 1.59e-95 293.0
## 4832 6.57e-94 289.0
## 4833 1.63e-93 288.0
## 4834 9.88e-92 283.0
## 4835 7.70e-88 273.0
## 4836 2.45e-98 298.0
## 4837 3.58e-95 290.0
## 4838 2.05e-93 286.0
## 4839 1.25e-89 276.0
## 4840 4.56e-87 270.0
## 4841 2.49e-98 300.0
## 4842 5.57e-97 297.0
## 4843 7.43e-96 294.0
## 4844 3.30e-95 293.0
## 4845 3.48e-93 287.0
## 4846 2.00e-92 285.0
## 4847 5.14e-86 269.0
## 4848 8.56e-78 248.0
## 4849 3.60e-98 300.0
## 4850 4.52e-98 300.0
## 4851 2.54e-97 298.0
## 4852 7.96e-96 294.0
## 4853 1.99e-95 293.0
## 4854 6.12e-95 292.0
## 4855 2.26e-94 290.0
## 4856 8.79e-94 289.0
## 4857 3.25e-89 277.0
## 4858 1.70e-17 84.7
## 4859 3.83e-98 301.0
## 4860 2.08e-97 299.0
## 4861 2.75e-95 293.0
## 4862 4.71e-95 293.0
## 4863 2.20e-94 291.0
## 4864 3.10e-94 291.0
## 4865 8.63e-94 290.0
## 4866 2.62e-93 288.0
## 4867 3.28e-93 288.0
## 4868 7.75e-89 277.0
## 4869 4.66e-98 301.0
## 4870 1.19e-97 300.0
## 4871 3.01e-95 294.0
## 4872 9.83e-95 293.0
## 4873 1.53e-94 292.0
## 4874 3.25e-94 291.0
## 4875 5.25e-92 286.0
## 4876 2.65e-90 281.0
## 4877 1.45e-83 264.0
## 4878 8.44e-98 306.0
## 4879 2.06e-96 302.0
## 4880 4.39e-96 301.0
## 4881 4.83e-96 301.0
## 4882 3.66e-94 296.0
## 4883 7.54e-94 296.0
## 4884 2.21e-93 294.0
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## 4885 2.70e-93 294.0
## 4886 1.70e-92 292.0
## 4887 4.51e-92 291.0
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## 4889 4.10e-91 288.0
## 4890 4.00e-89 283.0
## 4891 1.90e-88 281.0
## 4892 1.04e-97 293.0
## 4893 1.69e-81 251.0
## 4894 1.06e-97 297.0
## 4895 3.86e-95 291.0
## 4896 4.50e-93 285.0
## 4897 4.22e-92 283.0
## 4898 1.61e-91 281.0
## 4899 3.14e-83 260.0
## 4900 1.62e-97 296.0
## 4901 4.43e-96 293.0
## 4902 8.07e-93 285.0
## 4903 8.34e-92 282.0
## 4904 1.79e-97 307.0
## 4905 5.34e-94 298.0
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## 4907 1.11e-87 281.0
## 4908 2.07e-87 281.0
## 4909 3.15e-87 280.0
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## 4912 2.97e-84 272.0
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## 4918 2.92e-97 297.0
## 4919 6.44e-97 296.0
## 4920 1.37e-96 295.0
## 4921 3.87e-96 294.0
## 4922 6.65e-96 293.0
## 4923 4.12e-94 289.0
## 4924 7.00e-94 288.0
## 4925 5.02e-89 276.0
## 4926 1.60e-17 84.7
## 4927 2.21e-97 296.0
## 4928 7.12e-97 295.0
## 4929 4.94e-96 293.0
## 4930 1.77e-95 291.0
## 4931 6.92e-95 290.0
## 4932 4.96e-93 285.0
## 4933 3.69e-86 268.0
## 4934 2.85e-97 291.0
## 4935 4.40e-94 283.0
## 4936 1.85e-86 264.0
## 4937 3.18e-86 263.0
## 4938 2.87e-97 295.0
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## 4939 2.18e-96 293.0
## 4940 3.58e-96 293.0
## 4941 7.46e-94 286.0
## 4942 5.01e-93 285.0
## 4943 1.01e-86 268.0
## 4944 7.65e-86 266.0
## 4945 5.01e-40 147.0
## 4946 3.80e-97 295.0
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## 4948 2.85e-96 293.0
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## 4950 2.66e-94 288.0
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## 4952 1.28e-87 270.0
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## 4954 4.89e-97 292.0
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## 4963 9.23e-94 292.0
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## 4966 2.87e-64 215.0
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## 4970 2.70e-94 289.0
## 4971 5.33e-92 283.0
## 4972 5.69e-92 283.0
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## 4974 1.30e-90 280.0
## 4975 4.00e-81 255.0
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## 4979 6.84e-96 293.0
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## 4981 1.18e-93 287.0
## 4982 1.31e-93 287.0
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## 4985 1.58e-85 266.0
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## 4990 9.71e-97 294.0
## 4991 9.55e-91 279.0
## 4992 6.22e-83 259.0
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## 4993 9.71e-97 294.0
## 4994 9.55e-91 279.0
## 4995 6.22e-83 259.0
## 4996 9.71e-97 294.0
## 4997 9.55e-91 279.0
## 4998 6.22e-83 259.0
## 4999 9.71e-97 294.0
## 5000 9.55e-91 279.0
## 5001 6.22e-83 259.0
## 5002 9.71e-97 294.0
## 5003 9.55e-91 279.0
## 5004 6.22e-83 259.0
## 5005 1.02e-96 290.0
## 5006 3.14e-94 284.0
## 5007 1.62e-84 259.0
## 5008 2.95e-83 256.0
## 5009 6.84e-59 193.0
## 5010 1.06e-96 295.0
## 5011 1.19e-95 292.0
## 5012 4.21e-95 290.0
## 5013 6.28e-95 290.0
## 5014 1.56e-94 289.0
## 5015 1.10e-93 287.0
## 5016 1.14e-92 284.0
## 5017 3.03e-86 268.0
## 5018 8.00e-86 267.0
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## 5021 1.47e-91 281.0
## 5022 3.07e-82 257.0
## 5023 1.11e-96 294.0
## 5024 1.47e-91 281.0
## 5025 3.07e-82 257.0
## 5026 1.11e-96 294.0
## 5027 1.47e-91 281.0
## 5028 3.07e-82 257.0
## 5029 1.11e-96 294.0
## 5030 1.47e-91 281.0
## 5031 3.07e-82 257.0
## 5032 1.11e-96 294.0
## 5033 1.47e-91 281.0
## 5034 3.07e-82 257.0
## 5035 1.11e-96 294.0
## 5036 1.47e-91 281.0
## 5037 3.07e-82 257.0
## 5038 1.11e-96 294.0
## 5039 1.47e-91 281.0
## 5040 3.07e-82 257.0
## 5041 1.11e-96 294.0
## 5042 1.47e-91 281.0
## 5043 3.07e-82 257.0
## 5044 1.11e-96 294.0
## 5045 1.47e-91 281.0
## 5046 3.07e-82 257.0
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## 5047 1.11e-96 294.0
## 5048 1.47e-91 281.0
## 5049 3.07e-82 257.0
## 5050 1.11e-96 294.0
## 5051 1.47e-91 281.0
## 5052 3.07e-82 257.0
## 5053 1.11e-96 294.0
## 5054 1.47e-91 281.0
## 5055 3.07e-82 257.0
## 5056 1.11e-96 294.0
## 5057 1.47e-91 281.0
## 5058 3.07e-82 257.0
## 5059 1.11e-96 294.0
## 5060 1.47e-91 281.0
## 5061 3.07e-82 257.0
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## 5063 1.66e-91 280.0
## 5064 3.24e-82 256.0
## 5065 1.38e-96 293.0
## 5066 1.66e-91 280.0
## 5067 3.24e-82 256.0
## 5068 1.38e-96 293.0
## 5069 1.66e-91 280.0
## 5070 3.24e-82 256.0
## 5071 1.38e-96 293.0
## 5072 1.66e-91 280.0
## 5073 3.24e-82 256.0
## 5074 1.38e-96 293.0
## 5075 1.66e-91 280.0
## 5076 3.24e-82 256.0
## 5077 1.38e-96 293.0
## 5078 1.66e-91 280.0
## 5079 3.24e-82 256.0
## 5080 1.38e-96 293.0
## 5081 1.66e-91 280.0
## 5082 3.24e-82 256.0
## 5083 1.38e-96 293.0
## 5084 1.66e-91 280.0
## 5085 3.24e-82 256.0
## 5086 1.38e-96 293.0
## 5087 1.66e-91 280.0
## 5088 3.24e-82 256.0
## 5089 1.38e-96 293.0
## 5090 1.66e-91 280.0
## 5091 3.24e-82 256.0
## 5092 1.38e-96 293.0
## 5093 1.66e-91 280.0
## 5094 3.24e-82 256.0
## 5095 1.38e-96 293.0
## 5096 1.66e-91 280.0
## 5097 3.24e-82 256.0
## 5098 1.65e-96 294.0
## 5099 5.72e-84 262.0
## 5100 1.11e-71 230.0
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## 5101 1.38e-59 199.0
## 5102 1.81e-96 294.0
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## 5104 1.28e-82 259.0
## 5105 2.77e-96 298.0
## 5106 3.72e-95 295.0
## 5107 5.12e-93 290.0
## 5108 7.06e-93 290.0
## 5109 3.14e-90 283.0
## 5110 5.59e-90 282.0
## 5111 1.46e-83 265.0
## 5112 2.19e-82 262.0
## 5113 5.49e-79 253.0
## 5114 1.09e-47 171.0
## 5115 3.46e-96 292.0
## 5116 2.97e-90 276.0
## 5117 1.46e-87 270.0
## 5118 1.51e-86 267.0
## 5119 2.73e-65 213.0
## 5120 1.64e-07 53.9
## 5121 3.52e-96 301.0
## 5122 2.08e-94 296.0
## 5123 4.14e-93 293.0
## 5124 9.54e-92 290.0
## 5125 2.82e-91 288.0
## 5126 6.19e-91 287.0
## 5127 8.89e-91 287.0
## 5128 1.02e-87 279.0
## 5129 1.60e-85 273.0
## 5130 8.80e-85 271.0
## 5131 8.20e-81 261.0
## 5132 7.08e-47 170.0
## 5133 3.63e-96 295.0
## 5134 3.33e-94 290.0
## 5135 1.97e-91 283.0
## 5136 2.01e-91 283.0
## 5137 6.88e-90 279.0
## 5138 2.06e-89 278.0
## 5139 1.19e-88 276.0
## 5140 3.57e-86 270.0
## 5141 5.17e-84 264.0
## 5142 2.26e-17 84.3
## 5143 3.66e-96 296.0
## 5144 1.27e-95 295.0
## 5145 3.92e-95 293.0
## 5146 3.92e-95 293.0
## 5147 4.33e-94 290.0
## 5148 4.25e-93 288.0
## 5149 9.95e-92 285.0
## 5150 2.11e-91 283.0
## 5151 3.77e-89 278.0
## 5152 1.93e-85 268.0
## 5153 3.72e-96 298.0
## 5154 6.26e-95 295.0
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## 5155 1.82e-93 291.0
## 5156 7.83e-93 289.0
## 5157 7.95e-91 284.0
## 5158 1.74e-90 283.0
## 5159 2.50e-88 278.0
## 5160 6.76e-88 276.0
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## 5162 9.28e-82 260.0
## 5163 9.76e-07 52.0
## 5164 4.64e-96 293.0
## 5165 6.90e-93 285.0
## 5166 6.18e-92 283.0
## 5167 1.69e-91 282.0
## 5168 3.16e-89 276.0
## 5169 3.44e-83 261.0
## 5170 4.83e-96 288.0
## 5171 4.49e-95 286.0
## 5172 2.11e-88 269.0
## 5173 1.54e-79 246.0
## 5174 5.83e-96 306.0
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## 5176 1.20e-91 295.0
## 5177 2.69e-90 291.0
## 5178 1.01e-89 290.0
## 5179 2.04e-89 288.0
## 5180 2.57e-89 288.0
## 5181 3.69e-89 288.0
## 5182 1.22e-88 286.0
## 5183 1.35e-88 286.0
## 5184 2.32e-88 286.0
## 5185 4.02e-88 285.0
## 5186 2.98e-87 283.0
## 5187 3.86e-87 283.0
## 5188 4.74e-87 282.0
## 5189 5.00e-87 282.0
## 5190 6.27e-87 282.0
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## 5192 1.66e-86 281.0
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## 5194 1.72e-85 278.0
## 5195 2.41e-84 275.0
## 5196 4.59e-82 269.0
## 5197 1.53e-81 268.0
## 5198 1.94e-79 262.0
## 5199 1.56e-78 259.0
## 5200 6.28e-96 291.0
## 5201 4.52e-77 242.0
## 5202 8.46e-35 132.0
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## 5207 8.64e-96 305.0
## 5208 8.82e-96 305.0
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## 5212 2.12e-93 299.0
## 5213 1.10e-92 297.0
## 5214 1.13e-92 297.0
## 5215 1.34e-92 296.0
## 5216 1.35e-92 296.0
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## 5218 1.43e-89 288.0
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## 5220 3.16e-88 285.0
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## 5223 4.31e-79 260.0
## 5224 9.29e-67 227.0
## 5225 2.50e-38 147.0
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## 5227 3.51e-95 293.0
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## 5229 1.77e-94 291.0
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## 5231 1.41e-91 284.0
## 5232 1.82e-88 276.0
## 5233 5.66e-86 269.0
## 5234 2.00e-82 260.0
## 5235 2.01e-72 234.0
## 5236 1.49e-95 289.0
## 5237 1.51e-90 276.0
## 5238 1.13e-83 259.0
## 5239 4.41e-80 249.0
## 5240 1.59e-95 288.0
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## 5242 1.75e-37 138.0
## 5243 2.18e-95 299.0
## 5244 3.03e-94 296.0
## 5245 1.25e-93 294.0
## 5246 5.73e-93 292.0
## 5247 7.24e-93 292.0
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## 5249 5.77e-92 290.0
## 5250 2.91e-91 288.0
## 5251 7.33e-91 287.0
## 5252 3.11e-90 285.0
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## 5254 1.12e-87 279.0
## 5255 8.48e-86 274.0
## 5256 1.12e-83 268.0
## 5257 2.31e-80 259.0
## 5258 8.47e-74 242.0
## 5259 5.00e-03 40.4
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## 5261 1.45e-92 281.0
## 5262 1.75e-63 206.0
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## 5273 2.32e-91 286.0
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## 5291 5.43e-89 279.0
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## 5294 6.17e-88 276.0
## 5295 2.28e-87 275.0
## 5296 4.65e-86 271.0
## 5297 5.18e-76 245.0
## 5298 6.14e-16 80.1
## 5299 5.29e-15 77.4
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## 5302 7.24e-93 292.0
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## 5304 3.95e-90 285.0
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## 5310 4.47e-88 280.0
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## 5312 1.05e-86 276.0
## 5313 6.85e-86 274.0
## 5314 1.04e-84 271.0
## 5315 8.86e-95 301.0
## 5316 7.34e-94 299.0
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## 5324 3.07e-89 286.0
## 5325 1.24e-88 285.0
## 5326 1.90e-87 282.0
## 5327 2.90e-86 278.0
## 5328 1.29e-85 277.0
## 5329 1.48e-85 277.0
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## 5331 1.35e-80 263.0
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## 5333 2.42e-80 263.0
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## 5336 2.35e-91 287.0
## 5337 4.95e-91 286.0
## 5338 7.05e-90 283.0
## 5339 5.23e-88 278.0
## 5340 3.58e-86 274.0
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## 5342 6.95e-85 270.0
## 5343 1.32e-82 264.0
## 5344 3.97e-65 218.0
## 5345 7.00e-03 39.7
## 5346 1.09e-94 287.0
## 5347 3.26e-94 286.0
## 5348 9.22e-94 285.0
## 5349 9.31e-87 267.0
## 5350 6.05e-86 265.0
## 5351 1.11e-94 288.0
## 5352 6.35e-94 286.0
## 5353 3.94e-91 279.0
## 5354 3.55e-89 274.0
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## 5363 2.09e-85 265.0
## 5364 2.51e-22 98.2
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## 5366 1.17e-84 260.0
## 5367 2.51e-65 211.0
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## 5370 1.61e-94 286.0
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## 5385 1.23e-93 296.0
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## 5388 2.51e-92 293.0
## 5389 3.79e-92 292.0
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## 5394 2.39e-90 288.0
## 5395 2.57e-90 288.0
## 5396 3.46e-90 287.0
## 5397 4.80e-90 287.0
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## 5401 2.31e-89 285.0
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## 5403 2.28e-94 288.0
## 5404 2.11e-93 286.0
## 5405 3.83e-93 285.0
## 5406 1.86e-91 281.0
## 5407 2.09e-90 278.0
## 5408 3.43e-88 273.0
## 5409 3.76e-87 270.0
## 5410 2.40e-94 286.0
## 5411 9.68e-93 283.0
## 5412 1.67e-91 279.0
## 5413 1.41e-57 192.0
## 5414 2.51e-94 288.0
## 5415 5.01e-93 285.0
## 5416 6.22e-92 282.0
## 5417 3.74e-91 280.0
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## 5419 9.43e-76 241.0
## 5420 1.20e-63 209.0
## 5421 1.13e-36 138.0
## 5422 1.10e+00 32.7
## 5423 2.67e-94 288.0
## 5424 3.55e-92 282.0
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## 5427 7.74e-91 279.0
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## 5432 1.11e-93 298.0
## 5433 4.87e-92 294.0
## 5434 6.03e-88 283.0
## 5435 1.26e-86 280.0
## 5436 4.29e-86 278.0
## 5437 4.66e-86 278.0
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## 5439 6.82e-85 275.0
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## 5443 1.28e-78 258.0
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## 5445 4.49e-94 283.0
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## 5447 2.06e-86 264.0
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## 5450 8.20e-86 264.0
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## 5455 5.72e-90 275.0
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## 5459 4.25e-31 122.0
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## 5461 3.48e-91 276.0
## 5462 3.25e-87 266.0
## 5463 5.94e-94 284.0
## 5464 6.62e-93 281.0
## 5465 3.38e-92 279.0
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## 5475 9.03e-94 307.0
## 5476 2.17e-93 306.0
## 5477 4.02e-92 302.0
## 5478 1.55e-91 301.0
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## 5480 3.22e-91 300.0
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## 5483 1.81e-90 298.0
## 5484 1.88e-90 298.0
## 5485 1.99e-90 298.0
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## 5487 2.73e-90 297.0
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## 5490 1.28e-89 295.0
## 5491 1.86e-89 295.0
## 5492 2.34e-89 295.0
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## 5496 8.43e-89 293.0
## 5497 9.02e-89 293.0
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## 5499 1.26e-88 292.0
## 5500 1.84e-88 292.0
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## 5502 5.01e-88 291.0
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## 5505 2.43e-87 288.0
## 5506 2.62e-87 288.0
## 5507 5.84e-87 288.0
## 5508 1.05e-86 287.0
## 5509 1.19e-86 286.0
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## 5511 1.37e-86 286.0
## 5512 1.39e-86 286.0
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## 5517 1.71e-85 283.0
## 5518 1.92e-85 283.0
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## 5522 4.99e-85 282.0
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## 5524 2.00e-84 280.0
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## 5526 6.78e-84 279.0
## 5527 9.13e-84 278.0
## 5528 2.15e-83 277.0
## 5529 2.74e-83 277.0
## 5530 3.55e-83 276.0
## 5531 5.85e-83 276.0
## 5532 7.59e-83 276.0
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## 5537 3.41e-82 274.0
## 5538 3.68e-82 274.0
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## 5549 4.69e-79 265.0
## 5550 5.96e-79 265.0
## 5551 7.88e-79 264.0
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## 5572 1.59e-93 300.0
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## 5581 8.05e-86 279.0
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## 5584 4.15e-84 275.0
## 5585 2.42e-83 273.0
## 5586 4.13e-83 272.0

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## 5597 1.85e-90 291.0
## 5598 2.45e-90 290.0
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## 5608 1.61e-87 283.0
## 5609 1.88e-87 283.0
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## 5619 3.17e-45 159.0
## 5620 6.41e-35 132.0
## 5621 6.37e-31 121.0
## 5622 1.40e-93 285.0
## 5623 1.06e-89 275.0
## 5624 8.47e-89 272.0
## 5625 5.09e-85 263.0
## 5626 1.00e-67 218.0
## 5627 3.17e-45 159.0
## 5628 6.41e-35 132.0
## 5629 6.37e-31 121.0
## 5630 1.40e-93 285.0
## 5631 1.06e-89 275.0
## 5632 8.47e-89 272.0
## 5633 5.09e-85 263.0
## 5634 1.00e-67 218.0
## 5635 3.17e-45 159.0
## 5636 6.41e-35 132.0
## 5637 6.37e-31 121.0
## 5638 1.40e-93 285.0
## 5639 1.06e-89 275.0
## 5640 8.47e-89 272.0
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## 5641 5.09e-85 263.0
## 5642 1.00e-67 218.0
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## 5644 6.41e-35 132.0
## 5645 6.37e-31 121.0
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## 5655 7.08e-89 279.0
## 5656 6.52e-87 274.0
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## 5661 4.13e-92 286.0
## 5662 4.70e-92 286.0
## 5663 4.70e-92 286.0
## 5664 5.82e-92 285.0
## 5665 1.88e-88 276.0
## 5666 4.48e-86 270.0
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## 5670 3.46e-88 272.0
## 5671 2.22e-87 270.0
## 5672 3.07e-84 262.0
## 5673 1.63e-72 232.0
## 5674 2.06e-93 286.0
## 5675 2.32e-92 283.0
## 5676 3.46e-88 272.0
## 5677 2.22e-87 270.0
## 5678 3.07e-84 262.0
## 5679 1.63e-72 232.0
## 5680 2.06e-93 286.0
## 5681 2.32e-92 283.0
## 5682 3.46e-88 272.0
## 5683 2.22e-87 270.0
## 5684 3.07e-84 262.0
## 5685 1.63e-72 232.0
## 5686 2.06e-93 286.0
## 5687 2.32e-92 283.0
## 5688 3.46e-88 272.0
## 5689 2.22e-87 270.0
## 5690 3.07e-84 262.0
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## 5695 2.22e-87 270.0
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## 5698 2.06e-93 286.0
## 5699 2.32e-92 283.0
## 5700 3.46e-88 272.0
## 5701 2.22e-87 270.0
## 5702 3.07e-84 262.0
## 5703 1.63e-72 232.0
## 5704 2.06e-93 286.0
## 5705 2.32e-92 283.0
## 5706 3.46e-88 272.0
## 5707 2.22e-87 270.0
## 5708 3.07e-84 262.0
## 5709 1.63e-72 232.0
## 5710 2.06e-93 286.0
## 5711 2.32e-92 283.0
## 5712 3.46e-88 272.0
## 5713 2.22e-87 270.0
## 5714 3.07e-84 262.0
## 5715 1.63e-72 232.0
## 5716 2.06e-93 286.0
## 5717 2.32e-92 283.0
## 5718 3.46e-88 272.0
## 5719 2.22e-87 270.0
## 5720 3.07e-84 262.0
## 5721 1.63e-72 232.0
## 5722 2.06e-93 286.0
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## 5724 3.46e-88 272.0
## 5725 2.22e-87 270.0
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## 5727 1.63e-72 232.0
## 5728 2.06e-93 286.0
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## 5733 1.63e-72 232.0
## 5734 2.07e-93 284.0
## 5735 2.10e-93 286.0
## 5736 2.27e-92 283.0
## 5737 3.50e-88 272.0
## 5738 2.17e-87 270.0
## 5739 3.10e-84 262.0
## 5740 1.62e-72 232.0
## 5741 2.10e-93 286.0
## 5742 2.27e-92 283.0
## 5743 3.50e-88 272.0
## 5744 2.17e-87 270.0
## 5745 3.10e-84 262.0
## 5746 1.62e-72 232.0
## 5747 2.10e-93 286.0
## 5748 2.27e-92 283.0
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## 5749 3.50e-88 272.0
## 5750 2.17e-87 270.0
## 5751 3.10e-84 262.0
## 5752 1.62e-72 232.0
## 5753 2.21e-93 305.0
## 5754 4.25e-93 304.0
## 5755 7.48e-92 301.0
## 5756 6.90e-91 298.0
## 5757 1.16e-90 297.0
## 5758 1.22e-90 297.0
## 5759 4.67e-90 296.0
## 5760 4.46e-89 293.0
## 5761 5.07e-89 293.0
## 5762 1.70e-88 291.0
## 5763 3.03e-88 290.0
## 5764 4.70e-87 287.0
## 5765 6.44e-87 287.0
## 5766 1.19e-86 286.0
## 5767 1.75e-86 286.0
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## 5769 5.79e-86 284.0
## 5770 6.14e-86 284.0
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## 5772 2.42e-85 282.0
## 5773 3.28e-85 282.0
## 5774 3.34e-85 282.0
## 5775 4.14e-85 281.0
## 5776 4.99e-85 281.0
## 5777 9.33e-85 281.0
## 5778 1.07e-84 280.0
## 5779 2.04e-84 280.0
## 5780 5.87e-84 278.0
## 5781 1.89e-83 277.0
## 5782 3.37e-83 276.0
## 5783 3.03e-82 273.0
## 5784 3.40e-82 273.0
## 5785 8.21e-78 261.0
## 5786 3.35e-76 256.0
## 5787 1.05e-62 218.0
## 5788 1.28e-42 159.0
## 5789 2.21e-93 305.0
## 5790 4.25e-93 304.0
## 5791 7.48e-92 301.0
## 5792 6.90e-91 298.0
## 5793 1.16e-90 297.0
## 5794 1.22e-90 297.0
## 5795 4.67e-90 296.0
## 5796 4.46e-89 293.0
## 5797 5.07e-89 293.0
## 5798 1.70e-88 291.0
## 5799 3.03e-88 290.0
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## 5801 6.44e-87 287.0
## 5802 1.19e-86 286.0
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## 5803 1.75e-86 286.0
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## 5808 2.42e-85 282.0
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## 5810 3.34e-85 282.0
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## 5812 4.99e-85 281.0
## 5813 9.33e-85 281.0
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## 5815 2.04e-84 280.0
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## 5818 3.37e-83 276.0
## 5819 3.03e-82 273.0
## 5820 3.40e-82 273.0
## 5821 8.21e-78 261.0
## 5822 3.35e-76 256.0
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## 5824 1.28e-42 159.0
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## 5832 2.17e-88 291.0
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## 5834 4.99e-87 287.0
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## 5836 3.80e-85 281.0
## 5837 5.26e-85 281.0
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## 5839 1.95e-84 280.0
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## 5844 6.72e-83 275.0
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## 5848 3.40e-81 270.0
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## 5850 1.52e-80 268.0
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## 5852 6.25e-78 261.0
## 5853 2.23e-74 251.0
## 5854 4.35e-72 244.0
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## 5856 1.83e-91 300.0
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## 5859 1.54e-88 292.0
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## 5865 8.32e-87 287.0
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## 5868 4.67e-86 285.0
## 5869 9.17e-86 284.0
## 5870 1.20e-85 284.0
## 5871 1.24e-85 283.0
## 5872 2.10e-85 283.0
## 5873 2.25e-85 283.0
## 5874 2.52e-85 283.0
## 5875 3.03e-85 283.0
## 5876 3.34e-85 282.0
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## 5883 8.17e-84 278.0
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## 5885 4.08e-83 276.0
## 5886 8.00e-83 275.0
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## 5888 9.21e-81 270.0
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## 5890 3.98e-80 268.0
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## 5892 3.69e-75 253.0
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## 5895 4.87e-93 287.0
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## 5897 4.98e-89 277.0
## 5898 1.22e-86 271.0
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## 5900 2.35e-81 257.0
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## 5952 4.34e-89 294.0
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## 5959 3.35e-88 291.0
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## 5961 1.02e-87 290.0
## 5962 1.05e-87 290.0
## 5963 1.15e-87 290.0
## 5964 1.19e-87 290.0
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## 5972 1.82e-86 286.0
## 5973 2.84e-86 286.0
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## 5975 3.50e-86 285.0
## 5976 3.57e-86 285.0
## 5977 7.28e-86 285.0
## 5978 8.83e-86 284.0
## 5979 1.02e-85 284.0
## 5980 1.35e-85 284.0
## 5981 1.44e-85 283.0
## 5982 1.72e-85 283.0
## 5983 1.84e-85 283.0
## 5984 2.02e-85 283.0
## 5985 5.14e-85 282.0
## 5986 5.77e-85 282.0
## 5987 6.54e-85 281.0
## 5988 9.16e-85 281.0
## 5989 9.52e-85 281.0
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## 5992 1.60e-84 281.0
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## 5994 1.80e-84 280.0
## 5995 1.87e-84 280.0
## 5996 2.20e-84 280.0
## 5997 2.33e-84 280.0
## 5998 2.40e-84 280.0
## 5999 2.97e-84 280.0
## 6000 2.99e-84 280.0
## 6001 3.05e-84 280.0
## 6002 3.11e-84 280.0
## 6003 3.23e-84 280.0
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## 6007 1.06e-83 278.0
## 6008 1.13e-83 278.0
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## 6012 3.52e-83 277.0
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## 6014 6.21e-83 276.0
## 6015 8.62e-83 276.0
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## 6017 1.23e-82 275.0
## 6018 1.37e-82 275.0
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## 6022 2.51e-82 274.0
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## 6030 1.34e-81 272.0
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## 6032 2.81e-81 271.0
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## 6034 3.21e-81 271.0
## 6035 4.13e-81 271.0
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## 6037 1.94e-80 269.0
## 6038 2.64e-80 268.0
## 6039 4.94e-80 268.0
## 6040 5.71e-80 268.0
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## 6042 5.86e-79 265.0
## 6043 6.21e-79 265.0
## 6044 9.12e-79 264.0
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## 6058 3.64e-75 254.0
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## 6066 3.18e-91 281.0
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## 6069 8.92e-93 285.0
## 6070 4.81e-92 283.0
## 6071 3.18e-91 281.0
## 6072 7.25e-80 252.0
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## 6095 1.37e-81 270.0
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## 6097 4.26e-93 281.0
## 6098 3.14e-86 263.0
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## 6103 2.63e-91 296.0
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## 6109 1.68e-89 291.0
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## 6124 4.88e-92 298.0
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## 6180 3.12e-90 292.0
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## 6181 4.08e-90 292.0
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## 6234 1.50e-92 284.0
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## 6255 8.82e-89 290.0
## 6256 1.35e-88 289.0
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## 6258 6.06e-87 285.0
## 6259 6.19e-87 285.0
## 6260 1.41e-86 283.0
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## 6266 3.04e-85 280.0
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## 6272 1.06e-83 276.0
## 6273 6.59e-83 273.0
## 6274 6.38e-82 271.0
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## 6282 2.16e-92 287.0
## 6283 7.05e-92 285.0
## 6284 1.65e-91 285.0
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## 6288 2.80e-02 37.7

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## 6289 2.16e-92 287.0
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## 6291 1.65e-91 285.0
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## 6293 6.84e-81 257.0
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## 6297 7.05e-92 285.0
## 6298 1.65e-91 285.0
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## 6300 6.84e-81 257.0
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## 6314 2.69e-86 285.0
## 6315 1.37e-85 283.0
## 6316 9.39e-85 281.0
## 6317 1.15e-84 280.0
## 6318 2.60e-84 279.0
## 6319 2.71e-84 279.0
## 6320 5.02e-84 278.0
## 6321 6.22e-81 270.0
## 6322 1.56e-79 266.0
## 6323 3.54e-79 265.0
## 6324 3.69e-78 262.0
## 6325 7.86e-78 261.0
## 6326 2.51e-92 288.0
## 6327 3.65e-92 287.0
## 6328 1.45e-91 286.0
## 6329 2.08e-90 283.0
## 6330 2.34e-90 283.0
## 6331 2.96e-89 280.0
## 6332 5.22e-89 279.0
## 6333 6.75e-89 279.0
## 6334 1.38e-88 278.0
## 6335 1.68e-88 278.0
## 6336 9.60e-85 268.0
## 6337 2.55e-92 281.0
## 6338 2.14e-89 273.0
## 6339 4.24e-88 270.0
## 6340 2.28e-57 191.0
## 6341 2.64e-92 283.0
## 6342 2.13e-90 278.0
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## 6347 3.61e-92 282.0
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## 6354 4.02e-88 281.0
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## 6358 4.97e-84 270.0
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## 6361 3.51e-82 265.0
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## 6363 1.65e-78 256.0
## 6364 3.08e-44 163.0
## 6365 1.15e-34 135.0
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## 6370 1.18e-89 295.0
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## 6372 2.22e-88 291.0
## 6373 2.62e-88 291.0
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## 6375 1.29e-87 289.0
## 6376 1.38e-87 289.0
## 6377 3.99e-87 288.0
## 6378 6.03e-87 287.0
## 6379 6.52e-87 287.0
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## 6383 1.79e-84 280.0
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## 6386 5.37e-83 276.0
## 6387 7.24e-83 276.0
## 6388 1.11e-82 275.0
## 6389 1.66e-81 272.0
## 6390 2.07e-81 271.0
## 6391 8.19e-81 270.0
## 6392 2.62e-79 265.0
## 6393 2.26e-78 263.0
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## 6396 1.42e-41 156.0
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## 6415 4.55e-78 260.0
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## 6441 1.62e-83 273.0
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## 6445 2.84e-33 132.0
## 6446 8.06e-92 279.0
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## 6457 4.46e-83 263.0
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## 6459 2.12e-74 241.0
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## 6468 3.49e-88 290.0
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## 6478 2.05e-86 285.0
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## 6480 4.72e-86 283.0
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## 6482 4.13e-85 281.0
## 6483 7.14e-85 280.0
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## 6485 2.84e-84 278.0
## 6486 3.17e-84 278.0
## 6487 8.16e-82 272.0
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## 6489 5.66e-81 269.0
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## 6491 1.17e-78 263.0
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## 6493 9.37e-69 235.0
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## 6495 7.93e-42 157.0
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## 6497 8.11e-88 269.0
## 6498 1.71e-69 222.0
## 6499 1.23e-91 278.0
## 6500 1.99e-85 262.0
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## 6503 1.85e-89 279.0
## 6504 3.35e-89 278.0
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## 6517 2.54e-74 240.0
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## 6522 2.67e-91 278.0
## 6523 1.49e-77 243.0
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## 6542 1.76e-83 273.0
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## 6546 1.64e-78 259.0
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## 6551 1.37e-88 279.0
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## 6555 7.26e-74 240.0
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## 6558 4.10e-91 295.0
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## 6563 1.53e-89 290.0
## 6564 1.53e-89 290.0
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## 6570 4.60e-87 284.0
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## 6572 8.52e-87 283.0
## 6573 2.33e-86 282.0
## 6574 2.95e-86 281.0
## 6575 9.30e-86 280.0
## 6576 1.06e-85 280.0
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## 6593 1.95e-86 286.0
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## 6595 9.88e-86 284.0
## 6596 1.03e-85 284.0
## 6597 1.14e-85 284.0
## 6598 2.02e-85 283.0
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## 6605 2.06e-84 280.0
## 6606 2.53e-84 280.0
## 6607 3.38e-84 280.0
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## 6611 2.56e-83 277.0
## 6612 5.12e-83 276.0
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## 6617 1.99e-80 269.0
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## 6622 5.81e-91 291.0
## 6623 1.10e-90 291.0
## 6624 3.37e-90 290.0
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## 6627 4.29e-88 284.0
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## 6630 4.97e-86 278.0
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## 6633 1.73e-85 277.0
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## 6647 2.01e-86 283.0
## 6648 9.26e-86 281.0
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## 6652 2.75e-84 278.0
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## 6674 3.27e-62 209.0
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## 6698 4.13e-85 274.0
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## 6740 7.11e-81 258.0
## 6741 5.57e-80 255.0
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## 6772 6.93e-81 270.0
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## 6806 4.26e-83 274.0
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## 6858 2.08e-89 286.0
## 6859 4.38e-89 285.0
## 6860 4.72e-89 285.0
## 6861 8.97e-89 284.0
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## 6865 6.16e-86 276.0
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## 6895 1.41e-70 234.0
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## 6898 6.48e-90 296.0
## 6899 3.86e-89 294.0
## 6900 1.93e-88 291.0
## 6901 1.74e-87 289.0
## 6902 2.34e-87 288.0
## 6903 3.35e-87 288.0
## 6904 6.14e-87 287.0
## 6905 7.59e-87 287.0
## 6906 2.56e-85 283.0
## 6907 3.04e-85 283.0
## 6908 7.52e-85 281.0
## 6909 1.24e-84 281.0
## 6910 1.77e-84 280.0
## 6911 3.58e-84 280.0
## 6912 3.87e-84 279.0
## 6913 4.51e-84 279.0
## 6914 5.57e-84 279.0
## 6915 1.02e-83 278.0
## 6916 1.91e-83 277.0
## 6917 2.86e-83 277.0
## 6918 4.01e-83 276.0
## 6919 9.64e-83 275.0
## 6920 1.15e-82 275.0
## 6921 1.47e-82 275.0
## 6922 3.00e-82 274.0
## 6923 5.40e-82 273.0
## 6924 5.72e-82 273.0
## 6925 1.60e-81 272.0
## 6926 4.40e-81 270.0
## 6927 6.34e-81 270.0
## 6928 2.17e-80 268.0
## 6929 3.69e-80 268.0
## 6930 4.48e-80 268.0
## 6931 1.81e-79 266.0
## 6932 2.73e-79 265.0
## 6933 1.80e-78 263.0
## 6934 2.80e-78 263.0
## 6935 4.04e-78 262.0
## 6936 4.18e-77 259.0
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## 6937 2.69e-71 242.0
## 6938 3.21e-70 239.0
## 6939 1.28e-45 168.0
## 6940 7.69e-90 290.0
## 6941 2.01e-87 283.0
## 6942 1.59e-86 281.0
## 6943 3.43e-86 280.0
## 6944 4.49e-86 280.0
## 6945 6.93e-86 279.0
## 6946 1.62e-85 278.0
## 6947 5.10e-85 277.0
## 6948 7.80e-85 276.0
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## 6950 4.96e-84 274.0
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## 6952 1.96e-83 273.0
## 6953 2.00e-83 273.0
## 6954 2.21e-83 272.0
## 6955 5.21e-83 271.0
## 6956 1.71e-82 270.0
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## 6958 5.60e-81 266.0
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## 6960 7.99e-90 270.0
## 6961 3.06e-78 240.0
## 6962 4.01e-77 238.0
## 6963 9.37e-90 294.0
## 6964 2.95e-89 293.0
## 6965 3.99e-89 292.0
## 6966 2.71e-88 290.0
## 6967 1.47e-87 288.0
## 6968 8.92e-87 286.0
## 6969 1.96e-85 282.0
## 6970 2.10e-85 282.0
## 6971 2.64e-85 281.0
## 6972 3.66e-85 281.0
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## 6974 2.80e-84 279.0
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## 6976 2.84e-83 276.0
## 6977 3.16e-83 276.0
## 6978 3.16e-83 276.0
## 6979 1.38e-82 274.0
## 6980 7.32e-82 272.0
## 6981 7.37e-80 266.0
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## 6983 1.57e-71 243.0
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## 6985 1.51e-89 272.0
## 6986 1.08e-87 268.0
## 6987 1.48e-74 234.0
## 6988 1.66e-55 185.0
## 6989 1.84e-89 276.0
## 6990 5.01e-83 259.0
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## 6991 9.53e-81 253.0
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## 6998 3.09e-86 275.0
## 6999 4.48e-86 275.0
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## 7001 6.64e-86 274.0
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## 7003 2.39e-85 273.0
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## 7005 4.44e-83 266.0
## 7006 5.54e-83 266.0
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## 7008 8.57e-82 263.0
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## 7018 9.18e-86 279.0
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## 7022 3.62e-85 277.0
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## 7034 1.11e-64 222.0
## 7035 5.21e-89 273.0
## 7036 1.44e-87 270.0
## 7037 2.29e-80 251.0
## 7038 4.17e-79 248.0
## 7039 7.52e-73 232.0
## 7040 3.41e-15 77.4
## 7041 5.21e-89 273.0
## 7042 1.44e-87 270.0
## 7043 2.29e-80 251.0
## 7044 4.17e-79 248.0
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## 7045 7.52e-73 232.0
## 7046 3.41e-15 77.4
## 7047 5.21e-89 273.0
## 7048 1.44e-87 270.0
## 7049 2.29e-80 251.0
## 7050 4.17e-79 248.0
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## 7053 5.21e-89 273.0
## 7054 1.44e-87 270.0
## 7055 2.29e-80 251.0
## 7056 4.17e-79 248.0
## 7057 7.52e-73 232.0
## 7058 3.41e-15 77.4
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## 7060 4.32e-88 271.0
## 7061 1.25e-78 247.0
## 7062 1.46e-76 242.0
## 7063 7.92e-89 270.0
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## 7066 8.46e-45 157.0
## 7067 3.95e-19 87.8
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## 7069 3.37e-74 233.0
## 7070 6.84e-71 224.0
## 7071 8.46e-45 157.0
## 7072 3.95e-19 87.8
## 7073 7.92e-89 270.0
## 7074 3.37e-74 233.0
## 7075 6.84e-71 224.0
## 7076 8.46e-45 157.0
## 7077 3.95e-19 87.8
## 7078 7.92e-89 270.0
## 7079 3.37e-74 233.0
## 7080 6.84e-71 224.0
## 7081 8.46e-45 157.0
## 7082 3.95e-19 87.8
## 7083 7.92e-89 270.0
## 7084 3.37e-74 233.0
## 7085 6.84e-71 224.0
## 7086 8.46e-45 157.0
## 7087 3.95e-19 87.8
## 7088 7.92e-89 270.0
## 7089 3.37e-74 233.0
## 7090 6.84e-71 224.0
## 7091 8.46e-45 157.0
## 7092 3.95e-19 87.8
## 7093 7.92e-89 270.0
## 7094 3.37e-74 233.0
## 7095 6.84e-71 224.0
## 7096 8.46e-45 157.0
## 7097 3.95e-19 87.8
## 7098 7.92e-89 270.0
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## 7100 6.84e-71 224.0
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## 7104 1.54e-88 278.0
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## 7110 5.00e-87 267.0
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## 7113 2.08e-88 270.0
## 7114 1.11e-87 268.0
## 7115 3.00e-87 266.0
## 7116 1.05e-82 255.0
## 7117 2.67e-72 228.0
## 7118 2.31e-88 270.0
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## 7123 2.41e-83 258.0
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## 7126 1.53e-77 243.0
## 7127 5.22e-76 239.0
## 7128 4.11e-88 271.0
## 7129 8.48e-88 270.0
## 7130 1.36e-80 252.0
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## 7135 8.57e-88 284.0
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## 7146 1.48e-72 230.0
## 7147 2.09e-54 183.0
## 7148 6.32e-88 270.0
## 7149 7.41e-88 273.0
## 7150 5.55e-87 271.0
## 7151 3.54e-82 258.0
## 7152 2.99e-78 248.0
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## 7164 1.05e-77 243.0
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## 7167 5.68e-87 285.0
## 7168 1.63e-86 284.0
## 7169 8.22e-86 282.0
## 7170 7.61e-85 280.0
## 7171 8.50e-84 277.0
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## 7174 1.38e-80 268.0
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## 7188 1.17e-76 244.0
## 7189 1.63e-76 244.0
## 7190 1.57e-45 163.0
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## 7201 1.72e-78 248.0
## 7202 4.49e-77 244.0
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## 7206 2.82e-09 59.3

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## 7220 3.74e-79 251.0
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## 7227 6.04e-75 235.0
## 7228 3.96e-68 218.0
## 7229 2.35e-62 202.0
## 7230 1.03e-86 269.0
## 7231 5.24e-78 246.0
## 7232 5.96e-74 236.0
## 7233 1.31e-86 269.0
## 7234 2.03e-80 253.0
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## 7236 1.78e-72 233.0
## 7237 6.86e-72 231.0
## 7238 2.05e-86 270.0
## 7239 5.53e-82 258.0
## 7240 2.33e-81 256.0
## 7241 2.18e-79 251.0
## 7242 3.47e-78 248.0
## 7243 4.79e-77 245.0
## 7244 1.86e-72 234.0
## 7245 2.11e-86 265.0
## 7246 1.37e-75 237.0
## 7247 1.47e-41 149.0
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## 7249 2.42e-84 262.0
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## 7254 1.73e-80 250.0
## 7255 3.66e-72 229.0
## 7256 4.27e-86 264.0
## 7257 4.50e-78 243.0
## 7258 7.29e-74 232.0
## 7259 4.79e-86 268.0
## 7260 3.84e-81 255.0
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## 7274 6.35e-76 245.0
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## 7284 4.16e-81 255.0
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## 7294 3.79e-77 241.0
## 7295 3.32e-85 262.0
## 7296 3.09e-77 241.0
## 7297 3.79e-77 241.0
## 7298 3.32e-85 262.0
## 7299 3.09e-77 241.0
## 7300 3.79e-77 241.0
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## 7306 1.07e-77 248.0
## 7307 1.48e-77 247.0
## 7308 5.00e-77 246.0
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## 7314 1.27e-83 261.0
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## 7315 9.09e-81 253.0
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## 7328 3.97e-79 250.0
## 7329 7.78e-76 241.0
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## 7332 2.10e-53 183.0
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## 7334 7.70e-81 253.0
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## 7336 4.18e-78 245.0
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## 7339 1.39e-84 268.0
## 7340 2.36e-84 267.0
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## 7363 1.23e-71 226.0
## 7364 7.15e-62 201.0
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## 7368 2.12e-65 212.0
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## 7378 9.74e-78 251.0
## 7379 1.49e-77 251.0
## 7380 2.99e-77 250.0
## 7381 7.76e-77 249.0
## 7382 2.41e-76 248.0
## 7383 2.15e-74 242.0
## 7384 5.53e-59 202.0
## 7385 2.51e-84 259.0
## 7386 1.28e-09 60.1
## 7387 2.51e-84 259.0
## 7388 1.28e-09 60.1
## 7389 2.51e-84 259.0
## 7390 1.28e-09 60.1
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## 7397 2.79e-81 248.0
## 7398 2.11e-16 79.0
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## 7400 4.46e-82 256.0
## 7401 2.58e-78 246.0
## 7402 2.91e-69 223.0
## 7403 1.67e-39 145.0
## 7404 3.24e-84 261.0
## 7405 4.46e-82 256.0
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## 7407 2.91e-69 223.0
## 7408 1.67e-39 145.0
## 7409 3.94e-84 261.0
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## 7415 8.40e-80 254.0
## 7416 9.43e-76 244.0
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## 7418 3.20e-81 255.0
## 7419 1.08e-73 236.0
## 7420 4.48e-73 234.0
## 7421 5.06e-84 254.0
## 7422 3.06e-74 230.0
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## 7427 3.61e-72 228.0
## 7428 7.10e-59 193.0
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## 7430 3.34e-81 251.0
## 7431 3.61e-72 228.0
## 7432 7.10e-59 193.0
## 7433 6.37e-84 259.0
## 7434 1.08e-82 256.0
## 7435 2.53e-80 249.0
## 7436 1.57e-79 248.0
## 7437 1.66e-33 128.0
## 7438 6.79e-84 260.0
## 7439 2.06e-81 253.0
## 7440 7.35e-80 249.0
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## 7443 7.50e-63 206.0
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## 7452 2.91e-79 258.0
## 7453 2.17e-77 253.0
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## 7455 1.82e-75 248.0
## 7456 2.00e-75 248.0
## 7457 6.52e-73 241.0
## 7458 1.16e-69 233.0
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## 7475 5.24e-74 236.0
## 7476 1.37e-83 261.0
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## 7477 2.33e-82 258.0
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## 7479 5.24e-74 236.0
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## 7481 8.18e-81 254.0
## 7482 6.99e-78 246.0
## 7483 4.57e-75 239.0
## 7484 6.92e-52 179.0
## 7485 1.07e-44 160.0
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## 7488 2.37e-81 251.0
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## 7490 3.18e-83 266.0
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## 7492 1.27e-74 244.0
## 7493 2.21e-74 243.0
## 7494 1.19e-72 238.0
## 7495 4.46e-70 232.0
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## 7497 2.00e-67 225.0
## 7498 3.00e-67 224.0
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## 7503 3.72e-83 254.0
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## 7514 3.12e-75 237.0
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## 7523 2.02e-67 228.0
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## 7525 3.93e-40 152.0
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## 7532 3.47e-61 202.0
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## 7534 8.14e-83 255.0
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## 7536 5.46e-80 248.0
## 7537 8.69e-83 255.0
## 7538 8.87e-83 258.0
## 7539 2.93e-79 248.0
## 7540 2.67e-78 246.0
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## 7545 5.28e-80 257.0
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## 7547 3.92e-79 255.0
## 7548 9.07e-79 254.0
## 7549 9.16e-79 254.0
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## 7559 1.06e-71 231.0
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## 7563 2.97e-68 218.0
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## 7566 3.84e-79 247.0
## 7567 1.24e-65 213.0
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## 7580 7.02e-50 171.0
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## 7583 1.11e-78 252.0
## 7584 2.08e-78 251.0
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## 7612 8.40e-65 209.0
## 7613 1.10e-63 206.0
## 7614 1.30e+00 32.3
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## 7617 8.40e-65 209.0
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## 7622 2.05e-77 239.0
## 7623 1.97e-32 123.0
## 7624 5.31e-82 257.0
## 7625 6.52e-82 256.0
## 7626 1.62e-75 240.0
## 7627 4.08e-75 239.0
## 7628 1.33e-74 238.0
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## 7634 3.29e-67 218.0
## 7635 2.40e-59 198.0
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## 7637 6.18e-82 252.0
## 7638 7.70e-69 218.0
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## 7655 1.08e-81 256.0
## 7656 3.08e-80 252.0
## 7657 2.10e-78 247.0
## 7658 2.58e-46 164.0
## 7659 6.25e-38 141.0
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## 7665 1.59e-30 120.0
## 7666 8.01e-82 257.0
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## 7673 6.60e-80 249.0
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## 7677 7.84e-79 246.0
## 7678 2.55e-65 211.0
## 7679 2.42e-50 172.0
## 7680 8.86e-82 254.0
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## 7689 1.12e-77 244.0
## 7690 2.34e-76 241.0
## 7691 2.39e-76 241.0
## 7692 3.31e-26 108.0
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## 7694 1.12e-77 244.0
## 7695 2.34e-76 241.0
## 7696 2.39e-76 241.0
## 7697 3.31e-26 108.0
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## 7744 5.33e-77 256.0
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## 7746 2.17e-76 255.0
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## 7748 2.99e-76 254.0
## 7749 3.45e-76 254.0
## 7750 2.75e-75 252.0
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## 7752 3.50e-75 251.0
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## 7754 7.05e-66 226.0
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## 7756 1.10e-77 244.0
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## 7758 2.55e-74 236.0
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## 7760 1.05e-36 137.0
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## 7764 1.69e-65 212.0
## 7765 5.42e-50 172.0
## 7766 2.10e-81 253.0
## 7767 1.88e-78 245.0
## 7768 1.69e-65 212.0
## 7769 5.42e-50 172.0
## 7770 2.16e-81 258.0
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## 7774 1.55e-32 128.0
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## 7782 1.66e-38 144.0
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## 7787 2.02e-77 244.0
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## 7790 3.92e-38 141.0
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## 7826 2.30e-71 228.0
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## 7828 5.17e-38 141.0
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## 7854 1.12e-74 236.0
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## 7906 2.02e-80 253.0
## 7907 5.49e-80 252.0
## 7908 2.03e-76 243.0
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## 7924 5.72e-76 240.0
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## 7927 1.62e-55 187.0
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## 7930 3.83e-77 243.0
## 7931 5.72e-76 240.0
## 7932 1.68e-73 234.0
## 7933 8.20e-63 206.0
## 7934 1.62e-55 187.0
## 7935 3.61e-22 97.8
## 7936 1.52e-80 252.0
## 7937 3.83e-77 243.0
## 7938 5.72e-76 240.0
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## 7962 1.67e-77 258.0
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## 7968 5.96e-76 253.0
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## 7980 1.63e-23 100.0
## 7981 2.00e-03 41.2
## 7982 1.93e-80 250.0
## 7983 3.87e-42 151.0
## 7984 1.59e-23 100.0
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## 7993 1.51e-77 246.0
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## 8004 1.91e-59 198.0
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## 8007 3.55e-80 252.0
## 8008 1.13e-76 243.0
## 8009 2.31e-76 242.0
## 8010 2.13e-45 161.0
## 8011 5.40e-37 139.0
## 8012 2.52e-80 249.0
## 8013 9.58e-74 232.0
## 8014 9.07e-61 198.0
## 8015 2.06e-34 129.0
## 8016 6.67e-31 120.0
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## 8017 2.60e+00 31.2
## 8018 2.52e-80 249.0
## 8019 9.58e-74 232.0
## 8020 9.07e-61 198.0
## 8021 2.06e-34 129.0
## 8022 6.67e-31 120.0
## 8023 2.60e+00 31.2
## 8024 2.55e-80 254.0
## 8025 1.98e-76 244.0
## 8026 4.03e-75 241.0
## 8027 1.58e-74 239.0
## 8028 1.15e-53 185.0
## 8029 2.91e-80 261.0
## 8030 4.73e-79 258.0
## 8031 5.36e-77 252.0
## 8032 1.21e-75 248.0
## 8033 3.15e-75 247.0
## 8034 9.04e-75 246.0
## 8035 2.31e-72 240.0
## 8036 1.24e-71 238.0
## 8037 2.34e-71 237.0
## 8038 4.42e-70 234.0
## 8039 1.01e-69 233.0
## 8040 3.02e-68 229.0
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## 8042 1.29e-63 216.0
## 8043 1.99e-38 146.0
## 8044 3.16e-09 59.7
## 8045 3.58e-80 248.0
## 8046 7.80e-70 221.0
## 8047 7.11e-48 164.0
## 8048 3.79e-80 249.0
## 8049 1.52e-73 232.0
## 8050 1.64e-46 162.0
## 8051 4.72e-30 118.0
## 8052 1.00e-02 38.9
## 8053 4.75e-80 249.0
## 8054 5.77e-74 233.0
## 8055 1.46e-47 165.0
## 8056 5.27e-80 249.0
## 8057 1.61e-77 243.0
## 8058 8.65e-65 210.0
## 8059 2.42e-47 165.0
## 8060 5.40e-80 246.0
## 8061 1.67e-75 234.0
## 8062 3.47e-74 231.0
## 8063 4.34e-70 221.0
## 8064 1.05e-47 163.0
## 8065 6.14e-80 249.0
## 8066 3.29e-68 219.0
## 8067 3.89e-67 216.0
## 8068 2.24e-63 206.0
## 8069 1.98e-38 141.0
## 8070 7.10e-27 110.0
```

```

## 8071 5.03e-25 105.0
## 8072 4.90e+00 30.4
## 8073 6.41e-80 254.0
## 8074 4.79e-78 249.0
## 8075 3.48e-74 239.0
## 8076 5.27e-72 234.0
## 8077 9.67e-69 225.0
## 8078 1.36e-68 225.0
## 8079 1.91e-65 217.0
## 8080 7.30e-64 213.0
## 8081 1.28e-42 156.0
## 8082 6.56e-80 254.0
## 8083 5.28e-78 249.0
## 8084 3.40e-74 240.0
## 8085 4.67e-72 234.0
## 8086 9.02e-69 226.0
## 8087 1.44e-68 225.0
## 8088 3.71e-67 221.0
## 8089 7.08e-64 213.0
## 8090 3.05e-47 169.0
## 8091 1.25e-42 156.0
## 8092 5.79e-15 77.0
## 8093 6.90e-80 249.0
## 8094 8.83e-79 246.0
## 8095 1.10e-65 213.0
## 8096 4.69e-51 174.0
## 8097 7.07e-80 249.0
## 8098 2.90e-69 222.0
## 8099 3.69e-67 216.0
## 8100 2.29e-32 125.0
## 8101 1.70e-25 106.0
## 8102 1.10e+00 32.3
## 8103 7.75e-80 247.0
## 8104 3.01e-70 223.0
## 8105 8.63e-80 249.0
## 8106 8.31e-72 228.0
## 8107 7.86e-52 177.0
## 8108 9.70e-42 150.0
## 8109 8.71e-80 253.0
## 8110 9.26e-77 245.0
## 8111 3.87e-68 223.0
## 8112 3.21e-66 218.0
## 8113 4.33e-66 218.0
## 8114 5.13e-65 215.0
## 8115 9.28e-44 158.0
## 8116 1.06e-79 266.0
## 8117 1.54e-76 257.0
## 8118 1.60e-75 254.0
## 8119 4.90e-75 253.0
## 8120 1.74e-74 251.0
## 8121 5.31e-74 250.0
## 8122 8.46e-73 246.0
## 8123 3.47e-70 239.0
## 8124 5.52e-70 238.0

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```
## 8125 1.40e-69 237.0
## 8126 2.14e-67 231.0
## 8127 7.72e-67 229.0
## 8128 1.30e-66 229.0
## 8129 1.74e-63 219.0
## 8130 4.07e-57 201.0
## 8131 5.27e-57 201.0
## 8132 2.94e-55 196.0
## 8133 4.89e-55 195.0
## 8134 3.90e-54 192.0
## 8135 2.61e-50 182.0
## 8136 2.09e-46 170.0
## 8137 5.20e-15 77.8
## 8138 4.67e-08 56.2
## 8139 1.21e-79 249.0
## 8140 1.13e-71 229.0
## 8141 2.90e-70 225.0
## 8142 1.95e-46 163.0
## 8143 2.31e-38 142.0
## 8144 3.48e-13 71.2
## 8145 1.32e-79 254.0
## 8146 1.54e-76 246.0
## 8147 2.72e-72 235.0
## 8148 2.55e-67 222.0
## 8149 8.51e-67 221.0
## 8150 2.36e-63 212.0
## 8151 3.45e-38 144.0
## 8152 1.58e-24 105.0
## 8153 1.35e-79 248.0
## 8154 5.77e-73 231.0
## 8155 6.44e-72 228.0
## 8156 1.02e-57 192.0
## 8157 3.76e-50 172.0
## 8158 2.73e-32 125.0
## 8159 1.40e-79 249.0
## 8160 1.00e-77 244.0
## 8161 6.47e-76 240.0
## 8162 5.67e-70 224.0
## 8163 7.91e-52 177.0
## 8164 1.40e-79 248.0
## 8165 5.07e-72 229.0
## 8166 1.41e-51 176.0
## 8167 2.31e-41 149.0
## 8168 1.44e-79 251.0
## 8169 1.79e-71 230.0
## 8170 1.96e-65 215.0
## 8171 1.09e-51 179.0
## 8172 2.54e-51 178.0
## 8173 3.52e-40 148.0
## 8174 1.53e-79 248.0
## 8175 4.94e-73 231.0
## 8176 1.24e-06 51.2
## 8177 1.55e-79 247.0
## 8178 2.84e-78 244.0
```

```
## 8179 5.54e-75 235.0
## 8180 1.02e-73 232.0
## 8181 4.05e-58 192.0
## 8182 1.64e-79 249.0
## 8183 3.45e-73 233.0
## 8184 2.54e-71 228.0
## 8185 8.66e-46 162.0
## 8186 1.14e-37 140.0
## 8187 1.04e-13 72.8
## 8188 1.66e-79 249.0
## 8189 1.01e-73 234.0
## 8190 9.24e-72 229.0
## 8191 5.11e-66 214.0
## 8192 2.13e-47 166.0
## 8193 5.47e-39 144.0
## 8194 9.38e-17 82.0
## 8195 4.68e-12 67.8
## 8196 1.81e-79 248.0
## 8197 3.79e-71 226.0
## 8198 5.02e-69 221.0
## 8199 4.45e-53 179.0
## 8200 5.91e-39 142.0
## 8201 1.94e-79 248.0
## 8202 1.86e-71 228.0
## 8203 7.86e-52 177.0
## 8204 9.70e-42 150.0
## 8205 1.94e-79 248.0
## 8206 1.86e-71 228.0
## 8207 7.86e-52 177.0
## 8208 9.70e-42 150.0
## 8209 2.09e-79 247.0
## 8210 1.91e-60 198.0
## 8211 7.15e-37 137.0
## 8212 7.50e-01 33.1
## 8213 2.11e-79 250.0
## 8214 2.03e-71 229.0
## 8215 2.35e-65 214.0
## 8216 1.50e-51 177.0
## 8217 2.24e-51 177.0
## 8218 4.67e-40 147.0
## 8219 2.88e-79 248.0
## 8220 1.13e-70 226.0
## 8221 1.65e-50 173.0
## 8222 2.89e-79 247.0
## 8223 3.05e-79 259.0
## 8224 7.22e-79 258.0
## 8225 7.69e-79 258.0
## 8226 1.05e-78 258.0
## 8227 8.94e-78 255.0
## 8228 1.20e-77 255.0
## 8229 2.05e-77 254.0
## 8230 2.28e-76 251.0
## 8231 2.38e-76 251.0
## 8232 1.37e-75 249.0
```

```
## 8233 4.72e-74 245.0
## 8234 4.59e-73 243.0
## 8235 1.39e-65 223.0
## 8236 8.04e-65 221.0
## 8237 9.66e-64 218.0
## 8238 2.36e-63 216.0
## 8239 2.64e-63 216.0
## 8240 2.42e-47 172.0
## 8241 3.16e-79 264.0
## 8242 6.61e-75 252.0
## 8243 1.07e-74 251.0
## 8244 2.84e-74 250.0
## 8245 9.36e-74 249.0
## 8246 5.24e-73 246.0
## 8247 2.35e-72 245.0
## 8248 1.67e-71 242.0
## 8249 2.99e-71 241.0
## 8250 5.12e-71 241.0
## 8251 5.76e-71 241.0
## 8252 1.68e-69 237.0
## 8253 4.47e-69 235.0
## 8254 4.88e-69 235.0
## 8255 9.70e-66 226.0
## 8256 1.84e-60 211.0
## 8257 5.02e-51 184.0
## 8258 3.62e-79 249.0
## 8259 1.54e-76 243.0
## 8260 3.13e-75 239.0
## 8261 2.73e-72 231.0
## 8262 1.73e-46 164.0
## 8263 3.67e-79 247.0
## 8264 9.91e-76 238.0
## 8265 1.31e-67 218.0
## 8266 1.12e-47 166.0
## 8267 2.09e-29 117.0
## 8268 2.18e-19 89.4
## 8269 6.30e+00 30.0
## 8270 3.76e-79 247.0
## 8271 1.45e-78 246.0
## 8272 9.68e-70 223.0
## 8273 1.87e-66 214.0
## 8274 1.28e-46 163.0
## 8275 1.35e-38 142.0
## 8276 3.94e-79 248.0
## 8277 7.62e-79 247.0
## 8278 3.68e-71 227.0
## 8279 6.90e-50 172.0
## 8280 6.76e-49 169.0
## 8281 4.13e-79 248.0
## 8282 1.24e-72 231.0
## 8283 1.33e-58 194.0
## 8284 9.29e-56 187.0
## 8285 2.69e-45 160.0
## 8286 1.37e-16 81.3
```

```

## 8287 4.24e-79 248.0
## 8288 4.43e-71 228.0
## 8289 4.58e-71 228.0
## 8290 9.22e-46 161.0
## 8291 7.57e-38 140.0
## 8292 4.41e-79 248.0
## 8293 6.89e-77 243.0
## 8294 1.78e-71 229.0
## 8295 9.04e-48 167.0
## 8296 1.00e-03 41.6
## 8297 4.47e-79 248.0
## 8298 4.67e-79 246.0
## 8299 3.15e-67 216.0
## 8300 5.42e-61 200.0
## 8301 4.92e-51 174.0
## 8302 4.76e-79 246.0
## 8303 1.73e-64 209.0
## 8304 2.77e-55 185.0
## 8305 1.42e-26 108.0
## 8306 8.54e-20 90.1
## 8307 6.42e-18 84.7
## 8308 4.40e-01 33.9
## 8309 4.76e-79 246.0
## 8310 1.73e-64 209.0
## 8311 2.77e-55 185.0
## 8312 1.42e-26 108.0
## 8313 8.54e-20 90.1
## 8314 6.42e-18 84.7
## 8315 4.40e-01 33.9
## 8316 5.31e-79 246.0
## 8317 8.44e-69 220.0
## 8318 8.06e-50 171.0
## 8319 6.24e-79 246.0
## 8320 1.24e-68 219.0
## 8321 6.59e-56 186.0
## 8322 6.95e-50 171.0
## 8323 1.78e-39 144.0
## 8324 1.10e-13 72.4
## 8325 8.12e-79 247.0
## 8326 8.43e-79 245.0
## 8327 2.75e-72 228.0
## 8328 3.46e-53 179.0
## 8329 2.40e-11 65.5
## 8330 8.79e-79 246.0
## 8331 1.95e-74 234.0
## 8332 7.80e-46 160.0
## 8333 8.79e-79 246.0
## [ reached 'max' / getOption("max.print") -- omitted 59053 rows ]

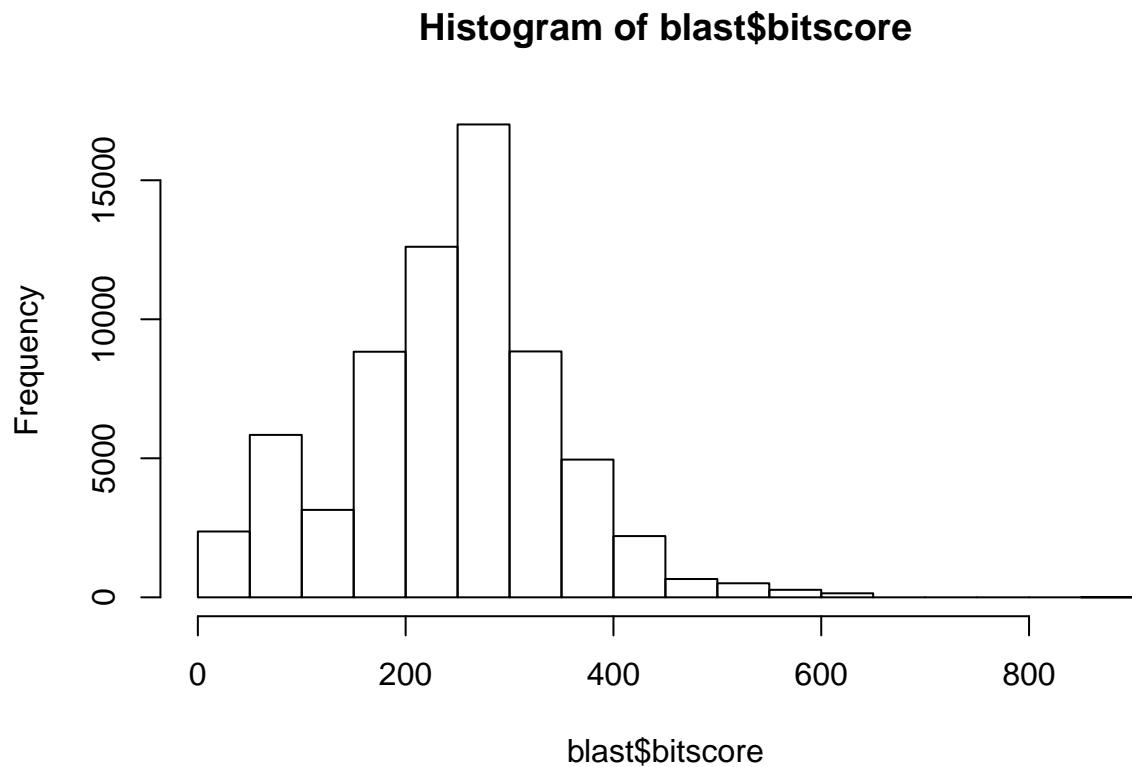
```

Add column names to data

```
colnames(blast) <- c("qseqid", "sseqid", "pident", "length", "mismatch", "gapopen", "qstart", "qend", "tstart", "tend", "strand", "qcovs", "scovs", "qlen", "slen", "qseq", "sseq")
```

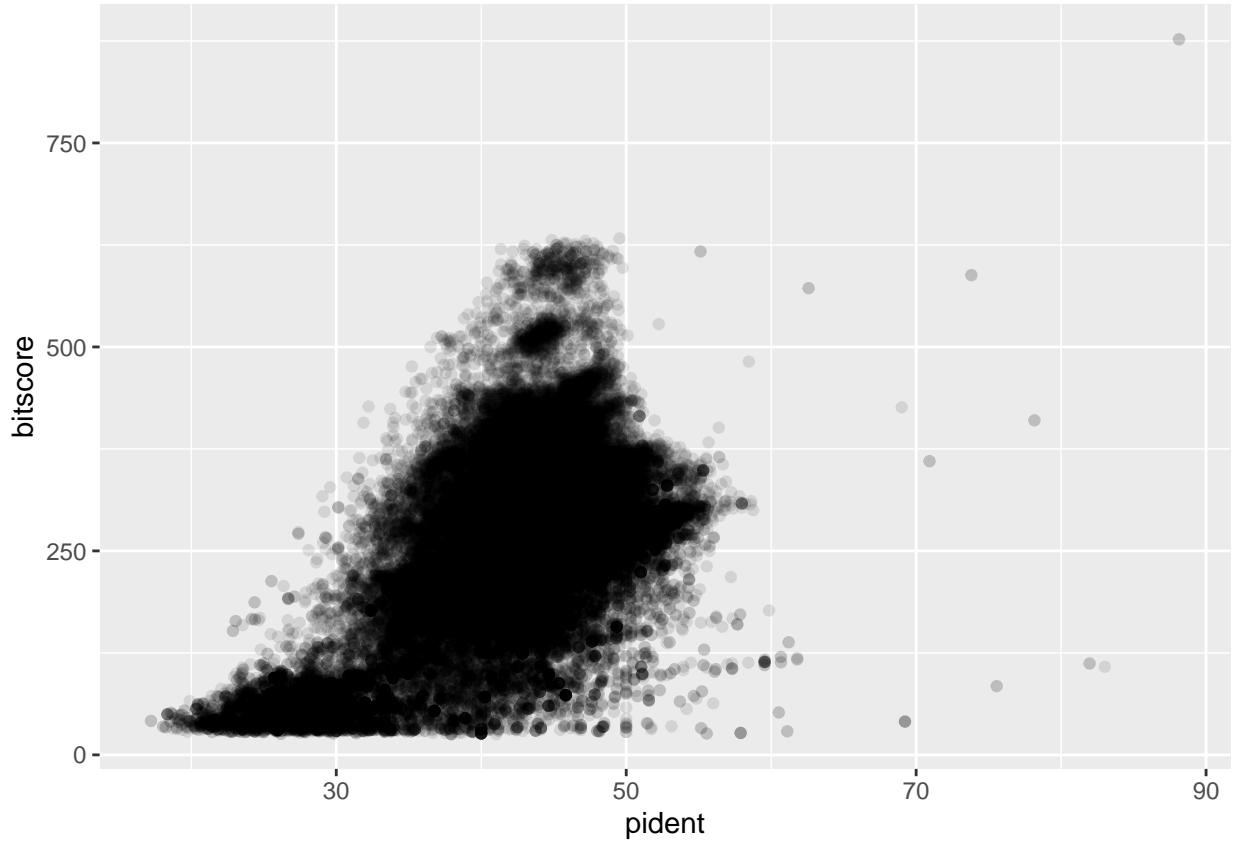
Plot graph

```
hist(blast$bitscore)
```



Use ggplot to make a nicer figure

```
library(ggplot2)  
ggplot(blast, aes(pident, bitscore)) + geom_point(alpha=0.1)
```



```
ggplot(blast, aes(pident * (qend-qstart), bitscore)) + geom_point(alpha=0.1) + geom_smooth()
```

```
## 'geom_smooth()' using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
```

