[siDirect v.2.0 | 2020-07-23 05:59:05]

target position	target sequence	RNA oligo, guide	passenger	functional siRNA selectio	seed-duplex stabilty (Tm), guide	passenger	min. number of mismatches against off-targets, guide	passenger	number of off-target hits, 0(+)	1(+)	2(+)	3(+)	0(-)	1(-)	2(-)	3(-)	target positio
13-35	ATGGATGAAAAATATGTAAACAG	GUUUACAUAUUUUUCAUCCAU	GGAUGAAAAAUAUGUAAACAG	A	6.9	16.3	2	2	1	0	4	27	0	0	2	10	1
14-36	TGGATGAAAAATATGTAAACAGC	UGUUUACAUAUUUUUCAUCCA	GAUGAAAAAUAUGUAAACAGC	UA	14.7	7.4	3	3	1	0	0	13	0	0	0	26	1
46-68	CTTCTGAAAAATGCAATTCAAGA	UUGAAUUGCAUUUUUCAGAAG	UCUGAAAAAUGCAAUUCAAGA	R	13.8	12.2	2	2	1	0	4	14	0	0	1	17	1
49-71	CTGAAAAATGCAATTCAAGAAAT	UUCUUGAAUUGCAUUUUUCAG	GAAAAAUGCAAUUCAAGAAAU	URA	20.4	-3.3	2	2	1	0	1	23	0	0	3	31	1
50-72	TGAAAAATGCAATTCAAGAAATC	UUUCUUGAAUUGCAUUUUUCA	AAAAAUGCAAUUCAAGAAAUC	R	20.4	14	3	2	1	0	0	25	0	0	1	17	1
51-73	GAAAAATGCAATTCAAGAAATCC	AUUUCUUGAAUUGCAUUUUUC	AAAAUGCAAUUCAAGAAAUCC	R	12.2	20	3	3	1	0	2	48	0	0	0	11	1
65-87	**AAGAAATCCAGCGTAAGAATAAC**	**UAUUCUUACGCUGGAUUUCUU**	**GAAAUCCAGCGUAAGAAUAAC**	**URA**	**6.9**	**20.1**	**3**	**3**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**1**
79-101	AAGAATAACAGTGGTCTTAGTTT	ACUAAGACCACUGUUAUUCUU	GAAUAACAGUGGUCUUAGUUU	URA	18.9	6.9	3	3	1	0	0	10	0	0	0	5	1
106-128	GAGCTCTATAGAAATGCATATAC	AUAUGCAUUUCUAUAGAGCUC	GCUCUAUAGAAAUGCAUAUAC	UA	21.1	13	3	3	1	0	0	8	0	0	0	10	1
107-129	AGCTCTATAGAAATGCATATACA	UAUAUGCAUUUCUAUAGAGCU	CUCUAUAGAAAUGCAUAUACA	UA	21.1	13	3	2	1	0	0	11	0	0	2	7	1
109-131	CTCTATAGAAATGCATATACAAT	UGUAUAUGCAUUUCUAUAGAG	CUAUAGAAAUGCAUAUACAAU	UR	8.2	8.4	3	3	1	0	0	6	0	0	0	10	1
120-142	TGCATATACAATGGTTTTGCATA	UGCAAAACCAUUGUAUAUGCA	CAUAUACAAUGGUUUUGCAUA	U	21.1	8.2	3	2	1	0	0	3	0	0	1	7	1
123-145	ATATACAATGGTTTTGCATAAAC	UUAUGCAAAACCAUUGUAUAU	AUACAAUGGUUUUGCAUAAAC	R	21.1	13.5	3	3	1	0	0	8	0	0	0	6	1
126-148	TACAATGGTTTTGCATAAACATG	UGUUUAUGCAAAACCAUUGUA	CAAUGGUUUUGCAUAAACAUG	UR	6.9	18.8	2	3	1	0	1	8	0	0	0	10	1
164-186	CTGGACTAAGAGAAGTTGTTACT	UAACAACUUCUCUUAGUCCAG	GGACUAAGAGAAGUUGUUACU	URA	17.8	18.9	2	3	1	0	1	13	0	0	0	3	1
165-187	TGGACTAAGAGAAGTTGTTACTG	GUAACAACUUCUCUUAGUCCA	GACUAAGAGAAGUUGUUACUG	A	14.7	18.9	3	3	1	0	0	8	0	0	0	2	1
168-190	ACTAAGAGAAGTTGTTACTGAAC	UCAGUAACAACUUCUCUUAGU	UAAGAGAAGUUGUUACUGAAC	R	19	19.1	3	3	1	0	0	7	0	0	0	6	1
183-205	TACTGAACATCTCATAAATAAGG	UUAUUUAUGAGAUGUUCAGUA	CUGAACAUCUCAUAAAUAAGG	URA	-8	20.5	3	2	1	0	0	9	0	0	1	12	1
208-230	CCCAAAGATGTACTAAATTCATT	UGAAUUUAGUACAUCUUUGGG	CAAAGAUGUACUAAAUUCAUU	URA	2.1	12	2	2	0	0	2	6	0	0	1	8	1
212-234	AAGATGTACTAAATTCATTGAAT	UCAAUGAAUUUAGUACAUCUU	GAUGUACUAAAUUCAUUGAAU	UA	13.8	19	3	3	1	0	0	5	0	0	0	7	1
215-237	ATGTACTAAATTCATTGAATAAC	UAUUCAAUGAAUUUAGUACAU	GUACUAAAUUCAUUGAAUAAC	URA	7.2	6.6	3	3	1	0	0	6	0	0	0	7	1
216-238	TGTACTAAATTCATTGAATAACA	UUAUUCAAUGAAUUUAGUACA	UACUAAAUUCAUUGAAUAACA	R	8.9	4.6	3	3	1	0	0	1	0	0	0	4	1
218-240	TACTAAATTCATTGAATAACAAC	UGUUAUUCAAUGAAUUUAGUA	CUAAAUUCAUUGAAUAACAAC	UR	10	2.1	3	2	1	0	0	9	0	0	2	7	1
219-241	ACTAAATTCATTGAATAACAACT	UUGUUAUUCAAUGAAUUUAGU	UAAAUUCAUUGAAUAACAACU	R	6.9	7.4	3	2	1	0	0	9	0	0	1	11	1
225-247	TTCATTGAATAACAACTTTCTTC	AGAAAGUUGUUAUUCAAUGAA	CAUUGAAUAACAACUUUCUUC	UA	13.3	7.2	3	2	1	0	0	8	0	0	2	12	1
229-251	TTGAATAACAACTTTCTTCAAAC	UUGAAGAAAGUUGUUAUUCAA	GAAUAACAACUUUCUUCAAAC	URA	20.4	6.9	2	2	1	0	1	16	0	0	1	26	1
230-252	TGAATAACAACTTTCTTCAAACA	UUUGAAGAAAGUUGUUAUUCA	AAUAACAACUUUCUUCAAACA	R	20.4	6.9	2	3	1	0	1	11	0	0	0	11	1
232-254	AATAACAACTTTCTTCAAACACT	UGUUUGAAGAAAGUUGUUAUU	UAACAACUUUCUUCAAACACU	R	14.9	17.8	3	3	1	0	0	14	0	0	0	16	1
235-257	AACAACTTTCTTCAAACACTAAA	UAGUGUUUGAAGAAAGUUGUU	CAACUUUCUUCAAACACUAAA	UR	17.8	13.3	2	2	1	0	1	11	0	0	1	19	1
238-260	AACTTTCTTCAAACACTAAATCA	AUUUAGUGUUUGAAGAAAGUU	CUUUCUUCAAACACUAAAUCA	UR	11.8	14.8	3	2	1	0	0	22	0	0	2	22	1
289-311	GTGATGATTAGAGACATACTAAT	UAGUAUGUCUCUAAUCAUCAC	GAUGAUUAGAGACAUACUAAU	U	19	8.7	3	3	1	0	0	7	0	0	0	1	1
297-319	TAGAGACATACTAATGTATATGG	AUAUACAUUAGUAUGUCUCUA	GAGACAUACUAAUGUAUAUGG	URA	8.2	20.3	3	3	1	0	0	4	0	0	0	4	1
300-322	AGACATACTAATGTATATGGACC	UCCAUAUACAUUAGUAUGUCU	ACAUACUAAUGUAUAUGGACC	R	14	13.1	3	2	1	0	0	3	0	0	1	2	1
310-332	ATGTATATGGACCGTGTATATGT	AUAUACACGGUCCAUAUACAU	GUAUAUGGACCGUGUAUAUGU	URA	15.8	14	3	3	1	0	0	7	0	0	0	3	1
323-345	GTGTATATGTACAACAGAATAAT	UAUUCUGUUGUACAUAUACAC	GUAUAUGUACAACAGAAUAAU	URA	19.2	8.2	2	3	1	0	2	5	0	0	0	16	1
324-346	TGTATATGTACAACAGAATAATG	UUAUUCUGUUGUACAUAUACA	UAUAUGUACAACAGAAUAAUG	R	13.4	8.2	2	2	1	0	2	3	0	0	1	13	1
332-354	TACAACAGAATAATGTAGAAAAT	UUUCUACAUUAUUCUGUUGUA	CAACAGAAUAAUGUAGAAAAU	UA	20.3	19.2	2	3	1	0	0	20	0	0	0	10	1
333-355	ACAACAGAATAATGTAGAAAATG	UUUUCUACAUUAUUCUGUUGU	AACAGAAUAAUGUAGAAAAUG	A	14.6	19.2	2	3	1	0	1	25	0	0	0	8	1
334-356	CAACAGAATAATGTAGAAAATGT	AUUUUCUACAUUAUUCUGUUG	ACAGAAUAAUGUAGAAAAUGU	RA	7.1	13.4	2	2	1	0	1	37	0	0	2	9	1
336-358	ACAGAATAATGTAGAAAATGTCT	ACAUUUUCUACAUUAUUCUGU	AGAAUAAUGUAGAAAAUGUCU	R	7.4	1.8	2	3	1	0	1	28	0	0	0	15	1
344-366	ATGTAGAAAATGTCTACAATTTG	AAUUGUAGACAUUUUCUACAU	GUAGAAAAUGUCUACAAUUUG	UA	11.6	7.1	3	2	1	0	0	11	0	0	1	23	1
345-367	TGTAGAAAATGTCTACAATTTGG	AAAUUGUAGACAUUUUCUACA	UAGAAAAUGUCUACAAUUUGG	R	6.9	5.3	3	2	1	0	0	1	0	0	1	13	1
355-377	GTCTACAATTTGGGATTAATAAT	UAUUAAUCCCAAAUUGUAGAC	CUACAAUUUGGGAUUAAUAAU	URA	1.8	6.9	3	3	1	0	0	11	0	0	0	9	1
356-378	TCTACAATTTGGGATTAATAATT	UUAUUAAUCCCAAAUUGUAGA	UACAAUUUGGGAUUAAUAAUU	R	-8	5.3	2	2	1	0	1	7	0	0	1	11	1
357-379	CTACAATTTGGGATTAATAATTT	AUUAUUAAUCCCAAAUUGUAG	ACAAUUUGGGAUUAAUAAUUU	R	-7.5	4.2	2	3	1	0	3	7	0	0	0	9	1
358-380	TACAATTTGGGATTAATAATTTT	AAUUAUUAAUCCCAAAUUGUA	CAAUUUGGGAUUAAUAAUUUU	URA	-8	11.3	3	2	1	0	0	8	0	0	1	9	1
364-386	TTGGGATTAATAATTTTTCGAGA	UCGAAAAAUUAUUAAUCCCAA	GGGAUUAAUAAUUUUUCGAGA	UA	7.7	15.5	3	3	1	0	0	6	0	0	0	3	1
366-388	GGGATTAATAATTTTTCGAGATC	UCUCGAAAAAUUAUUAAUCCC	GAUUAAUAAUUUUUCGAGAUC	UA	21	-8	4	3	1	0	0	0	0	0	0	5	1
376-398	ATTTTTCGAGATCAAGTTGTACG	UACAACUUGAUCUCGAAAAAU	UUUUCGAGAUCAAGUUGUACG	R	17.8	21	2	2	1	0	1	7	0	0	1	4	1
403-425	GGGTGTATTAGGGATCATCTTCG	AAGAUGAUCCCUAAUACACCC	GUGUAUUAGGGAUCAUCUUCG	UA	20.4	8.5	3	2	1	0	0	2	0	0	1	6	1
415-437	GATCATCTTCGGCAAACTTTATT	UAAAGUUUGCCGAAGAUGAUC	UCAUCUUCGGCAAACUUUAUU	R	3.2	20.4	3	3	1	0	0	4	0	0	0	13	1
416-438	ATCATCTTCGGCAAACTTTATTG	AUAAAGUUUGCCGAAGAUGAU	CAUCUUCGGCAAACUUUAUUG	URA	4.9	21	3	3	1	0	0	2	0	0	0	4	1
425-447	GGCAAACTTTATTGGATATGATT	UCAUAUCCAAUAAAGUUUGCC	CAAACUUUAUUGGAUAUGAUU	UR	21.2	3.2	3	3	1	0	0	4	0	0	0	8	1
426-448	GCAAACTTTATTGGATATGATTG	AUCAUAUCCAAUAAAGUUUGC	AAACUUUAUUGGAUAUGAUUG	R	17.4	4.9	2	3	1	0	1	3	0	0	0	10	1
490-512	AGAAATGCTTGCCAGATGTTAAT	UAACAUCUGGCAAGCAUUUCU	AAAUGCUUGCCAGAUGUUAAU	R	19.2	18.5	2	2	1	0	4	17	0	0	1	6	1
502-524	CAGATGTTAATGATTTTAGGTCT	ACCUAAAAUCAUUAACAUCUG	GAUGUUAAUGAUUUUAGGUCU	U	11	6.9	3	3	1	0	0	10	0	0	0	2	1
534-556	ATCAGTCTATGAGGAAGATTTTG	AAAUCUUCCUCAUAGACUGAU	CAGUCUAUGAGGAAGAUUUUG	UA	14.8	18.9	3	3	1	0	0	8	0	0	0	14	1
535-557	TCAGTCTATGAGGAAGATTTTGA	AAAAUCUUCCUCAUAGACUGA	AGUCUAUGAGGAAGAUUUUGA	A	5.3	20.3	3	2	1	0	0	10	0	0	1	14	1
548-570	AAGATTTTGAGGCTCCTTTTTTG	AAAAAGGAGCCUCAAAAUCUU	GAUUUUGAGGCUCCUUUUUUG	URA	18.7	7.4	3	2	1	0	0	19	0	0	1	21	1
570-592	GGAAATGTCTGCAGAATTTTTTC	AAAAAUUCUGCAGACAUUUCC	AAAUGUCUGCAGAAUUUUUUC	R	0.4	19.2	2	2	1	0	4	28	0	0	5	23	1
592-614	CAGATGGAAAGCCAGAAATTTTT	AAAUUUCUGGCUUUCCAUCUG	GAUGGAAAGCCAGAAAUUUUU	UA	5.3	20.1	2	3	1	0	2	27	0	0	0	9	1
617-639	CAGAAAACAGTGCTTCAGTATAT	AUACUGAAGCACUGUUUUCUG	GAAAACAGUGCUUCAGUAUAU	URA	20.3	10.3	2	3	1	0	5	11	0	0	0	5	1
618-640	AGAAAACAGTGCTTCAGTATATA	UAUACUGAAGCACUGUUUUCU	AAAACAGUGCUUCAGUAUAUA	R	20.3	17.8	2	3	1	0	2	14	0	0	0	9	1
627-649	TGCTTCAGTATATATAAAGAAAG	UUCUUUAUAUAUACUGAAGCA	CUUCAGUAUAUAUAAAGAAAG	U	6.9	20.3	3	2	1	0	0	8	0	0	2	13	1
628-650	GCTTCAGTATATATAAAGAAAGT	UUUCUUUAUAUAUACUGAAGC	UUCAGUAUAUAUAAAGAAAGU	R	7.1	20.3	2	2	1	0	1	9	0	0	1	8	1
630-652	TTCAGTATATATAAAGAAAGTAG	ACUUUCUUUAUAUAUACUGAA	CAGUAUAUAUAAAGAAAGUAG	UA	10.3	6.1	3	3	1	0	0	12	0	0	0	18	1
644-666	AGAAAGTAGAAGCTAGGATTAAT	UAAUCCUAGCUUCUACUUUCU	AAAGUAGAAGCUAGGAUUAAU	R	19.9	18.9	3	3	1	0	0	6	0	0	0	1	1
646-668	AAAGTAGAAGCTAGGATTAATGA	AUUAAUCCUAGCUUCUACUUU	AGUAGAAGCUAGGAUUAAUGA	A	15.5	18.9	3	3	1	0	0	10	0	0	0	1	1
655-677	GCTAGGATTAATGAGGAAATAGA	UAUUUCCUCAUUAAUCCUAGC	UAGGAUUAAUGAGGAAAUAGA	R	18.7	19.9	2	3	1	0	1	5	0	0	0	5	1
657-679	TAGGATTAATGAGGAAATAGAGC	UCUAUUUCCUCAUUAAUCCUA	GGAUUAAUGAGGAAAUAGAGC	URA	6.9	1.8	3	3	1	0	0	12	0	0	0	7	1
754-776	CACATGAAGACTATTGTAGAAAT	UUCUACAAUAGUCUUCAUGUG	CAUGAAGACUAUUGUAGAAAU	URA	20.3	20.4	2	3	1	0	1	14	0	0	0	7	1
759-781	GAAGACTATTGTAGAAATGGAAA	UCCAUUUCUACAAUAGUCUUC	AGACUAUUGUAGAAAUGGAAA	R	20.1	14.5	3	2	1	0	0	10	0	0	1	8	1
760-782	AAGACTATTGTAGAAATGGAAAA	UUCCAUUUCUACAAUAGUCUU	GACUAUUGUAGAAAUGGAAAA	UA	20.1	11.6	3	2	1	0	0	11	0	0	1	12	1
762-784	GACTATTGTAGAAATGGAAAATT	UUUUCCAUUUCUACAAUAGUC	CUAUUGUAGAAAUGGAAAAUU	URA	20.1	8.5	3	2	1	0	0	8	0	0	1	9	1
777-799	GGAAAATTCTGGGCTAGTACATA	UGUACUAGCCCAGAAUUUUCC	AAAAUUCUGGGCUAGUACAUA	R	18.8	5.3	3	3	1	0	0	4	0	0	0	3	1
778-800	GAAAATTCTGGGCTAGTACATAT	AUGUACUAGCCCAGAAUUUUC	AAAUUCUGGGCUAGUACAUAU	R	20.2	12	2	3	1	0	1	4	0	0	0	1	1
789-811	GCTAGTACATATGCTGAAAAATG	UUUUUCAGCAUAUGUACUAGC	UAGUACAUAUGCUGAAAAAUG	R	12.2	19	2	2	1	0	1	3	0	0	1	4	1
790-812	CTAGTACATATGCTGAAAAATGG	AUUUUUCAGCAUAUGUACUAG	AGUACAUAUGCUGAAAAAUGG	A	7.7	15.8	3	3	1	0	0	7	0	0	0	8	1
827-849	TTGCTTGTATGTACAAATTATTT	AUAAUUUGUACAUACAAGCAA	GCUUGUAUGUACAAAUUAUUU	URA	-1.4	11.6	2	3	1	0	1	9	0	0	0	2	1
830-852	CTTGTATGTACAAATTATTTAGT	UAAAUAAUUUGUACAUACAAG	UGUAUGUACAAAUUAUUUAGU	R	-10.3	15.8	3	3	1	0	0	20	0	0	0	5	1
835-857	ATGTACAAATTATTTAGTCGTGT	ACGACUAAAUAAUUUGUACAU	GUACAAAUUAUUUAGUCGUGU	U	20.9	6.9	3	3	1	0	0	5	0	0	0	4	1
868-890	TTGAAGACAATGTGTGAATGTAT	ACAUUCACACAUUGUCUUCAA	GAAGACAAUGUGUGAAUGUAU	UR	20.5	19.2	2	2	1	0	2	13	0	0	2	13	1
870-892	GAAGACAATGTGTGAATGTATGA	AUACAUUCACACAUUGUCUUC	AGACAAUGUGUGAAUGUAUGA	A	16.1	20.5	2	3	1	0	1	11	0	0	0	10	1
872-894	AGACAATGTGTGAATGTATGAGT	UCAUACAUUCACACAUUGUCU	ACAAUGUGUGAAUGUAUGAGU	R	13.3	18.1	3	3	1	0	0	7	0	0	0	6	1
879-901	GTGTGAATGTATGAGTTCTTATT	UAAGAACUCAUACAUUCACAC	GUGAAUGUAUGAGUUCUUAUU	UA	17.7	20.5	3	2	1	0	0	14	0	0	1	5	1
881-903	GTGAATGTATGAGTTCTTATTTG	AAUAAGAACUCAUACAUUCAC	GAAUGUAUGAGUUCUUAUUUG	URA	6.9	6.7	2	3	1	0	2	9	0	0	0	9	1
884-906	AATGTATGAGTTCTTATTTGAGG	UCAAAUAAGAACUCAUACAUU	UGUAUGAGUUCUUAUUUGAGG	R	-1.4	20.3	3	2	1	0	0	9	0	0	1	7	1
910-932	CAAGGAAAAGCCCTTGTTTCTGA	AGAAACAAGGGCUUUUCCUUG	AGGAAAAGCCCUUGUUUCUGA	A	14.9	18.7	2	2	1	0	2	34	0	0	2	31	1
1004-1026	TCCTTCAAGAATCCTTCAATAAT	UAUUGAAGGAUUCUUGAAGGA	CUUCAAGAAUCCUUCAAUAAU	URA	12	20.4	3	2	1	0	0	8	0	0	2	12	1
1005-1027	CCTTCAAGAATCCTTCAATAATG	UUAUUGAAGGAUUCUUGAAGG	UUCAAGAAUCCUUCAAUAAUG	R	8.9	20.4	3	3	1	0	0	10	0	0	0	12	1
1006-1028	CTTCAAGAATCCTTCAATAATGA	AUUAUUGAAGGAUUCUUGAAG	UCAAGAAUCCUUCAAUAAUGA	R	8.9	12	3	2	1	0	0	20	0	0	2	8	1
1020-1042	CAATAATGACCGACTCTTTAAAC	UUAAAGAGUCGGUCAUUAUUG	AUAAUGACCGACUCUUUAAAC	R	11.7	16.1	3	3	1	0	0	4	0	0	0	7	1
1033-1055	CTCTTTAAACAGACTATTGCTGG	AGCAAUAGUCUGUUUAAAGAG	CUUUAAACAGACUAUUGCUGG	U	19.7	0	3	3	1	0	0	7	0	0	0	6	1
1044-1066	GACTATTGCTGGGGACTTTGAGT	UCAAAGUCCCCAGCAAUAGUC	CUAUUGCUGGGGACUUUGAGU	UR	19.2	19.7	2	3	1	0	1	10	0	0	0	9	1
1054-1076	GGGGACTTTGAGTATTTCTTAAA	UAAGAAAUACUCAAAGUCCCC	GGACUUUGAGUAUUUCUUAAA	URA	5.3	19.2	3	3	1	0	0	15	0	0	0	23	1
1055-1077	GGGACTTTGAGTATTTCTTAAAC	UUAAGAAAUACUCAAAGUCCC	GACUUUGAGUAUUUCUUAAAC	URA	7.1	19.2	3	2	1	0	0	10	0	0	1	30	1
1056-1078	GGACTTTGAGTATTTCTTAAACC	UUUAAGAAAUACUCAAAGUCC	ACUUUGAGUAUUUCUUAAACC	R	7.1	16.6	3	2	1	0	0	13	0	0	1	14	1
1091-1113	CTCCTGAATACCTCTCATTATTT	AUAAUGAGAGGUAUUCAGGAG	CCUGAAUACCUCUCAUUAUUU	URA	13.4	13.4	3	3	1	0	0	5	0	0	0	10	1
1092-1114	TCCTGAATACCTCTCATTATTTA	AAUAAUGAGAGGUAUUCAGGA	CUGAAUACCUCUCAUUAUUUA	URA	8.7	16.1	3	2	1	0	0	6	0	0	1	8	1
1094-1116	CTGAATACCTCTCATTATTTATT	UAAAUAAUGAGAGGUAUUCAG	GAAUACCUCUCAUUAUUUAUU	URA	-10.3	18.5	2	2	1	0	1	4	0	0	1	5	1
1104-1126	CTCATTATTTATTGATGATAAGC	UUAUCAUCAAUAAAUAAUGAG	CAUUAUUUAUUGAUGAUAAGC	URA	17.4	-10.3	3	3	1	0	0	9	0	0	0	12	1
1134-1156	GGGAGTCAAAGGGCTAACAGAAC	UCUGUUAGCCCUUUGACUCCC	GAGUCAAAGGGCUAACAGAAC	UA	16.4	19.2	3	2	0	0	0	6	0	0	1	11	1
1160-1182	AAGTAGAAACGATATTGGATAAG	UAUCCAAUAUCGUUUCUACUU	GUAGAAACGAUAUUGGAUAAG	UA	20.1	14.6	3	3	1	0	0	4	0	0	0	4	1
1161-1183	AGTAGAAACGATATTGGATAAGG	UUAUCCAAUAUCGUUUCUACU	UAGAAACGAUAUUGGAUAAGG	R	21.2	19.7	3	2	1	0	0	4	0	0	1	3	1
1189-1211	GTCCTTTTTAGGTTTATGCAAGA	UUGCAUAAACCUAAAAAGGAC	CCUUUUUAGGUUUAUGCAAGA	UA	21.1	-3.8	3	3	1	0	0	8	0	0	0	5	1
1194-1216	TTTTAGGTTTATGCAAGAAAAAG	UUUUCUUGCAUAAACCUAAAA	UUAGGUUUAUGCAAGAAAAAG	R	12.2	18.6	3	2	1	0	0	14	0	0	1	6	1
1197-1219	TAGGTTTATGCAAGAAAAAGATG	UCUUUUUCUUGCAUAAACCUA	GGUUUAUGCAAGAAAAAGAUG	UA	5.5	6.9	2	2	1	0	1	20	0	0	1	7	1
1198-1220	AGGTTTATGCAAGAAAAAGATGT	AUCUUUUUCUUGCAUAAACCU	GUUUAUGCAAGAAAAAGAUGU	U	5.5	15.3	2	3	1	0	1	24	0	0	0	12	1
1204-1226	ATGCAAGAAAAAGATGTATTTGA	AAAUACAUCUUUUUCUUGCAU	GCAAGAAAAAGAUGUAUUUGA	URA	6.7	12.2	2	2	1	0	4	22	0	0	1	18	1
1207-1229	CAAGAAAAAGATGTATTTGAACG	UUCAAAUACAUCUUUUUCUUG	AGAAAAAGAUGUAUUUGAACG	R	8.9	5.5	2	3	1	0	3	63	0	0	0	17	1
1217-1239	ATGTATTTGAACGTTACTATAAA	UAUAGUAACGUUCAAAUACAU	GUAUUUGAACGUUACUAUAAA	URA	6.3	8.9	3	3	1	0	0	7	0	0	0	3	1
1218-1240	TGTATTTGAACGTTACTATAAAC	UUAUAGUAACGUUCAAAUACA	UAUUUGAACGUUACUAUAAAC	R	7.9	7.4	3	3	1	0	0	8	0	0	0	4	1
1219-1241	GTATTTGAACGTTACTATAAACA	UUUAUAGUAACGUUCAAAUAC	AUUUGAACGUUACUAUAAACA	R	6.3	14.9	3	3	1	0	0	12	0	0	0	3	1
1225-1247	GAACGTTACTATAAACAACATCT	AUGUUGUUUAUAGUAACGUUC	ACGUUACUAUAAACAACAUCU	A	19.3	19.6	3	3	1	0	0	5	0	0	0	5	1
1227-1249	ACGTTACTATAAACAACATCTGG	AGAUGUUGUUUAUAGUAACGU	GUUACUAUAAACAACAUCUGG	U	20.5	6.3	3	2	1	0	0	1	0	0	1	6	1
1237-1259	AAACAACATCTGGCAAGAAGACT	UCUUCUUGCCAGAUGUUGUUU	ACAACAUCUGGCAAGAAGACU	R	16.6	20.5	2	3	1	0	2	26	0	0	0	9	1
1259-1281	TGCTCACAAATAAAAGTGTTTCT	AAACACUUUUAUUUGUGAGCA	CUCACAAAUAAAAGUGUUUCU	UA	17.8	20.5	3	2	1	0	0	15	0	0	2	17	1
1287-1309	CTCTGAAAAAAATATGATTTCTA	GAAAUCAUAUUUUUUUCAGAG	CUGAAAAAAAUAUGAUUUCUA	A	7.2	7.7	2	2	1	0	5	15	0	0	1	24	1
1289-1311	CTGAAAAAAATATGATTTCTAAA	UAGAAAUCAUAUUUUUUUCAG	GAAAAAAAUAUGAUUUCUAAA	URA	14.8	-11.3	3	2	1	0	0	20	0	0	2	40	1
1290-1312	TGAAAAAAATATGATTTCTAAAT	UUAGAAAUCAUAUUUUUUUCA	AAAAAAAUAUGAUUUCUAAAU	R	6.9	-12	2	2	1	0	1	24	0	0	4	39	1
1291-1313	GAAAAAAATATGATTTCTAAATT	UUUAGAAAUCAUAUUUUUUUC	AAAAAAUAUGAUUUCUAAAUU	R	7.1	-9.7	2	2	1	0	1	48	0	0	1	33	1
1295-1317	AAAATATGATTTCTAAATTAAAG	UUAAUUUAGAAAUCAUAUUUU	AAUAUGAUUUCUAAAUUAAAG	R	-7.5	8.5	2	3	1	0	4	20	0	0	0	17	1
1296-1318	AAATATGATTTCTAAATTAAAGA	UUUAAUUUAGAAAUCAUAUUU	AUAUGAUUUCUAAAUUAAAGA	R	-9.7	8.7	2	2	1	0	1	18	0	0	1	10	1
1300-1322	ATGATTTCTAAATTAAAGACTGA	AGUCUUUAAUUUAGAAAUCAU	GAUUUCUAAAUUAAAGACUGA	U	14.6	6.9	3	3	1	0	0	14	0	0	0	16	1
1352-1374	AAGGAATGTTTAGGGATATGAGC	UCAUAUCCCUAAACAUUCCUU	GGAAUGUUUAGGGAUAUGAGC	URA	21.2	14.8	2	3	1	0	1	9	0	0	0	3	1
1362-1384	TAGGGATATGAGCATCTCAAACA	UUUGAGAUGCUCAUAUCCCUA	GGGAUAUGAGCAUCUCAAACA	URA	20.4	21.2	3	2	1	0	0	11	0	0	1	4	1
1364-1386	GGGATATGAGCATCTCAAACACA	UGUUUGAGAUGCUCAUAUCCC	GAUAUGAGCAUCUCAAACACA	UR	19.2	13.3	3	3	1	0	0	7	0	0	0	7	1
1521-1543	TCCAAGACATGCTTTTGAGATAT	AUCUCAAAAGCAUGUCUUGGA	CAAGACAUGCUUUUGAGAUAU	U	20.4	19.2	2	3	1	0	1	5	0	0	0	8	1
1526-1548	GACATGCTTTTGAGATATTTAGA	UAAAUAUCUCAAAAGCAUGUC	CAUGCUUUUGAGAUAUUUAGA	URA	1.8	18.5	3	2	1	0	0	14	0	0	2	6	1
1540-1562	ATATTTAGACGGTTCTATTTAGC	UAAAUAGAACCGUCUAAAUAU	AUUUAGACGGUUCUAUUUAGC	R	6.9	14.6	3	3	1	0	0	6	0	0	0	1	1
1611-1633	AGATCTCAATGCCACCTTTTATG	UAAAAGGUGGCAUUGAGAUCU	AUCUCAAUGCCACCUUUUAUG	RA	17.3	20.4	2	2	1	0	1	13	0	0	3	11	1
1612-1634	GATCTCAATGCCACCTTTTATGG	AUAAAAGGUGGCAUUGAGAUC	UCUCAAUGCCACCUUUUAUGG	R	11	18.1	3	2	1	0	0	9	0	0	1	14	1
1624-1646	ACCTTTTATGGTCCAGTTAAAAA	UUUAACUGGACCAUAAAAGGU	CUUUUAUGGUCCAGUUAAAAA	URA	11.8	-1.4	3	2	1	0	0	6	0	0	1	13	1
1626-1648	CTTTTATGGTCCAGTTAAAAAGG	UUUUUAACUGGACCAUAAAAG	UUUAUGGUCCAGUUAAAAAGG	R	0	20	3	3	1	0	0	16	0	0	0	8	1
1678-1700	GCACAAGTAACTGGTTCTAATAC	AUUAGAACCAGUUACUUGUGC	ACAAGUAACUGGUUCUAAUAC	R	14.6	11.8	3	3	1	0	0	6	0	0	0	4	1
1679-1701	CACAAGTAACTGGTTCTAATACA	UAUUAGAACCAGUUACUUGUG	CAAGUAACUGGUUCUAAUACA	URA	6.9	12.9	3	3	1	0	0	7	0	0	0	4	1
1681-1703	CAAGTAACTGGTTCTAATACACG	UGUAUUAGAACCAGUUACUUG	AGUAACUGGUUCUAAUACACG	R	6.3	19	3	3	1	0	0	4	0	0	0	5	1
1735-1757	ATGACCATATTAATGCTTTTTAA	AAAAAGCAUUAAUAUGGUCAU	GACCAUAUUAAUGCUUUUUAA	UA	18.6	20	2	3	1	0	4	10	0	0	0	9	1
1736-1758	TGACCATATTAATGCTTTTTAAT	UAAAAAGCAUUAAUAUGGUCA	ACCAUAUUAAUGCUUUUUAAU	RA	12.3	12.6	2	3	1	0	3	11	0	0	0	6	1
1737-1759	GACCATATTAATGCTTTTTAATA	UUAAAAAGCAUUAAUAUGGUC	CCAUAUUAAUGCUUUUUAAUA	URA	-3.8	0	2	3	1	0	2	14	0	0	0	8	1
1738-1760	ACCATATTAATGCTTTTTAATAA	AUUAAAAAGCAUUAAUAUGGU	CAUAUUAAUGCUUUUUAAUAA	UA	-9.1	-8	3	3	1	0	0	8	0	0	0	16	1
1739-1761	CCATATTAATGCTTTTTAATAAT	UAUUAAAAAGCAUUAAUAUGG	AUAUUAAUGCUUUUUAAUAAU	R	-9.7	-8	3	3	1	0	0	5	0	0	0	18	1
1740-1762	CATATTAATGCTTTTTAATAATA	UUAUUAAAAAGCAUUAAUAUG	UAUUAAUGCUUUUUAAUAAUA	R	-7.5	-1.8	2	2	1	0	2	11	0	0	1	12	1
1741-1763	ATATTAATGCTTTTTAATAATAG	AUUAUUAAAAAGCAUUAAUAU	AUUAAUGCUUUUUAAUAAUAG	R	-7.5	15.3	2	2	1	0	2	19	0	0	1	15	1
1742-1764	TATTAATGCTTTTTAATAATAGA	UAUUAUUAAAAAGCAUUAAUA	UUAAUGCUUUUUAAUAAUAGA	R	-8	19.7	3	2	1	0	0	16	0	0	1	5	1
1744-1766	TTAATGCTTTTTAATAATAGAGA	UCUAUUAUUAAAAAGCAUUAA	AAUGCUUUUUAAUAAUAGAGA	R	-2.7	18.5	3	3	1	0	0	9	0	0	0	9	1
1752-1774	TTTTAATAATAGAGAGAAATACA	UAUUUCUCUCUAUUAUUAAAA	UUAAUAAUAGAGAGAAAUACA	R	14.8	-8	2	3	1	0	1	14	0	0	0	9	1
1761-1783	TAGAGAGAAATACACATTTGAGG	UCAAAUGUGUAUUUCUCUCUA	GAGAGAAAUACACAUUUGAGG	UA	12.1	19.1	2	3	1	0	2	18	0	0	0	14	1
1768-1790	AAATACACATTTGAGGAAATTCA	AAUUUCCUCAAAUGUGUAUUU	AUACACAUUUGAGGAAAUUCA	R	18.7	20.4	3	3	1	0	0	13	0	0	0	12	1
1771-1793	TACACATTTGAGGAAATTCAACA	UUGAAUUUCCUCAAAUGUGUA	CACAUUUGAGGAAAUUCAACA	UA	7.4	12.1	2	3	1	0	3	21	0	0	0	14	1
1773-1795	CACATTTGAGGAAATTCAACAAG	UGUUGAAUUUCCUCAAAUGUG	CAUUUGAGGAAAUUCAACAAG	U	14.8	12	3	3	1	0	0	20	0	0	0	11	1
1795-1817	GAGACTGATATCCCTGAAAGAGA	UCUUUCAGGGAUAUCAGUCUC	GACUGAUAUCCCUGAAAGAGA	URA	16.6	20.3	3	3	1	0	0	7	0	0	0	9	1
1797-1819	GACTGATATCCCTGAAAGAGAAC	UCUCUUUCAGGGAUAUCAGUC	CUGAUAUCCCUGAAAGAGAAC	UA	19.1	17.4	2	3	1	0	2	7	0	0	0	10	1
1807-1829	CCTGAAAGAGAACTTGTTAGAGC	UCUAACAAGUUCUCUUUCAGG	UGAAAGAGAACUUGUUAGAGC	R	11.8	19.1	2	2	1	0	3	14	0	0	1	16	1
1896-1918	GATAGAAAGTGGCCACATATTTA	AAUAUGUGGCCACUUUCUAUC	UAGAAAGUGGCCACAUAUUUA	R	13.3	17.7	2	2	1	0	1	4	0	0	1	16	1
1897-1919	ATAGAAAGTGGCCACATATTTAC	AAAUAUGUGGCCACUUUCUAU	AGAAAGUGGCCACAUAUUUAC	R	6.7	19.2	2	3	1	0	1	6	0	0	0	9	1
1906-1928	GGCCACATATTTACAGTTAATGA	AUUAACUGUAAAUAUGUGGCC	CCACAUAUUUACAGUUAAUGA	URA	11.8	13.3	3	2	1	0	0	7	0	0	1	12	1
1908-1930	CCACATATTTACAGTTAATGATC	UCAUUAACUGUAAAUAUGUGG	ACAUAUUUACAGUUAAUGAUC	R	6.9	-1.8	3	3	1	0	0	7	0	0	0	16	1
1909-1931	CACATATTTACAGTTAATGATCA	AUCAUUAACUGUAAAUAUGUG	CAUAUUUACAGUUAAUGAUCA	U	8.9	-8	3	3	1	0	0	6	0	0	0	10	1
1916-1938	TTACAGTTAATGATCAATTCACA	UGAAUUGAUCAUUAACUGUAA	ACAGUUAAUGAUCAAUUCACA	R	16.3	11.8	3	2	1	0	0	7	0	0	1	3	1
1919-1941	CAGTTAATGATCAATTCACATCC	AUGUGAAUUGAUCAUUAACUG	GUUAAUGAUCAAUUCACAUCC	U	20.5	8.9	2	3	1	0	1	5	0	0	0	3	1
1974-1996	AGCCAAACAAGGTGAATCTGACC	UCAGAUUCACCUUGUUUGGCU	CCAAACAAGGUGAAUCUGACC	URA	20.4	12.2	2	2	1	0	1	9	0	0	2	7	1
2020-2042	AAAGTAGATGATGACAGAAAACA	UUUUCUGUCAUCAUCUACUUU	AGUAGAUGAUGACAGAAAACA	RA	19.2	20.3	2	2	1	0	1	29	0	0	2	18	1
2031-2053	TGACAGAAAACACGAGATAGAAG	UCUAUCUCGUGUUUUCUGUCA	ACAGAAAACACGAGAUAGAAG	R	20.2	12.2	2	2	1	0	2	16	0	0	4	13	1
2032-2054	GACAGAAAACACGAGATAGAAGC	UUCUAUCUCGUGUUUUCUGUC	CAGAAAACACGAGAUAGAAGC	UA	20.2	13.3	2	2	1	0	5	30	0	0	0	16	1
2043-2065	CGAGATAGAAGCTGCTATAGTGC	ACUAUAGCAGCUUCUAUCUCG	AGAUAGAAGCUGCUAUAGUGC	R	19.5	16	2	3	1	0	2	9	0	0	0	5	1
2054-2076	CTGCTATAGTGCGGATAATGAAG	UCAUUAUCCGCACUAUAGCAG	GCUAUAGUGCGGAUAAUGAAG	URA	8.7	11.2	3	4	1	0	0	4	0	0	0	0	1
2055-2077	TGCTATAGTGCGGATAATGAAGT	UUCAUUAUCCGCACUAUAGCA	CUAUAGUGCGGAUAAUGAAGU	UR	8.7	13.1	3	3	1	0	0	8	0	0	0	2	1
2082-2104	GAAGAAGATGCAGCACAATGTTT	ACAUUGUGCUGCAUCUUCUUC	AGAAGAUGCAGCACAAUGUUU	R	18.1	20.4	2	3	1	0	2	30	0	0	0	10	1
2167-2189	AAACGTATTGAAGGACTTATTGA	AAUAAGUCCUUCAAUACGUUU	ACGUAUUGAAGGACUUAUUGA	A	14.5	13.7	3	3	1	0	0	4	0	0	0	1	1
2169-2191	ACGTATTGAAGGACTTATTGAGA	UCAAUAAGUCCUUCAAUACGU	GUAUUGAAGGACUUAUUGAGA	UR	3.5	8.9	3	4	1	0	0	7	0	0	0	0	1
2178-2200	AGGACTTATTGAGAGAGAATATT	UAUUCUCUCUCAAUAAGUCCU	GACUUAUUGAGAGAGAAUAUU	UA	19.1	4.6	3	3	1	0	0	10	0	0	0	10	1
2180-2202	GACTTATTGAGAGAGAATATTTG	AAUAUUCUCUCUCAAUAAGUC	CUUAUUGAGAGAGAAUAUUUG	UA	6.6	8.9	2	2	1	0	3	10	0	0	2	11	1
2181-2203	ACTTATTGAGAGAGAATATTTGG	AAAUAUUCUCUCUCAAUAAGU	UUAUUGAGAGAGAAUAUUUGG	R	1.8	13.4	3	2	1	0	0	15	0	0	1	5	1
2220-2242	TCGCAAAGTATACACATACGTAG	ACGUAUGUGUAUACUUUGCGA	GCAAAGUAUACACAUACGUAG	U	21	11.8	3	3	1	0	0	3	0	0	0	2	1
2221-2243	CGCAAAGTATACACATACGTAGC	UACGUAUGUGUAUACUUUGCG	CAAAGUAUACACAUACGUAGC	U	21	4.6	2	3	1	0	1	3	0	0	0	4	1
2227-2249	GTATACACATACGTAGCATAAAA	UUAUGCUACGUAUGUGUAUAC	AUACACAUACGUAGCAUAAAA	R	20.9	20.4	3	2	1	0	0	2	0	0	1	3	1
2229-2251	ATACACATACGTAGCATAAAATG	UUUUAUGCUACGUAUGUGUAU	ACACAUACGUAGCAUAAAAUG	R	15.3	20.4	3	2	0	0	0	1	0	0	1	9	1
2230-2252	TACACATACGTAGCATAAAATGC	AUUUUAUGCUACGUAUGUGUA	CACAUACGUAGCAUAAAAUGC	UA	-1.4	21	3	2	0	0	0	5	0	0	1	6	1
2239-2261	GTAGCATAAAATGCATTCAGAAA	UCUGAAUGCAUUUUAUGCUAC	AGCAUAAAAUGCAUUCAGAAA	A	18.1	15.3	3	2	0	0	0	2	0	0	1	13	1
2240-2262	TAGCATAAAATGCATTCAGAAAT	UUCUGAAUGCAUUUUAUGCUA	GCAUAAAAUGCAUUCAGAAAU	UA	20.4	-1.4	3	2	0	0	0	9	0	0	2	16	1
2241-2263	AGCATAAAATGCATTCAGAAATT	UUUCUGAAUGCAUUUUAUGCU	CAUAAAAUGCAUUCAGAAAUU	UA	20.4	-10.3	3	2	0	0	0	13	0	0	3	12	1
2243-2265	CATAAAATGCATTCAGAAATTTG	AAUUUCUGAAUGCAUUUUAUG	UAAAAUGCAUUCAGAAAUUUG	R	12	14	2	3	0	0	2	30	0	0	0	16	1
2244-2266	ATAAAATGCATTCAGAAATTTGA	AAAUUUCUGAAUGCAUUUUAU	AAAAUGCAUUCAGAAAUUUGA	R	5.3	20	2	3	0	0	1	31	0	0	0	11	1
2250-2272	TGCATTCAGAAATTTGATTTATT	UAAAUCAAAUUUCUGAAUGCA	CAUUCAGAAAUUUGAUUUAUU	URA	7.4	20.4	2	3	0	0	5	13	0	0	0	21	1
2252-2274	CATTCAGAAATTTGATTTATTCT	AAUAAAUCAAAUUUCUGAAUG	UUCAGAAAUUUGAUUUAUUCU	R	1.8	20.4	3	2	0	0	0	18	0	0	1	28	1
2254-2276	TTCAGAAATTTGATTTATTCTTG	AGAAUAAAUCAAAUUUCUGAA	CAGAAAUUUGAUUUAUUCUUG	UA	2.1	5.3	3	2	0	0	0	14	0	0	2	31	1
2298-2320	TGGGAAGTTCTTTTAAATCCTAC	AGGAUUUAAAAGAACUUCCCA	GGAAGUUCUUUUAAAUCCUAC	U	15.5	21.5	2	2	0	0	1	10	0	0	2	8	1
2299-2321	GGGAAGTTCTTTTAAATCCTACT	UAGGAUUUAAAAGAACUUCCC	GAAGUUCUUUUAAAUCCUACU	UR	18.7	17.7	3	2	0	0	0	9	0	0	2	17	1
2305-2327	TTCTTTTAAATCCTACTATTAAG	UAAUAGUAGGAUUUAAAAGAA	CUUUUAAAUCCUACUAUUAAG	URA	6.3	-9.1	3	2	0	0	0	6	0	0	2	17	1
2306-2328	TCTTTTAAATCCTACTATTAAGA	UUAAUAGUAGGAUUUAAAAGA	UUUUAAAUCCUACUAUUAAGA	R	6.3	-9.7	3	3	0	0	0	6	0	0	0	9	1
2308-2330	TTTTAAATCCTACTATTAAGACG	UCUUAAUAGUAGGAUUUAAAA	UUAAAUCCUACUAUUAAGACG	R	-2.3	15.5	3	3	0	0	0	6	0	0	0	4	1
2341-2363	CTGTTAAATTGCAGTACATGTTA	ACAUGUACUGCAAUUUAACAG	GUUAAAUUGCAGUACAUGUUA	UA	20.4	-9.7	2	3	0	0	1	4	0	0	0	8	1
2343-2365	GTTAAATTGCAGTACATGTTATA	UAACAUGUACUGCAAUUUAAC	UAAAUUGCAGUACAUGUUAUA	R	19.3	14	2	3	0	0	1	9	0	0	0	2	1
2344-2366	TTAAATTGCAGTACATGTTATAG	AUAACAUGUACUGCAAUUUAA	AAAUUGCAGUACAUGUUAUAG	R	13.5	20	3	3	0	0	0	6	0	0	0	4	1
2490-2512	CCGCGTTTTGTTTTCAATATTGT	AAUAUUGAAAACAAAACGCGG	GCGUUUUGUUUUCAAUAUUGU	URA	8.7	12.5	3	2	0	0	0	4	0	0	1	12	1
2492-2514	GCGTTTTGTTTTCAATATTGTAT	ACAAUAUUGAAAACAAAACGC	GUUUUGUUUUCAAUAUUGUAU	U	-1.8	5.6	3	2	0	0	0	15	0	0	8	59	1
2499-2521	GTTTTCAATATTGTATGAAAACA	UUUUCAUACAAUAUUGAAAAC	UUUCAAUAUUGUAUGAAAACA	R	8.9	8.9	2	3	0	0	3	36	0	0	0	10	1
2501-2523	TTTCAATATTGTATGAAAACAGG	UGUUUUCAUACAAUAUUGAAA	UCAAUAUUGUAUGAAAACAGG	R	14.9	-1.8	3	3	0	0	0	15	0	0	0	12	1
2512-2534	TATGAAAACAGGAAAAAAAATAA	AUUUUUUUUCCUGUUUUCAUA	UGAAAACAGGAAAAAAAAUAA	R	-11.3	14.9	2	2	1	0	24	>100	0	0	15	>100	1
2526-2548	AAAAAATAAAACAAATTTAGAAA	UCUAAAUUUGUUUUAUUUUUU	AAAAUAAAACAAAUUUAGAAA	R	-4.3	-9.7	2	2	0	0	7	>100	0	0	3	60	1
2527-2549	AAAAATAAAACAAATTTAGAAAA	UUCUAAAUUUGUUUUAUUUUU	AAAUAAAACAAAUUUAGAAAA	R	6.9	-9.7	2	2	0	0	7	74	0	0	5	56	1
2529-2551	AAATAAAACAAATTTAGAAAACA	UUUUCUAAAUUUGUUUUAUUU	AUAAAACAAAUUUAGAAAACA	R	7.1	7.2	2	2	0	0	5	58	0	0	4	31	1
2531-2553	ATAAAACAAATTTAGAAAACACA	UGUUUUCUAAAUUUGUUUUAU	AAAACAAAUUUAGAAAACACA	R	13.3	5.6	3	2	0	0	0	31	0	0	4	30	1
2542-2564	TTAGAAAACACAGCTCATTAAAA	UUAAUGAGCUGUGUUUUCUAA	AGAAAACACAGCUCAUUAAAA	RA	13.4	14.9	3	2	0	0	0	10	0	0	0	16	1
2543-2565	TAGAAAACACAGCTCATTAAAAT	UUUAAUGAGCUGUGUUUUCUA	GAAAACACAGCUCAUUAAAAU	URA	8.9	13.3	2	2	0	0	2	24	0	0	1	24	1
2544-2566	AGAAAACACAGCTCATTAAAATA	UUUUAAUGAGCUGUGUUUUCU	AAAACACAGCUCAUUAAAAUA	R	-1.4	19.3	2	3	0	0	2	12	0	0	0	20	1
2553-2575	AGCTCATTAAAATAAAATTGTTG	ACAAUUUUAUUUUAAUGAGCU	CUCAUUAAAAUAAAAUUGUUG	UA	-3.3	8.9	2	2	0	0	1	21	0	0	4	22	1
2554-2576	GCTCATTAAAATAAAATTGTTGG	AACAAUUUUAUUUUAAUGAGC	UCAUUAAAAUAAAAUUGUUGG	R	5.3	-1.4	2	3	0	0	1	31	0	0	3	18	1
2563-2585	AATAAAATTGTTGGATTTCATTT	AUGAAAUCCAACAAUUUUAUU	UAAAAUUGUUGGAUUUCAUUU	R	16.3	-3.3	2	3	0	0	3	11	0	0	0	29	1
2602-2624	TTGCTGTAAGTGTGTTTCTGTAG	ACAGAAACACACUUACAGCAA	GCUGUAAGUGUGUUUCUGUAG	UA	19.2	16.4	2	3	0	0	1	8	0	0	0	12	1
2603-2625	TGCTGTAAGTGTGTTTCTGTAGT	UACAGAAACACACUUACAGCA	CUGUAAGUGUGUUUCUGUAGU	URA	19.2	19	3	3	0	0	0	8	0	0	0	13	1
2634-2656	CTACACTTTGCGCATTGTGTAAG	UACACAAUGCGCAAAGUGUAG	ACACUUUGCGCAUUGUGUAAG	R	19.3	16.7	3	3	0	0	0	2	0	0	0	3	1
2662-2684	GAGCAAGAATGGCAAAAGAGACA	UCUCUUUUGCCAUUCUUGCUC	GCAAGAAUGGCAAAAGAGACA	URA	10.3	12	2	3	0	0	1	26	0	0	0	11	1
2670-2692	ATGGCAAAAGAGACAGAATTCCC	GAAUUCUGUCUCUUUUGCCAU	GGCAAAAGAGACAGAAUUCCC	A	12	18.6	2	3	0	0	1	26	0	0	0	6	1
2860-2882	GAGTTGTTTTTCTCTATTGTAAT	UACAAUAGAGAAAAACAACUC	GUUGUUUUUCUCUAUUGUAAU	U	11.6	5.6	2	3	0	0	1	19	0	0	0	38	1
2861-2883	AGTTGTTTTTCTCTATTGTAATC	UUACAAUAGAGAAAAACAACU	UUGUUUUUCUCUAUUGUAAUC	R	8.5	5.6	3	2	0	0	0	14	0	0	1	15	1
2876-2898	TTGTAATCTGAGGTTTTCCAAAT	UUGGAAAACCUCAGAUUACAA	GUAAUCUGAGGUUUUCCAAAU	UR	20.1	13.4	3	2	0	0	0	3	0	0	1	13	1
2883-2905	CTGAGGTTTTCCAAATTAAGTTC	ACUUAAUUUGGAAAACCUCAG	GAGGUUUUCCAAAUUAAGUUC	UA	-4.3	17.3	3	3	0	0	0	6	0	0	0	21	1
2886-2908	AGGTTTTCCAAATTAAGTTCTAA	AGAACUUAAUUUGGAAAACCU	GUUUUCCAAAUUAAGUUCUAA	U	14.6	20.1	3	2	0	0	0	13	0	0	1	20	1
2887-2909	GGTTTTCCAAATTAAGTTCTAAG	UAGAACUUAAUUUGGAAAACC	UUUUCCAAAUUAAGUUCUAAG	R	17.7	20.1	2	2	0	0	1	14	0	0	1	11	1
2891-2913	TTCCAAATTAAGTTCTAAGATGA	AUCUUAGAACUUAAUUUGGAA	CCAAAUUAAGUUCUAAGAUGA	UA	20.2	-1.4	2	3	0	0	1	11	0	0	0	2	1
2893-2915	CCAAATTAAGTTCTAAGATGATT	UCAUCUUAGAACUUAAUUUGG	AAAUUAAGUUCUAAGAUGAUU	R	13.4	-4.3	2	3	0	0	1	5	0	0	0	4	1
2896-2918	AATTAAGTTCTAAGATGATTAGG	UAAUCAUCUUAGAACUUAAUU	UUAAGUUCUAAGAUGAUUAGG	R	16.2	14.6	3	3	0	0	0	10	0	0	0	4	1
2900-2922	AAGTTCTAAGATGATTAGGTTTT	AACCUAAUCAUCUUAGAACUU	GUUCUAAGAUGAUUAGGUUUU	UA	18.5	11.7	3	3	0	0	0	7	0	0	0	8	1
2914-2936	TTAGGTTTTGCTCTGAGTTATTT	AUAACUCAGAGCAAAACCUAA	AGGUUUUGCUCUGAGUUAUUU	A	20.3	18.8	3	2	0	0	0	8	0	0	1	5	1
2915-2937	TAGGTTTTGCTCTGAGTTATTTC	AAUAACUCAGAGCAAAACCUA	GGUUUUGCUCUGAGUUAUUUC	URA	14.5	21.1	3	3	0	0	0	4	0	0	0	10	1
2916-2938	AGGTTTTGCTCTGAGTTATTTCT	AAAUAACUCAGAGCAAAACCU	GUUUUGCUCUGAGUUAUUUCU	UA	4.6	18.6	3	3	0	0	0	8	0	0	0	14	1
2925-2947	TCTGAGTTATTTCTAGAGAAAGA	UUUCUCUAGAAAUAACUCAGA	UGAGUUAUUUCUAGAGAAAGA	R	20.2	14.5	3	2	0	0	0	12	0	0	4	8	1
2927-2949	TGAGTTATTTCTAGAGAAAGAAA	UCUUUCUCUAGAAAUAACUCA	AGUUAUUUCUAGAGAAAGAAA	R	19.1	-0.3	2	2	0	0	2	4	0	0	2	12	1
2928-2950	GAGTTATTTCTAGAGAAAGAAAA	UUCUUUCUCUAGAAAUAACUC	GUUAUUUCUAGAGAAAGAAAA	U	19.1	2.1	2	2	0	0	1	10	0	0	1	35	1
2929-2951	AGTTATTTCTAGAGAAAGAAAAT	UUUCUUUCUCUAGAAAUAACU	UUAUUUCUAGAGAAAGAAAAU	R	14.8	6.9	2	2	0	0	1	15	0	0	3	36	1
2935-2957	TTCTAGAGAAAGAAAATATTTTA	AAAUAUUUUCUUUCUCUAGAA	CUAGAGAAAGAAAAUAUUUUA	URA	-10.3	20.2	2	2	0	0	2	24	0	0	2	41	1
2937-2959	CTAGAGAAAGAAAATATTTTAGT	UAAAAUAUUUUCUUUCUCUAG	AGAGAAAGAAAAUAUUUUAGU	RA	-10.3	19.1	3	2	0	0	0	58	0	0	1	15	1
2940-2962	GAGAAAGAAAATATTTTAGTATG	UACUAAAAUAUUUUCUUUCUC	GAAAGAAAAUAUUUUAGUAUG	URA	4.9	5.5	2	3	0	0	6	36	0	0	0	40	1
2943-2965	AAAGAAAATATTTTAGTATGTAT	ACAUACUAAAAUAUUUUCUUU	AGAAAAUAUUUUAGUAUGUAU	R	13.1	2.1	2	2	0	0	3	19	0	0	1	11	1
2944-2966	AAGAAAATATTTTAGTATGTATA	UACAUACUAAAAUAUUUUCUU	GAAAAUAUUUUAGUAUGUAUA	UR	19	-10.3	3	2	0	0	0	17	0	0	1	26	1
2945-2967	AGAAAATATTTTAGTATGTATAA	AUACAUACUAAAAUAUUUUCU	AAAAUAUUUUAGUAUGUAUAA	R	15.8	-10.3	3	3	0	0	0	13	0	0	0	21	1
2946-2968	GAAAATATTTTAGTATGTATAAA	UAUACAUACUAAAAUAUUUUC	AAAUAUUUUAGUAUGUAUAAA	R	8.2	-10.3	3	3	0	0	0	12	0	0	2	15	1
2947-2969	AAAATATTTTAGTATGTATAAAT	UUAUACAUACUAAAAUAUUUU	AAUAUUUUAGUAUGUAUAAAU	R	8.2	-10.3	3	3	0	0	0	21	0	0	0	18	1
2948-2970	AAATATTTTAGTATGTATAAATT	UUUAUACAUACUAAAAUAUUU	AUAUUUUAGUAUGUAUAAAUU	R	8.5	-7.5	3	3	0	0	0	15	0	0	0	19	1
2950-2972	ATATTTTAGTATGTATAAATTGT	AAUUUAUACAUACUAAAAUAU	AUUUUAGUAUGUAUAAAUUGU	R	-8	4.9	3	3	0	0	0	25	0	0	0	9	1
2953-2975	TTTTAGTATGTATAAATTGTACA	UACAAUUUAUACAUACUAAAA	UUAGUAUGUAUAAAUUGUACA	R	5.3	13.1	3	3	0	0	0	15	0	0	0	4	1
2956-2978	TAGTATGTATAAATTGTACAATA	UUGUACAAUUUAUACAUACUA	GUAUGUAUAAAUUGUACAAUA	UR	20.4	8.2	3	3	0	0	0	16	0	0	0	9	1
2958-2980	GTATGTATAAATTGTACAATAAT	UAUUGUACAAUUUAUACAUAC	AUGUAUAAAUUGUACAAUAAU	R	14.6	8.5	2	3	0	0	1	20	0	0	0	10	1
2959-2981	TATGTATAAATTGTACAATAATT	UUAUUGUACAAUUUAUACAUA	UGUAUAAAUUGUACAAUAAUU	R	8.5	1.4	3	3	0	0	0	20	0	0	0	7	1
2960-2982	ATGTATAAATTGTACAATAATTT	AUUAUUGUACAAUUUAUACAU	GUAUAAAUUGUACAAUAAUUU	URA	6.9	-8	2	2	0	0	1	26	0	0	1	12	1
2961-2983	TGTATAAATTGTACAATAATTTT	AAUUAUUGUACAAUUUAUACA	UAUAAAUUGUACAAUAAUUUU	R	-1.8	-10.3	3	2	0	0	0	15	0	0	1	12	1
2962-2984	GTATAAATTGTACAATAATTTTT	AAAUUAUUGUACAAUUUAUAC	AUAAAUUGUACAAUAAUUUUU	R	-10.3	-1.4	3	2	0	0	0	16	0	0	1	25	1
2963-2985	TATAAATTGTACAATAATTTTTT	AAAAUUAUUGUACAAUUUAUA	UAAAUUGUACAAUAAUUUUUU	R	-10.3	5.3	3	2	0	0	0	15	0	0	3	25	1
2964-2986	ATAAATTGTACAATAATTTTTTG	AAAAAUUAUUGUACAAUUUAU	AAAUUGUACAAUAAUUUUUUG	R	-9.7	6.9	2	2	0	0	3	11	0	0	2	21	1
2987-3009	CTGTTGTACTTACTGCTAATAGT	UAUUAGCAGUAAGUACAACAG	GUUGUACUUACUGCUAAUAGU	UA	19.7	19	3	2	0	0	0	11	0	0	1	7	1
2998-3020	ACTGCTAATAGTGGATTGTATAG	AUACAAUCCACUAUUAGCAGU	UGCUAAUAGUGGAUUGUAUAG	A	16.1	14.9	3	2	0	0	0	2	0	0	1	2	1
2999-3021	CTGCTAATAGTGGATTGTATAGG	UAUACAAUCCACUAUUAGCAG	GCUAAUAGUGGAUUGUAUAGG	UA	6.7	2.8	3	3	0	0	0	5	0	0	0	2	1
3012-3034	ATTGTATAGGGTGGTGTTTTTAT	AAAAACACCACCCUAUACAAU	UGUAUAGGGUGGUGUUUUUAU	R	13.3	19.8	2	3	0	0	1	10	0	0	0	4	1
3022-3044	GTGGTGTTTTTATTTCATTTATT	UAAAUGAAAUAAAAACACCAC	GGUGUUUUUAUUUCAUUUAUU	URA	7.4	13.3	2	2	0	0	4	59	0	0	4	56	1
3023-3045	TGGTGTTTTTATTTCATTTATTG	AUAAAUGAAAUAAAAACACCA	GUGUUUUUAUUUCAUUUAUUG	URA	8.9	5.6	3	2	0	0	0	31	0	0	16	>100	1
3029-3051	TTTTATTTCATTTATTGTAGACA	UCUACAAUAAAUGAAAUAAAA	UUAUUUCAUUUAUUGUAGACA	R	11.6	8.9	2	3	0	0	2	15	0	0	0	12	1
3033-3055	ATTTCATTTATTGTAGACAAAAT	UUUGUCUACAAUAAAUGAAAU	UUCAUUUAUUGUAGACAAAAU	R	20.3	8.9	3	2	0	0	0	14	0	0	1	25	1
3035-3057	TTCATTTATTGTAGACAAAATAA	AUUUUGUCUACAAUAAAUGAA	CAUUUAUUGUAGACAAAAUAA	URA	14.9	-10.3	2	2	0	0	1	15	0	0	5	17	1
3036-3058	TCATTTATTGTAGACAAAATAAA	UAUUUUGUCUACAAUAAAUGA	AUUUAUUGUAGACAAAAUAAA	R	5.3	-1.4	2	2	0	0	2	14	0	0	3	26	1
3037-3059	CATTTATTGTAGACAAAATAAAT	UUAUUUUGUCUACAAUAAAUG	UUUAUUGUAGACAAAAUAAAU	R	-1.4	6.9	3	2	0	0	0	16	0	0	2	32	1
3038-3060	ATTTATTGTAGACAAAATAAATG	UUUAUUUUGUCUACAAUAAAU	UUAUUGUAGACAAAAUAAAUG	R	-9.7	8.5	2	2	0	0	1	25	0	0	4	23	1
3043-3065	TTGTAGACAAAATAAATGAATTT	AUUCAUUUAUUUUGUCUACAA	GUAGACAAAAUAAAUGAAUUU	UA	7.4	20.3	2	2	0	0	1	45	0	0	3	17	1
3048-3070	GACAAAATAAATGAATTTAGTAT	ACUAAAUUCAUUUAUUUUGUC	CAAAAUAAAUGAAUUUAGUAU	UR	-4.3	-9.7	2	2	0	0	2	45	0	0	3	24	1
3049-3071	ACAAAATAAATGAATTTAGTATT	UACUAAAUUCAUUUAUUUUGU	AAAAUAAAUGAAUUUAGUAUU	R	4.6	-9.7	2	2	0	0	14	22	0	0	2	22	1
3053-3075	AATAAATGAATTTAGTATTCACA	UGAAUACUAAAUUCAUUUAUU	UAAAUGAAUUUAGUAUUCACA	R	14.5	7.4	2	2	0	0	2	6	0	0	1	11	1
3057-3079	AATGAATTTAGTATTCACATACA	UAUGUGAAUACUAAAUUCAUU	UGAAUUUAGUAUUCACAUACA	R	20.5	2.1	3	2	0	0	0	11	0	0	1	8	1
3059-3081	TGAATTTAGTATTCACATACACA	UGUAUGUGAAUACUAAAUUCA	AAUUUAGUAUUCACAUACACA	R	20.4	4.6	3	3	0	0	0	5	0	0	0	15	1
3069-3091	ATTCACATACACACTAACTGAAG	UCAGUUAGUGUGUAUGUGAAU	UCACAUACACACUAACUGAAG	R	16.4	20.4	3	2	0	0	0	8	0	0	5	18	1
3070-3092	TTCACATACACACTAACTGAAGT	UUCAGUUAGUGUGUAUGUGAA	CACAUACACACUAACUGAAGU	UA	20.3	20.4	3	2	0	0	0	7	0	0	2	9	1
3076-3098	TACACACTAACTGAAGTATGTCA	ACAUACUUCAGUUAGUGUGUA	CACACUAACUGAAGUAUGUCA	URA	11.6	19	3	3	0	0	0	7	0	0	0	6	1
3116-3138	CTGGTTATATTTAATTCAGTTCC	AACUGAAUUAAAUAUAACCAG	GGUUAUAUUUAAUUCAGUUCC	UA	19.2	1.1	2	3	0	0	1	7	0	0	0	8	1
3125-3147	TTTAATTCAGTTCCTTTGAAAAG	UUUCAAAGGAACUGAAUUAAA	UAAUUCAGUUCCUUUGAAAAG	R	12.2	12	3	2	0	0	0	11	0	0	3	25	1
3148-3170	CACATCCATTCTACCATTTGTTT	ACAAAUGGUAGAAUGGAUGUG	CAUCCAUUCUACCAUUUGUUU	URA	17.7	20.1	3	3	0	0	0	6	0	0	0	14	1
3151-3173	ATCCATTCTACCATTTGTTTATA	UAAACAAAUGGUAGAAUGGAU	CCAUUCUACCAUUUGUUUAUA	URA	5.6	13.4	3	2	0	0	0	10	0	0	3	9	1
3152-3174	TCCATTCTACCATTTGTTTATAA	AUAAACAAAUGGUAGAAUGGA	CAUUCUACCAUUUGUUUAUAA	UA	7.2	14.5	3	2	0	0	0	10	0	0	3	12	1
3156-3178	TTCTACCATTTGTTTATAAATAC	AUUUAUAAACAAAUGGUAGAA	CUACCAUUUGUUUAUAAAUAC	URA	-7.5	20	2	3	0	0	1	10	0	0	0	15	1
3157-3179	TCTACCATTTGTTTATAAATACA	UAUUUAUAAACAAAUGGUAGA	UACCAUUUGUUUAUAAAUACA	R	-8	18.8	3	3	0	0	0	12	0	0	0	9	1
3159-3181	TACCATTTGTTTATAAATACATC	UGUAUUUAUAAACAAAUGGUA	CCAUUUGUUUAUAAAUACAUC	URA	1.4	12.1	2	2	0	0	2	15	0	0	2	31	1
3160-3182	ACCATTTGTTTATAAATACATCC	AUGUAUUUAUAAACAAAUGGU	CAUUUGUUUAUAAAUACAUCC	U	6.9	5.3	3	2	0	0	0	17	0	0	1	21	1
3194-3216	CACACAGTTTAAATATATATTTT	AAUAUAUAUUUAAACUGUGUG	CACAGUUUAAAUAUAUAUUUU	UA	-6.4	17.8	2	2	0	0	1	20	0	0	2	36	1
3195-3217	ACACAGTTTAAATATATATTTTG	AAAUAUAUAUUUAAACUGUGU	ACAGUUUAAAUAUAUAUUUUG	R	-8.6	11.8	2	3	0	0	2	18	0	0	0	38	1
3196-3218	CACAGTTTAAATATATATTTTGG	AAAAUAUAUAUUUAAACUGUG	CAGUUUAAAUAUAUAUUUUGG	URA	-8	4.9	2	3	0	0	4	31	0	0	0	17	1
3231-3253	ACACCATTAATTGTTTCAAAATG	UUUUGAAACAAUUAAUGGUGU	ACCAUUAAUUGUUUCAAAAUG	RA	7.7	12.8	2	2	0	0	1	11	0	0	3	15	1
3232-3254	CACCATTAATTGTTTCAAAATGC	AUUUUGAAACAAUUAAUGGUG	CCAUUAAUUGUUUCAAAAUGC	URA	7.7	-1.8	2	2	0	0	1	12	0	0	2	15	1
3235-3257	CATTAATTGTTTCAAAATGCAAT	UGCAUUUUGAAACAAUUAAUG	UUAAUUGUUUCAAAAUGCAAU	R	14	6.9	3	2	0	0	0	11	0	0	3	19	1
3241-3263	TTGTTTCAAAATGCAATCTAAAG	UUAGAUUGCAUUUUGAAACAA	GUUUCAAAAUGCAAUCUAAAG	URA	13.4	7.7	3	2	0	0	0	10	0	0	3	19	1
3244-3266	TTTCAAAATGCAATCTAAAGATG	UCUUUAGAUUGCAUUUUGAAA	UCAAAAUGCAAUCUAAAGAUG	R	11.7	4.2	3	2	0	0	0	17	0	0	1	11	1
3245-3267	TTCAAAATGCAATCTAAAGATGC	AUCUUUAGAUUGCAUUUUGAA	CAAAAUGCAAUCUAAAGAUGC	U	11.7	14	2	2	0	0	1	18	0	0	1	12	1
3251-3273	ATGCAATCTAAAGATGCAATAAA	UAUUGCAUCUUUAGAUUGCAU	GCAAUCUAAAGAUGCAAUAAA	URA	19.9	13.4	3	3	0	0	0	15	0	0	0	6	1
3252-3274	TGCAATCTAAAGATGCAATAAAT	UUAUUGCAUCUUUAGAUUGCA	CAAUCUAAAGAUGCAAUAAAU	URA	21.1	6.9	3	3	0	0	0	10	0	0	0	8	1
3253-3275	GCAATCTAAAGATGCAATAAATA	UUUAUUGCAUCUUUAGAUUGC	AAUCUAAAGAUGCAAUAAAUA	R	15.3	6.9	3	3	0	0	0	9	0	0	0	4	1
3254-3276	CAATCTAAAGATGCAATAAATAG	AUUUAUUGCAUCUUUAGAUUG	AUCUAAAGAUGCAAUAAAUAG	RA	-1.4	11.7	3	3	0	0	0	23	0	0	0	3	1
3255-3277	AATCTAAAGATGCAATAAATAGA	UAUUUAUUGCAUCUUUAGAUU	UCUAAAGAUGCAAUAAAUAGA	R	-10.3	11.7	3	3	0	0	0	5	0	0	0	5	1
3257-3279	TCTAAAGATGCAATAAATAGATT	UCUAUUUAUUGCAUCUUUAGA	UAAAGAUGCAAUAAAUAGAUU	R	-2.3	12	2	3	0	0	5	5	0	0	0	12	1
3264-3286	ATGCAATAAATAGATTACCTTGA	AAGGUAAUCUAUUUAUUGCAU	GCAAUAAAUAGAUUACCUUGA	UA	18.5	-1.4	3	3	0	0	0	6	0	0	0	2	1
3274-3296	TAGATTACCTTGATAGTTTGAAG	UCAAACUAUCAAGGUAAUCUA	GAUUACCUUGAUAGUUUGAAG	U	11.8	18.5	2	3	0	0	1	6	0	0	0	4	1
3315-3337	AGCTGTGTTTTGGAAAGTGTTAA	AACACUUUCCAAAACACAGCU	CUGUGUUUUGGAAAGUGUUAA	UA	17.8	19.3	2	2	0	0	4	22	0	0	1	13	1
3317-3339	CTGTGTTTTGGAAAGTGTTAAGC	UUAACACUUUCCAAAACACAG	GUGUUUUGGAAAGUGUUAAGC	UA	19	12.2	2	2	0	0	5	35	0	0	1	11	1
3324-3346	TTGGAAAGTGTTAAGCAATATTT	AUAUUGCUUAACACUUUCCAA	GGAAAGUGUUAAGCAAUAUUU	URA	19.7	19.2	3	3	0	0	0	22	0	0	0	6	1
3325-3347	TGGAAAGTGTTAAGCAATATTTT	AAUAUUGCUUAACACUUUCCA	GAAAGUGUUAAGCAAUAUUUU	URA	15.2	17.8	2	3	0	0	1	10	0	0	0	12	1
3326-3348	GGAAAGTGTTAAGCAATATTTTT	AAAUAUUGCUUAACACUUUCC	AAAGUGUUAAGCAAUAUUUUU	R	-1.8	17.8	3	2	0	0	0	9	0	0	1	5	1
3329-3351	AAGTGTTAAGCAATATTTTTCAA	GAAAAAUAUUGCUUAACACUU	GUGUUAAGCAAUAUUUUUCAA	A	-9.7	11.8	2	3	0	0	1	9	0	0	0	13	1
3331-3353	GTGTTAAGCAATATTTTTCAAAC	UUGAAAAAUAUUGCUUAACAC	GUUAAGCAAUAUUUUUCAAAC	UR	7.7	19.7	2	2	0	0	1	14	0	0	2	13	1
3332-3354	TGTTAAGCAATATTTTTCAAACG	UUUGAAAAAUAUUGCUUAACA	UUAAGCAAUAUUUUUCAAACG	R	7.7	19.7	2	3	0	0	1	9	0	0	0	4	1
3344-3366	TTTTTCAAACGTGGATATTTAGC	UAAAUAUCCACGUUUGAAAAA	UUUCAAACGUGGAUAUUUAGC	R	1.8	14.9	3	3	0	0	0	7	0	0	0	3	1
3347-3369	TTCAAACGTGGATATTTAGCTAT	AGCUAAAUAUCCACGUUUGAA	CAAACGUGGAUAUUUAGCUAU	U	13.6	19.8	3	3	0	0	0	2	0	0	0	3	1
3354-3376	GTGGATATTTAGCTATCCATTGT	AAUGGAUAGCUAAAUAUCCAC	GGAUAUUUAGCUAUCCAUUGU	UA	21.2	1.8	3	2	0	0	0	10	0	0	3	5	1
3385-3407	GAGTCATGTTCGTGTTTTCAAAG	UUGAAAACACGAACAUGACUC	GUCAUGUUCGUGUUUUCAAAG	URA	14.9	20.5	3	2	0	0	0	9	0	0	1	6	1
3386-3408	AGTCATGTTCGTGTTTTCAAAGA	UUUGAAAACACGAACAUGACU	UCAUGUUCGUGUUUUCAAAGA	R	7.7	20.5	2	2	0	0	1	10	0	0	1	13	1
3423-3445	GAGATTCGTGTCCGTTACTCTGT	AGAGUAACGGACACGAAUCUC	GAUUCGUGUCCGUUACUCUGU	U	21.4	21.1	2	3	0	0	1	2	0	0	0	1	1
3452-3474	AACTATCACTGACGTTTTCTACC	UAGAAAACGUCAGUGAUAGUU	CUAUCACUGACGUUUUCUACC	URA	13.3	20.3	3	3	0	0	0	1	0	0	0	6	1
3461-3483	TGACGTTTTCTACCTGATTGATC	UCAAUCAGGUAGAAAACGUCA	ACGUUUUCUACCUGAUUGAUC	R	18.1	15.3	3	3	0	0	0	9	0	0	0	7	1
3475-3497	TGATTGATCTGCCAAGGATTATA	UAAUCCUUGGCAGAUCAAUCA	AUUGAUCUGCCAAGGAUUAUA	R	18.7	20.4	2	3	0	0	1	4	0	0	0	5	1
3487-3509	CAAGGATTATAGTTTGCTTTAAC	UAAAGCAAACUAUAAUCCUUG	AGGAUUAUAGUUUGCUUUAAC	A	18.6	15.4	3	3	0	0	0	4	0	0	0	4	1
3488-3510	AAGGATTATAGTTTGCTTTAACT	UUAAAGCAAACUAUAAUCCUU	GGAUUAUAGUUUGCUUUAACU	URA	19.7	3.5	3	3	0	0	0	6	0	0	0	5	1
3493-3515	TTATAGTTTGCTTTAACTTCAGA	UGAAGUUAAAGCAAACUAUAA	AUAGUUUGCUUUAACUUCAGA	R	14.6	11.8	3	2	0	0	0	4	0	0	1	15	1
3500-3522	TTGCTTTAACTTCAGAGTATTTT	AAUACUCUGAAGUUAAAGCAA	GCUUUAACUUCAGAGUAUUUU	UA	18.9	4.9	3	2	0	0	0	14	0	0	1	19	1
3501-3523	TGCTTTAACTTCAGAGTATTTTT	AAAUACUCUGAAGUUAAAGCA	CUUUAACUUCAGAGUAUUUUU	UA	14.5	4.9	2	2	0	0	1	6	0	0	2	24	1
3504-3526	TTTAACTTCAGAGTATTTTTATC	UAAAAAUACUCUGAAGUUAAA	UAACUUCAGAGUAUUUUUAUC	R	-9.7	19.2	2	2	0	0	1	12	0	0	1	18	1
3514-3536	GAGTATTTTTATCTTCCATTTTA	AAAUGGAAGAUAAAAAUACUC	GUAUUUUUAUCUUCCAUUUUA	URA	20.1	-9.7	2	3	0	0	2	13	0	0	0	70	1
3516-3538	GTATTTTTATCTTCCATTTTATT	UAAAAUGGAAGAUAAAAAUAC	AUUUUUAUCUUCCAUUUUAUU	R	11.3	-9.7	2	2	0	0	2	41	0	0	4	93	1
3517-3539	TATTTTTATCTTCCATTTTATTT	AUAAAAUGGAAGAUAAAAAUA	UUUUUAUCUUCCAUUUUAUUU	R	-1.4	2.1	2	2	0	0	2	21	0	0	7	76	1
3544-3566	TTGTTCCTTTTTTTTCTTAAAAG	UUUAAGAAAAAAAAGGAACAA	GUUCCUUUUUUUUCUUAAAAG	URA	7.1	18.7	2	2	0	0	4	75	0	0	26	>100	1
3545-3567	TGTTCCTTTTTTTTCTTAAAAGA	UUUUAAGAAAAAAAAGGAACA	UUCCUUUUUUUUCUUAAAAGA	R	7.1	18.7	2	2	0	0	6	77	0	0	6	>100	1
3559-3581	CTTAAAAGATAATGTTTTAGATA	UCUAAAACAUUAUCUUUUAAG	UAAAAGAUAAUGUUUUAGAUA	R	4.9	5.3	3	2	0	0	0	13	0	0	1	11	1
3560-3582	TTAAAAGATAATGTTTTAGATAT	AUCUAAAACAUUAUCUUUUAA	AAAAGAUAAUGUUUUAGAUAU	R	7.1	6.9	3	2	0	0	0	10	0	0	1	13	1
3561-3583	TAAAAGATAATGTTTTAGATATG	UAUCUAAAACAUUAUCUUUUA	AAAGAUAAUGUUUUAGAUAUG	R	6.9	6.9	3	2	0	0	0	14	0	0	1	9	1
3562-3584	AAAAGATAATGTTTTAGATATGT	AUAUCUAAAACAUUAUCUUUU	AAGAUAAUGUUUUAGAUAUGU	A	8.4	6.6	3	3	0	0	0	16	0	0	0	6	1
3564-3586	AAGATAATGTTTTAGATATGTAA	ACAUAUCUAAAACAUUAUCUU	GAUAAUGUUUUAGAUAUGUAA	U	13.3	6.7	3	3	0	0	0	10	0	0	0	6	1
3565-3587	AGATAATGTTTTAGATATGTAAT	UACAUAUCUAAAACAUUAUCU	AUAAUGUUUUAGAUAUGUAAU	R	16	6.9	2	2	0	0	1	4	0	0	1	3	1
3566-3588	GATAATGTTTTAGATATGTAATT	UUACAUAUCUAAAACAUUAUC	UAAUGUUUUAGAUAUGUAAUU	R	8.2	5.3	2	2	0	0	1	11	0	0	1	9	1
3588-3610	TGGGGAAAACCACTAGATTTCTG	GAAAUCUAGUGGUUUUCCCCA	GGGAAAACCACUAGAUUUCUG	A	6.9	21.2	2	2	0	0	1	20	0	0	1	8	1
3589-3611	GGGGAAAACCACTAGATTTCTGT	AGAAAUCUAGUGGUUUUCCCC	GGAAAACCACUAGAUUUCUGU	UA	14.8	21.2	2	2	0	0	3	11	0	0	1	5	1
3598-3620	CACTAGATTTCTGTCAGAAAAAT	UUUUCUGACAGAAAUCUAGUG	CUAGAUUUCUGUCAGAAAAAU	URA	20.4	6.9	3	2	0	0	0	11	0	0	1	11	1
3599-3621	ACTAGATTTCTGTCAGAAAAATG	UUUUUCUGACAGAAAUCUAGU	UAGAUUUCUGUCAGAAAAAUG	R	12.2	14.8	3	2	0	0	0	16	0	0	2	17	1
3600-3622	CTAGATTTCTGTCAGAAAAATGA	AUUUUUCUGACAGAAAUCUAG	AGAUUUCUGUCAGAAAAAUGA	R	5.5	14.8	2	2	0	0	3	20	0	0	1	16	1
3608-3630	CTGTCAGAAAAATGAAATGTTAC	AACAUUUCAUUUUUCUGACAG	GUCAGAAAAAUGAAAUGUUAC	UA	14.8	20.4	2	2	0	0	4	29	0	0	1	17	1
3609-3631	TGTCAGAAAAATGAAATGTTACT	UAACAUUUCAUUUUUCUGACA	UCAGAAAAAUGAAAUGUUACU	R	5.3	12.2	2	2	0	0	4	20	0	0	2	7	1
3651-3673	TCCATTGAATATCAATACTGTTG	ACAGUAUUGAUAUUCAAUGGA	CAUUGAAUAUCAAUACUGUUG	UA	11.6	7.2	3	2	0	0	0	7	0	0	0	6	1
3658-3680	AATATCAATACTGTTGATATACT	UAUAUCAACAGUAUUGAUAUU	UAUCAAUACUGUUGAUAUACU	R	8.7	8.7	2	3	0	0	2	12	0	0	0	5	1
3660-3682	TATCAATACTGTTGATATACTTA	AGUAUAUCAACAGUAUUGAUA	UCAAUACUGUUGAUAUACUUA	R	11.2	11.6	3	2	0	0	0	5	0	0	2	6	1
3661-3683	ATCAATACTGTTGATATACTTAT	AAGUAUAUCAACAGUAUUGAU	CAAUACUGUUGAUAUACUUAU	UR	6.1	11.6	3	2	0	0	0	11	0	0	1	7	1
3668-3690	CTGTTGATATACTTATTAGAATG	UUCUAAUAAGUAUAUCAACAG	GUUGAUAUACUUAUUAGAAUG	U	8.4	8.7	3	2	0	0	0	4	0	0	2	5	1
3671-3693	TTGATATACTTATTAGAATGTAT	ACAUUCUAAUAAGUAUAUCAA	GAUAUACUUAUUAGAAUGUAU	UA	13.4	6.1	3	2	0	0	0	10	0	0	1	9	1
3672-3694	TGATATACTTATTAGAATGTATG	UACAUUCUAAUAAGUAUAUCA	AUAUACUUAUUAGAAUGUAUG	R	19.2	6.3	3	3	0	0	0	3	0	0	0	12	1
3696-3718	CTCAGAAGATGGTTTGTGTTAAA	UAACACAAACCAUCUUCUGAG	CAGAAGAUGGUUUGUGUUAAA	URA	19.3	19.1	3	2	0	0	0	15	0	0	5	15	1
3697-3719	TCAGAAGATGGTTTGTGTTAAAT	UUAACACAAACCAUCUUCUGA	AGAAGAUGGUUUGUGUUAAAU	RA	20.4	20.4	3	3	0	0	0	11	0	0	0	16	1
3701-3723	AAGATGGTTTGTGTTAAATTTAT	AAAUUUAACACAAACCAUCUU	GAUGGUUUGUGUUAAAUUUAU	URA	-9.7	18.8	2	2	0	0	1	13	0	0	2	7	1
3705-3727	TGGTTTGTGTTAAATTTATGAAG	UCAUAAAUUUAACACAAACCA	GUUUGUGUUAAAUUUAUGAAG	U	-1.8	19.3	2	3	0	0	2	8	0	0	0	22	1
3709-3731	TTGTGTTAAATTTATGAAGTTAC	AACUUCAUAAAUUUAACACAA	GUGUUAAAUUUAUGAAGUUAC	UA	19.2	7.2	3	2	0	0	0	10	0	0	0	12	1
3716-3738	AAATTTATGAAGTTACAATAACT	UUAUUGUAACUUCAUAAAUUU	AUUUAUGAAGUUACAAUAACU	R	8.5	8.9	3	3	0	0	0	9	0	0	0	11	1
3718-3740	ATTTATGAAGTTACAATAACTGA	AGUUAUUGUAACUUCAUAAAU	UUAUGAAGUUACAAUAACUGA	R	6.9	13.4	3	3	0	0	0	4	0	0	0	4	1
3722-3744	ATGAAGTTACAATAACTGAATTC	AUUCAGUUAUUGUAACUUCAU	GAAGUUACAAUAACUGAAUUC	UA	19.2	12.9	2	2	0	0	2	12	0	0	1	10	1
3723-3745	TGAAGTTACAATAACTGAATTCT	AAUUCAGUUAUUGUAACUUCA	AAGUUACAAUAACUGAAUUCU	A	19.2	19	3	3	0	0	0	3	0	0	0	14	1
3725-3747	AAGTTACAATAACTGAATTCTAA	AGAAUUCAGUUAUUGUAACUU	GUUACAAUAACUGAAUUCUAA	UA	16.3	6.9	3	3	0	0	0	10	0	0	0	12	1
3726-3748	AGTTACAATAACTGAATTCTAAT	UAGAAUUCAGUUAUUGUAACU	UUACAAUAACUGAAUUCUAAU	R	14.8	8.5	3	2	0	0	0	11	0	0	1	8	1
3727-3749	GTTACAATAACTGAATTCTAATA	UUAGAAUUCAGUUAUUGUAAC	UACAAUAACUGAAUUCUAAUA	R	6.9	6.9	3	3	0	0	0	9	0	0	0	6	1
3728-3750	TTACAATAACTGAATTCTAATAT	AUUAGAAUUCAGUUAUUGUAA	ACAAUAACUGAAUUCUAAUAU	A	6.9	6.9	3	3	0	0	0	10	0	0	0	3	1
3729-3751	TACAATAACTGAATTCTAATATG	UAUUAGAAUUCAGUUAUUGUA	CAAUAACUGAAUUCUAAUAUG	URA	6.9	4.6	3	3	0	0	0	6	0	0	0	6	1
3735-3757	AACTGAATTCTAATATGGATTAA	AAUCCAUAUUAGAAUUCAGUU	CUGAAUUCUAAUAUGGAUUAA	UA	21.2	16.3	3	3	0	0	0	9	0	0	0	10	1
3736-3758	ACTGAATTCTAATATGGATTAAA	UAAUCCAUAUUAGAAUUCAGU	UGAAUUCUAAUAUGGAUUAAA	R	20.1	14.8	3	2	0	0	0	5	0	0	1	8	1
3737-3759	CTGAATTCTAATATGGATTAAAA	UUAAUCCAUAUUAGAAUUCAG	GAAUUCUAAUAUGGAUUAAAA	URA	21.2	6.9	3	2	0	0	0	9	0	0	1	11	1
3739-3761	GAATTCTAATATGGATTAAAAGC	UUUUAAUCCAUAUUAGAAUUC	AUUCUAAUAUGGAUUAAAAGC	R	2.1	6.9	2	3	0	0	1	12	0	0	0	6	1
3742-3764	TTCTAATATGGATTAAAAGCTCC	AGCUUUUAAUCCAUAUUAGAA	CUAAUAUGGAUUAAAAGCUCC	U	13.7	0	2	3	0	0	1	6	0	0	0	6	1
3751-3773	GGATTAAAAGCTCCACATAAATA	UUUAUGUGGAGCUUUUAAUCC	AUUAAAAGCUCCACAUAAAUA	R	13.5	-3.8	3	2	0	0	0	3	0	0	1	13	1
3752-3774	GATTAAAAGCTCCACATAAATAT	AUUUAUGUGGAGCUUUUAAUC	UUAAAAGCUCCACAUAAAUAU	R	6.9	13.7	2	2	0	0	1	8	0	0	2	10	1
3753-3775	ATTAAAAGCTCCACATAAATATT	UAUUUAUGUGGAGCUUUUAAU	UAAAAGCUCCACAUAAAUAUU	R	-1.8	17	3	2	0	0	0	6	0	0	2	8	1
3786-3808	GTCTTGGATTATAATTTTCCTTT	AGGAAAAUUAUAAUCCAAGAC	CUUGGAUUAUAAUUUUCCUUU	U	14.2	20.1	2	2	0	0	1	8	0	0	2	11	1
3789-3811	TTGGATTATAATTTTCCTTTTAG	AAAAGGAAAAUUAUAAUCCAA	GGAUUAUAAUUUUCCUUUUAG	URA	18.7	3.5	2	2	0	0	1	17	0	0	1	24	1
3792-3814	GATTATAATTTTCCTTTTAGACT	UCUAAAAGGAAAAUUAUAAUC	UUAUAAUUUUCCUUUUAGACU	R	1.3	-8	2	2	0	0	2	15	0	0	2	10	1
3803-3825	TCCTTTTAGACTTGGTTTTGTTG	ACAAAACCAAGUCUAAAAGGA	CUUUUAGACUUGGUUUUGUUG	UA	18.8	7.1	2	2	0	0	1	10	0	0	2	22	1
3811-3833	GACTTGGTTTTGTTGCATTTAAA	UAAAUGCAACAAAACCAAGUC	CUUGGUUUUGUUGCAUUUAAA	UA	20	18.8	2	2	0	0	1	11	0	0	3	27	1
3812-3834	ACTTGGTTTTGTTGCATTTAAAT	UUAAAUGCAACAAAACCAAGU	UUGGUUUUGUUGCAUUUAAAU	R	15.3	18.8	2	2	0	0	2	14	0	0	1	22	1
3813-3835	CTTGGTTTTGTTGCATTTAAATT	UUUAAAUGCAACAAAACCAAG	UGGUUUUGUUGCAUUUAAAUU	R	-1.4	18.8	2	2	0	0	1	34	0	0	1	17	1
3814-3836	TTGGTTTTGTTGCATTTAAATTT	AUUUAAAUGCAACAAAACCAA	GGUUUUGUUGCAUUUAAAUUU	UA	-9.7	13.3	3	2	0	0	0	24	0	0	1	20	1
3815-3837	TGGTTTTGTTGCATTTAAATTTG	AAUUUAAAUGCAACAAAACCA	GUUUUGUUGCAUUUAAAUUUG	UA	-9.7	5.6	3	2	0	0	0	8	0	0	1	58	1
3825-3847	GCATTTAAATTTGCTCTTATATG	UAUAAGAGCAAAUUUAAAUGC	AUUUAAAUUUGCUCUUAUAUG	R	11.6	-9.7	2	3	0	0	1	12	0	0	0	20	1
3854-3876	ATGGTTGAAGTCTTATGATCTTA	AGAUCAUAAGACUUCAACCAU	GGUUGAAGUCUUAUGAUCUUA	UA	17.4	19.2	3	3	0	0	0	2	0	0	0	7	1
3855-3877	TGGTTGAAGTCTTATGATCTTAA	AAGAUCAUAAGACUUCAACCA	GUUGAAGUCUUAUGAUCUUAA	UA	20.4	19.2	3	3	0	0	0	2	0	0	0	7	1
3858-3880	TTGAAGTCTTATGATCTTAATCT	AUUAAGAUCAUAAGACUUCAA	GAAGUCUUAUGAUCUUAAUCU	URA	6.9	17.7	3	3	0	0	0	6	0	0	0	8	1
3863-3885	GTCTTATGATCTTAATCTCTACA	UAGAGAUUAAGAUCAUAAGAC	CUUAUGAUCUUAAUCUCUACA	U	19.1	8.7	3	2	0	0	0	14	0	0	1	11	1
3868-3890	ATGATCTTAATCTCTACATGTTT	ACAUGUAGAGAUUAAGAUCAU	GAUCUUAAUCUCUACAUGUUU	U	17.9	6.9	4	3	0	0	0	0	0	0	1	11	1
3978-4000	TCGGTGTAATTGGAATTTTTACT	UAAAAAUUCCAAUUACACCGA	GGUGUAAUUGGAAUUUUUACU	URA	-12	14.6	3	3	1	0	0	7	0	0	0	12	1
3979-4001	CGGTGTAATTGGAATTTTTACTA	GUAAAAAUUCCAAUUACACCG	GUGUAAUUGGAAUUUUUACUA	A	-9.7	6.9	2	2	1	0	2	9	0	0	2	5	1
3981-4003	GTGTAATTGGAATTTTTACTAAG	UAGUAAAAAUUCCAAUUACAC	GUAAUUGGAAUUUUUACUAAG	UR	4.9	12.8	2	3	1	0	1	16	0	0	0	8	1
3982-4004	TGTAATTGGAATTTTTACTAAGG	UUAGUAAAAAUUCCAAUUACA	UAAUUGGAAUUUUUACUAAGG	R	6.6	20.1	2	2	1	0	1	9	0	0	1	7	1
4061-4083	GTGTATATGTAGGGACATAAAGG	UUUAUGUCCCUACAUAUACAC	GUAUAUGUAGGGACAUAAAGG	URA	16.1	8.2	3	3	1	0	0	3	0	0	0	4	1
4114-4136	CTGGGTTAAAGTAGATTTATCGG	GAUAAAUCUACUUUAACCCAG	GGGUUAAAGUAGAUUUAUCGG	A	1.8	14	3	3	1	0	0	6	0	0	0	1	1
4164-4186	CAAAATTCCTGTGATGCATTTGG	AAAUGCAUCACAGGAAUUUUG	AAAUUCCUGUGAUGCAUUUGG	R	19.9	18.7	2	3	1	0	1	8	0	0	0	13	1
4219-4241	TCCTCTAAATGTTTTAAAAGAAT	UCUUUUAAAACAUUUAGAGGA	CUCUAAAUGUUUUAAAAGAAU	URA	-3.8	6.9	3	2	1	0	0	12	0	0	3	24	1
4220-4242	CCTCTAAATGTTTTAAAAGAATG	UUCUUUUAAAACAUUUAGAGG	UCUAAAUGUUUUAAAAGAAUG	R	7.1	3.5	3	2	1	0	0	25	0	0	1	12	1
4221-4243	CTCTAAATGTTTTAAAAGAATGA	AUUCUUUUAAAACAUUUAGAG	CUAAAUGUUUUAAAAGAAUGA	URA	5.5	6.9	2	2	1	0	3	47	0	0	2	11	1
4223-4245	CTAAATGTTTTAAAAGAATGATG	UCAUUCUUUUAAAACAUUUAG	AAAUGUUUUAAAAGAAUGAUG	R	12	5.3	2	2	1	0	2	40	0	0	1	14	1