Appendix A Sequence characteristics of novel soybean miRNAs

No.	Seed	Name(Temp	Mature	Length	Start	End	Pre-miRNA	Length	Start	End	RNAfold	Chrom	Str	Arm	MEF	AMFE	MFEI	A(%)	C(%)	G(%)	U(%)	G+C(%)	A+U(%)	G/C	U/A	Query	Miss	TSS	LDF	TATA	TATA-Scor	TSS	LDF	TATA	TATA-Scor	TSS	LDF	TATA	TATA-Scor	TSS	LDF	TATA	TATA-Score
1	gma-MIR1525	1525	AGGGUUAAU	21	2682113	2682093	AGGGUUAAU	368	2682113	2681746	(((((((((Gm01	-	5'		-71.83	-19.519	-0.94513	40.21739	11.1413	9.51087	39.13043	20.65217	79.34783	0.853659	0.972973	UGGGUUAAU	2	1163	0.06	1136	19.97											
2	ath-MIR835	835	GUCUUGCAU	21	5834728	5834748	UGUAUAGAA	157	5834592	5834748	.(((((((Gm01	+	3'		-47.8	-30.4459	-0.8386	28.02548	17.19745	19.10828	35.66879	36.30573	63.69427	1.111111	1.272727	UUCUUGCAU	2															
3	gma-MIR1516	1516	CAAAAGAGC	21	7144541	7144521	UACAAGUAU	89	7144609	7144521	(((((((..Gm01	-	3'		-57	-64.0449	-1.83871	32.58427	14.60674	20.2472	32.58427	34.83146	65.16854	1.384615	1	CAAAAGAGC	0	102	0.04	64	20.17											
4	gma-MIR1525	1525	AGGAUUAAU	21	7542899	7542919	AGGAUUAAU	388	7542899	7543286	..((((((Gm01	+	5'		-99.6	-25.6701	-1.34595	39.43299	8.762887	10.30928	41.49485	19.07216	80.92784	1.176471	1.052288	UGGGUUAAU	2	276	0.09	239	23.09	1457	0.08	1439	22.63	714	0.02	681	20.01				
5	gma-MIR1517	1517	AGCCUUGGU	24	8047711	8047688	UUUUUUCG	227	8047914	8047688	.((((..(Gm01	-	3'		-92.52	-40.7577	-1.05136	22.46696	16.29956	22.46696	38.76652	38.76652	61.23348	1.378378	1.72549	AGUCUUGGU	1	380	0.08	352	21.01	911	0.05	893	21.46								
6	gma-MIR1520a	1520	AAGAACGUG	23	9996789	9996767	UGACUACCA	164	9996930	9996767	.((((..(Gm01	-	3'		-81	-49.3902	-1.35	33.53659	19.5122	17.07317	29.87805	36.58537	63.41463	0.875	0.890909	UAGAACAUG	3	1431	0.06	1399	21.11											
7	gma-MIR1517	1517	AGCCUUGGU	24	14254378	14254355	UUUGUUCG	189	14254543	14254355	.((((..(Gm01	-	3'		-70.42	-37.2593	-0.92658	24.86772	17.98942	22.22222	34.92063	40.21164	59.78836	1.235294	1.404255	AGUCUUGGU	3	726	0.05	697	20.33											
8	gma-MIR1517	1517	AGUCUUGGU	24	23929298	23929321	UUUGUUCCG	151	23929171	23929321	.((((..(Gm01	+	3'		-58.6	-38.8079	-0.99322	27.15232	17.21854	21.8543	33.77483	39.07285	60.92715	1.269231	1.243902	AGUCUUGGU	1	121	0.14	86	22.11											
9	gma-MIR1525	1525	AGGGUUAAU	21	25516301	25516281	AGGGUUAAU	378	25516301	25515924	(((((((((Gm01	-	5'		-101.49	-26.8492	-1.30115	37.56614	10.31746	10.31746	41.79894	20.63492	79.36508	1	1.112676	UGGGUUAAU	1	621	0.04	589	18.96											
10	gma-MIR1525	1525	AGGGUUAAU	21	25516301	25516281	AUUAAAAAC	185	25516465	25516281	(((((((((Gm01	-	3'		-30.1	-16.2703	-1.36818	44.86486	4.864865	7.027027	43.24324	11.89189	88.10811	1.444444	0.963855	UGGGUUAAU	1	785	0.04	753	18.96											
11	osa-MIR1863	1863	GGCUCUGAU	24	27886962	27886939	GAAUUUAAC	337	27887275	27886939	(((((((((Gm01	-	3'		-111.5	-33.0861	-0.75338	30.26706	23.73887	20.17804	25.81602	43.91691	56.08309	0.85	0.852941	AGCUCUGAU	3	1922	0.02	1891	17.26											
12	gma-MIR1534	1534	UAUUUUGGG	20	29065654	29065635	UAUUUUGGG	221	29065654	29065434	.....((Gm01	-	5'		-72.1	-32.6244	-0.91266	29.86425	17.64706	18.09955	34.38914	35.74661	64.25339	1.025641	1.151515	UUUUUUGGG	0															
13	ath-MIR2111a	2111	UAAUCUGCA	21	31787463	31787483	UAAUCUGCA	66	31787463	31787528	(((((((((Gm01	+	5'		-32.2	-48.7879	-1.288	21.21212	16.66667	21.21212	40.90909	37.87879	62.12121	1.272727	1.928571	UAAUCUGCA	0	1850	0.07	1817	21.09	435	0.06	421	20.5								
14	gma-MIR1517	1517	AGCCUUGGU	24	32023353	32023376	UUUGUCUG	225	32023152	32023376	.((((..(Gm01	+	3'		-89	-39.5556	-1.02299	23.11111	16	22.66667	38.22222	38.66667	61.33333	1.416667	1.653846	AGCUCUGGU	1	834	0.08	797	21.14	169	0.03	131	19.53								
15	gma-MIR1534	1534	UAUUUUGGA	20	32037136	32037117	AUGACUAAU	390	32037506	32037117	(((((((((Gm01	-	3'		-105.02	-26.9282	-1.25024	34.10256	9.487179	12.05128	44.35897	21.53846	78.46154	1.27027	1.300752	UUUUUUGGG	1	786	0.04	754	21.6	1658	0.03	1634	19.06								
16	gma-MIR1534	1534	UAUUUUGAG	20	36047271	36047290	UAUUUUGAG	233	36047271	36047503	..(((((Gm01	+	5'		-81.7	-35.0644	-1.16714	31.33047	14.59227	15.45064	38.62661	30.04292	69.95708	1.058824	1.232877	UUUUUUGGG	1	1171	0.13	1134	21.21											
17	gma-MIR1522	1522	UUUAUUGCU	20	40666345	40666326	UUUAUUGCU	169	40666345	40666177	.((((..(Gm01	-	5'		-30	-17.7515	-1	41.42012	7.692308	10.05917	40.8284	17.75148	82.24852	1.307692	0.985714	UUUAUUGCU	1	454	0.04	420	20.7											
18	gma-MIR1522	1522	UUUAUUGCU	20	40666345	40666326	UUUAAUUUU	119	40666444	40666326	(((((((((Gm01	-	3'		-12	-10.084	-0.54545	41.17647	12.60504	5.882353	40.33613	18.48739	81.51261	0.466667	0.979592	UUUAUUGCU	1	553	0.04	519	20.7											
19	gma-MIR1522	1522	UUUAUUGCU	20	40666345	40666262	UUUAUUGCU	169	40692665	40692497	.((((..(Gm01	-	5'		-25.5	-15.0888	-0.87931	40.23669	6.508287	12.42605	40.60355	17.16588	82.84412	1.636364	1.058824	UUUAUUGCU	1	1295	0.02	1261	20.7											
20	gma-MIR1522	1522	UUUAUUGCU	20	40748850	40748869	UUUAUUGCU	168	40748850	40749017	.((((..(Gm01	+	5'		-31.6	-18.8095	-1.05333	41.07143	7.738095	10.11905	41.07143	17.85714	82.14286	1.307692	1	UUUAUUGCU	1	455	0.05	419	20.7											
21	gma-MIR1522	1522	UUUAUUGCU	20	40767958	40767977	UUUAUUGCU	178	40767958	40768135	.((((..(Gm01	+	5'		-34.1	-19.1573	-1.17586	43.25843	6.741573	9.550562	40.44944	16.29213	83.70787	1.416667	0.935065	UUUAUUGCU	1															
22	gma-MIR1522	1522	UUUAUUGCU	20	40782798	40782817	UUUAUUGCU	170	40782798	40782967	.((((..(Gm01	+	5'		-29.2	-17.1765	-1.0069	40	6.470588	10.58824	42.94118	17.05882	82.94118	1.636364	1.073529	UUUAUUGCU	1															
23	gma-MIR1522	1522	UUUAUUGCU	20	40782798	40782817	UUUAAUUUU	121	40782697	40782817	(((((((((Gm01	+	3'		-12.62	-10.4298	-0.66421	39.66942	9.917355	5.785124	44.6281	15.70248	84.29752	0.583333	1.125	UUUAUUGCU	1															
24	gma-MIR1520a	1520	AAGAACAUG	23	41126216	41126194	UGACUGUCA	164	41126357	41126194	.(((((((Gm01	-	3'		-90.6	-55.2439	-1.46129	28.04878	15.85366	21.95122	34.14634	37.80488	62.19512	1.384615	1.217391	UAGAACAUG	3	148	0.02	111	22.17											
25	gma-MIR393	393	UCCAAAGGG	21	41428937	41428917	UCCAAAGGG	100	41428937	41428838	(((((((((Gm01	-	5'		-31.9	-31.9	-0.88611	27	24	12	37	36	64	0.5	1.37037	UCCAAAGGG	1															
26	gma-MIR390a	390	AAGCUCAGG	21	42335625	42335645	AAGCUCAGG	76	42335625	42335700	(((((((((Gm01	+	5'		-37.94	-49.9211	-1.02541	18.42105	27.63158	21.05263	32.89474	48.68421	51.31579	0.761905	1.785714	AAGCUCAGG	0	1861	0.16	1826	24.01											
27	gma-MIR1517	1517	AGUCUUGAU	24	48067563	48067586	UUUGUCCUG	224	48067363	48067586	.((((..(Gm01	+	3'		-73.4	-32.7679	-0.89512	27.23214	17.85714	18.75	36.16071	36.60714	63.39286	1.05	1.327869	AGUCUUGGU	1	115	0.08	99	19.03	641	0.04	623	17.64								
28	gma-MIR168	168	UCGCUUGGU	21	48070409	48070389	UCGCUUGGU	88	48070409	48070322	(((.(((((Gm01	-	5'		-42.6	-48.4091	-0.77455	17.04545	26.13636	36.36364	20.45455	62.5	37.5	1.391304	1.2	UCGCUUGGU	0	1786	0.22	1753	22.43	1145	0.06	1112	21.77	683	0.05	668	21.57				
29	gma-MIR1520a	1520	CAGAACAUG	23	50649913	50649935	GACUGUCAC	99	50649837	50649935	(((((((((Gm01	+	3'		-43	-43.4343	-1.22857	35.35354	21.21212	14.14141	29.29293	35.35354	64.64646	0.666667	0.828571	UAGAACAUG	3	1475	0.07	1442	19.54	1044	0.04	1015	19.7								
30	gma-MIR1530	1530	UUUUCACAU	21	54172097	54172077	UUAAUAUAA	132	54172208	54172077	....((((Gm01	-	3'		-25.2	-19.0909	-2.52	40.90909	4.545455	3.030303	51.51515	7.575758	92.42424	0.666667	1.259259	UUUUCACAU	1	490	0.08	457	21.54	1449	0.02	1436	20.34								
31	gma-MIR1520a	1520	AAGAACGUG	23	54792920	54792898	GAUUAUCAC	151	54793048	54792898	(((.((Gm01	-	3'		-72.5	-48.0132	-1.29464	30.46358	20.5298	16.55629	32.45033	37.08609	62.91391	0.806452	1.065217	UAGAACAUG	3															
32	gma-MIR1517	1517	AGUCUUGGU	24	55082758	55082735	UUUUGACUG	377	55083111	55082735	.(((((..(Gm01	-	3'		-133.4	-35.3846	-0.92639	23.87268	16.44562	21.75066	37.93103	38.19629	61.80371	1.322581	1.588889	AGUCUUGGU	1	473	0.1	439	20.9	1323	0.05	1286	20.21								
33	gma-MIR1517	1517	AGCCUUGGU	24	132260	132283	UUUGUCCG	225	132059	132283	.((((..(Gm02	+	3'		-90	-40	-1.03448	24.44444	17.77778	20.88889	36.88889	38.66667	61.33333	1.175	1.509091	AGCUCUGGU	1															
34	gma-MIR1517	1517	AGUCUUGGU	24	164386	164363	UUUGACUCG	378	164740	164363	(((((..(Gm02	-	3'		-124.79	-33.0132	-0.93127	24.86772	14.81481	20.63492	39.68254	35.44974	64.55026	1.392857	1.595745	AGUCUUGGU	1	370	0.09	336	21.97											
35	ath-MIR408	408	AUGCACUGC	21	837520	837540	GCAGGGGAA	112	837429	837540	(((.(((((Gm02	+	3'		-48	-42.8571	-0.87273	28.57143	19.64286	29.46429	22.32143	49.10714	50.89286	1.5	0.78125	AUGCACUGC	0	584	0.09	571	21.26											
36	ath-MIR403	403	UUAGAUUCA	21	1042058	1042078	CAGGUCGUA	77	1042002	1042078	(((((((..(Gm02	+	3'		-32.71	-42.4805	-0.93457	22.07792	27.27273	18.18182	32.46753	45.45455	54.54545	0.666667	1.470588	UUAGAUUCA	1	1715	0.05	1681	20.34	1300	0.04	1276	19.67								
37	gma-MIR164	164	UGGAGAAGC	21	1511600	1511620	UGGAGAAGC	78	1511600	1511677	.(((((((Gm02	+	5'		-37.8	-48.4615	-0.85909	17.94872	34.61538	21.79487	25.64103	56.41026	43.58974	0.62963	1.428571	UGGAGAAGC	0	1950	0.08	1915	22.56											
38	gma-MIR1520a	1520	CAAAACAUG	23	2139212	2139234	UGACUGUCA	87	2139148	2139234	.(((((((Gm02	+	3'		-30.8	-35.4023	-0.90588	27.58621	22.98851	16.09195	33.33333	39.08046	60.91954	0.7	1.208333	UAGAACAUG	3	945	0.02	931	20.77	155	0.02	119	18.87								
39	gma-MIR1519	1519	UAAGUGUUG	22	3493664	3493685	UAAGUGUUG	156	3493664	3493819	(((((((((Gm02	+	5'		-64.2	-41.1538	-1.03548	29.48718	22.4359	17.30769	30.76923	39.74359	60.25641	0.771429	1.043478	UAAGUGUUG	1	138	0.06	118	19.93											
40	gma-MIR1520a	1520	CAGAACAUG	23	3788305	3788327	GACUACCAC	99	3788229	3788327	(((((..(Gm02	+	3'		-37.15	-37.5253	-0.97763	31.31313	20.20202	18.18182	30.30303	38.38384	61.61616	0.9	0.967742	UAGAACAUG	2	734	0.06	700	20.77											
41	ath-MIR170	170	UGAUUGAGC	21	4014036	4014016	GAUAUUGGC	122	4014137	4014016	(((((((((Gm02	-	3'		-45.8	-37.541	-0.89804	25.40984	17.21311	24.59016	32.78689	41.80328	58.19672	1.428571	1.290323	UGAUUGAGC	1	950	0.04	912	21.19	195	0.03	176	18	1566	0.02	1530	21.47				
42	gma-MIR1520a	1520	AAGAACGUG	23	7065438	7065416	GAUGUCACC	163	7065578	7065416	(((((((((Gm02	-	3'		-89.3	-54.7853	-1.46393	33.74233	19.6319	17.79141	28.83436	37.42331	62.57669	0.90625	0.854545	UAGAACAUG	3	754	0.08	719	22.27											
43	gma-MIR1517	1517	AGUCUUGGU	24	8495255	8495232	UUUGUCCUG	226	8495457	8495232	.((((..(Gm02	-	3'		-82.3	-36.4159	-0.9044	22.56637	17.25664	23.00885	37.16814	40.26549	59.73451	1.333333	1.647059	AGUCUUGGU	0	759	0.03	742	19.4											
44	gma-MIR1525	1525	AGGAUUAAU	21	10352967	10352947	AGGAUUAAU	359	10352967	10352609	(((((..(Gm02	-	5'		-93.1	-25.9331	-1.29306	40.11142	8.356546	11.69916	39.83287	20.05571	79.94429	1.4	0.993056	UGGGUUAAU	2															
45	gma-MIR1517	1517	AGUCUUGGU	24	10940955	10940932	UUUGUCCUG	225	10941156	10940932	.((((..(Gm02	-	3'		-80.2	-35.6444	-0.93256	23.11111	17.33333	20.88889	38.66667	38.22222	61.77778	1.205128	1.673077	AGUCUUGGU	1															
46	gma-MIR2119	2119	UCAAAGGGA	21	10988208	10988188	UUCCUCUAC	94	10988281	10988188	.(((((((Gm02	-	3'		-35.13	-37.3723	-1.09781	35.10638	14.89362	19.14894	30.85106	34.04255	65.95745	1.285714	0.878788	UCAAAGGGA	0	439	0.09	410	17.89	1289	0.07	1255	19.4								
47	gma-MIR1520a	1520	CAAAACAUG	23	13665525	13665547	UGAUUGUCA	100	13665448	13665547	.(((((((Gm02	+	3'		-44.2	-44.2	-1.19459	32	18	19	31	37	63	1.055556	0.96875	UAGAACAUG	3	811	0.05	779	20.01											
48	ath-MIR165a	165	UCGGACCAG	21	14340838	14340858	GGGGAAUGU	87	14340772	14340858	(((((((((Gm02	+	3'		-48.3	-55.5172	-1.09773	20.68966	25.28736	25.28736	28.73563	50.57471	49.42529	1	1.388889	UCGGACCAG	1															
49	gma-MIR1534	1534	UAUUUUGGA	20	16718364	16718345	UAUUUUGGA	229	16718364	16718136	....((((Gm02	-	5'		-50.6	-22.0961	-0.84333	34.49782	13.53712	12.66376	39.30131	26.20087	73.79913	0.935484	1.139241	UAUUUUGGG	1	955	0.05	923	19.34											
50	gma-MIR1520a	1520	CAGAACAUG	23	17518192	17518170	GAUUGUCAC	88	17518257	17518170	(((((((((Gm02	-	3'		-40.3	-45.7955	-1.34333	34.09091	17.04545	17.04545	31.81818	34.09091	65.90909	1	0.933333	UAGAACAUG	3	1934	0.05	1900	19.83	1063	0.04	1041	17.61								
51	gma-MIR1517	1517	AGCCUUGAU	24	27278557	27278534	UUUGUCUGA	224	27278757	27278534	(((((..(Gm02	-	3'		-90.3	-40.3125	-1.00333	22.76786	17.41071	22.76786	37.05357	40.17857	59.82143	1.307692	1.627451	AGUCUUGGU	3	1254	0.07	1217	19.19											
52	gma-MIR1525	1525	AGGAUUAAU	21	38447270	38447250	ACUAAAAGG	396	38447645	38447250	(((((((((Gm02	-	3'		-64.12	-16.1919	-0.57766	38.13131	16.91919	11.11111	33.83838	28.0303	71.9697	0.656716	0.887417	UGGGUUAAU	2															
53	gma-MIR1517	1517	AGUCUUGGU	24	41597722	41597745	UUUGUCUG	225	41597521	41597745	.((((..(Gm02	+	3'		-92.7	-41.2	-1.07791	24	16.44444	21.77778	37.77778	38.22222	61.77778	1.324324	1.574074	AGUCUUGGU	0	880	0.13	845	22.11	108	0.03	89	18.91								
54	gma-MIR1534	1534	UAUUUUGGG	20	41830738	41830719	UAUUUUGGG	219	41830738	41830520	(((((((((Gm02	-	5'		-69.54	-31.7534	-1.17864	35.61644	13.69863	13.24201	37.44292	26.94064	73.05936	0.966667	1.051282	UAUUUUGGG	0	952	0.13	929	21.87	1743	0.1	1707	21.74								
55	gma-MIR319a	319	UUGGACUGA	20	43885561	43885580	AGGAGUUUC	169	43885412	43885580	(((((((((Gm02	+	3'		-68.7	-40.6509	-1.05692	28.40237	16.56805	21.89349	33.13609	38.46154	61.53846	1.321429	1.166667	UGGGACUGA	1	1312	0.09	1274	21.14	767	0.05	732	19.4								
56	gma-MIR1520a	1520	CAGAACAUG	23	44426135	44426157	AAUGUCACU	95	44426063	44426157	(((((((((Gm02	+	3'		-25.7	-27.0526	-0.95185	34.73684	14.73684	13.68421	36.84211	28.42105	71.57895	0.928571	1.060606	UAGAACAUG	4	810	0.07	775	19.77	1665	0.03	1632	20.17								
57	gma-MIR390a	390	AAGCUCAGG	21	44954768	44954788	AAGCUCAGG	76	44954768	44954843	(((((((((Gm02	+	5'		-34.1	-44.8684	-1.03333	28.94737	19.73684	23.68421	27.63158	43.42105	56.57895	1.2	0.954545	AAGCUCAGG	1	1814	0.18	1779	22.17	929	0.09	896	20.53								
58	gma-MIR1520a	1520	CAGAAUAUG	23	45427913	45427935	GACUAUCAC	99	45427837	45427935	(((((((((Gm02	+	3'		-43.5	-43.9394	-1.24286	36.36364	17.17172	18.18182	28.28283	35.35354	64.64646	1.058824	0.777778	UAGAACAUG	3	1190	0.07	1155	23.29											
59	gma-MIR319a	319	UUGGACUGA	20	45704386	45704405	GAGCUUCCU	170	45704236	45704405	(((((((((Gm02	+	3'		-82.2	-48.3529	-1.11081	22.94118	18.82353	24.70588	33.52941	43.52941	56.47059	1.3125	1.461538	UUGGACUGA	0	1166	0.04	1134	20.23											
60	gma-MIR169a	169	UAGCCAAGA	21	46876726	46876706	UAGCCAAGA	83	46876726	46876644	(((((((((Gm02	-	5'		-36.4	-43.8554	-1.07059	25.3012	15.66265	25.3012	33.73494	40.96386	59.03614	1.615385	1.333333	CAGCCAAGG	2	1877	0.08	1849	20.7	1376	0.08	1340	19.93	490	0.03	457	21.43				
61	gma-MIR393	393	UCCAAAGGG	21	47136308	47136288	UCCAAAGGG	94	47136308	47136215	(((((((((Gm02	-	5'		-37.19	-39.5638	-1.03306	23.40426	25.53191	12.76596	38.29787	38.29787	61.70213	0.5	1.636364	UCCAAAGGG	0	1568	0.03	1533	20.46	776	0.02	763	20.7								
62	gma-MIR1517	1517	AACUUUGCU	24	47706906	47706929	UUCGAUUGA	373	47706557	47706929	.((((..(Gm02	+	3'		-109.33	-29.311	-0.90355	28.41823	14.47721	17.96247	39.14209	32.43968	67.56032	1.240741	1.377358	AGUCUUGGU	4	260	0.08	230	20.93	1072	0.06	1038	18.93								
63	ath-MIR398a	398	UGUGUCUCC	21	49180093	49180113	CAGGGUCGU	98	49180016	49180113	(((((.((Gm02	+	3'		-47.8	-48.7755	-1.06222	24.4898	24.4898	21.42857	29.59184	45.91837	54.08163	0.875	1.208333	UGUGUCUCC	2	1914	0.06	1879	20.26	1344	0.02	1326	21.43								
64	gma-MIR1534	1534	UAUUUUGGA	20	49356196	49356177	UAUUUUGGA	230	49356196	49355967	..((((((Gm02	-	5'		-48.45	-21.0652	-0.95	37.82609	10.43478	11.73913	40	22.17391	77.82609	1.125	1.057471	UAUUUUGGG	1	1460	0.09	1424	20.67	819	0.03	793	19.97								
65	gma-MIR156a	156	UGACAGAAG	20	50779323	50779304	UGACAGAAG	83	50779323	50779241	.(((((((Gm02	-	5'		-45.2	-54.4578	-1.10244	22.89157	20.48193	28.91566	27.71084	49.39759	50.60241	1.411765	1.210526	UGACAGAAG	1	1074	0.1	1046	20.8											
66	gma-MIR1534	1534	UAUUUCGGG	20	4686501	4686482	UAUUUCGGG	203	4686501	4686299	(((((.((Gm03	-	5'		-53.5	-26.3547	-0.87705	31.03448	14.28571	15.76355	38.91626	30.04926	69.95074	1.103448	1.253968	UAUUUUGGG	1	844	0.08	813	21.59	1481	0.04	1453	21.36								
67	gma-MIR1525	1525	GGGAUUAAU	21	17229346	17229326	GGGAUUAAU	384	17229346	17228963	(((.((((Gm03	-	5'		-90.21	-23.4922	-0.94958	39.32292	10.67708	14.0625	35.9375	24.73958	75.26042	1.317073	0.913907	UGGGUUAAU	2	1637	0.05	1608	21.76											
68	gma-MIR1517	1517	AGUCUUGGU	24	18161989	18161966	UUUGAUUG	375	18162340	18161966	.((((..(Gm03	-	3'		-128.3	-34.2133	-0.86107	24.26667	17.86667	21.86667	36	39.73333	60.26667	1.223881	1.483516	AGUCUUGGU	0															
69	gma-MIR1534	1534	UAUUUUGGG	20	18582290	18582309	UAUUUUGGG	197	18582290	18582486	(((((((((Gm03	+	5'		-78.3	-39.7462	-1.2629	35.02538	16.75127	14.72081	33.50254	31.47208	68.52792	0.878788	0.956522	UAUUUUGGG	1	1815	0.03	1793	21.21											
70	gma-MIR1525	1525	UGAGUUAAU	21	20041928	20041948	UGAGUUAAU	384	20041928	20042311	(((((((((Gm03	+	5'		-99	-25.7813	-1.39437	42.1875	8.072917	10.41667	39.32292	18.48958	81.51042	1.290323	0.932099	UGGGUUAAU	1	1337	0.04	1302	18.54	291	0.03	276	21.21								
71	gma-MIR1517	1517	AGUCUUGGU	24	34095677	34095700	UUUGUCCUG	215	34095486	34095700	.((((..(Gm03	+	3'		-83.3	-38.7442	-0.92556	20.93023	17.67442	24.18605	37.2093	41.86047	58.13953	1.368421	1.777778	AGUCUUGGU	1															
72	gma-MIR1534	1534	UAUUUUAGG	20	35301791	35301772	UAUUUUAGG	233	35301791	35301559	(((((((((Gm03	-	5'		-55.75	-23.927	-0.85769	35.62232	14.59227	13.30472	36.48069	27.897	72.103	0.911765	1.024096	UAUUUUGGG	1	1203	0.05	1170	21.11	1649	0.02	1628	20.69								
73	gma-MIR1520a	1520	AAGAACAUG	23	36289314	36289334	GAUGUCAUC	139	36289196	36289334	(((((((((Gm03	+	3'		-72.1	-51.8705	-1.50208	33.09353	15.10791	19.42446	32.3741	34.53237	65.46763	1.285714	0.978261	UAGAACAUG	2	384	0.06	349	20.76	1216	0.04	1186	21.46								
74	tae-

126	gma-MIR156a	156	UGACAGAAG	20	4013580	4013599	UGACAGAAG	87	4013580	4013666	(((((((((Gm06	+	5'	−50	−57.4713	−1.35135	25.28736	19.54023	22.98851	32.18391	42.52874	57.47126	1.176471	1.272727	UGACAGAAG	0	1776	0.18	1742	22.47	173	0.06	136	21.77	962	0.02	925	21.14				
127	gma-MIR1520a	1520	UAGAACAUG	23	4360182	4360204	ACUGCAUAG	130	4360075	4360204	(((((((((Gm06	+	3'	−43.5	−33.4615	−1.03571	30.76923	13.07692	19.23077	36.92308	32.30769	67.69231	1.470588	1.2	UAGAACAUG	0	1722	0.06	1689	18.77	1185	0.02	1151	19.86								
128	gma-MIR1517	1517	AACCUUGGU	24	8129848	8129871	UUUCGAUCA	174	8129698	8129871	(((((.(Gm06	+	3'	−53.83	−30.9368	−0.91237	26.43678	14.94253	18.96552	39.65517	33.90805	66.09195	1.269231	1.5	AGCUCUGGU	2	218	0.09	186	21.26	691	0.06	654	21.14								
129	gma-MIR1517	1517	AGCCUUGGU	24	9302784	9302761	UUUGUCCGA	225	9302985	9302761	((((..((Gm06	+	5'	−91.2	−40.5333	−1.01333	24	18.22222	21.77778	36	40	60	1.195122	1.5	AGUCUUGGU	1	392	0.08	357	21.19												
130	gma-MIR1525	1525	UGGAUUAAU	21	9659334	9659314	UGGAUUAAU	382	9659334	9658953	.(..((((Gm06	−	5'	−114.25	−29.9084	−1.73106	40.57592	7.853403	9.424084	42.1466	17.27749	82.72251	1.2	1.03871	UGGGUUAAU	1	1332	0.13	1306	21.37	1954	0.04	1940	22.07	544	0.03	510	20.67				
131	atb-MIR165a	165	UCGGACCAG	21	10985854	10985874	GGGGAAUGC	136	10985739	10985874	(((((((((Gm06	+	3'	−45	−33.0882	−0.86538	30.14706	21.32353	16.91176	31.61765	38.23529	61.76471	0.793103	1.048878	UCGGACCAG	2	1623	0.08	1591	21.13	386	0.05	355	19.06								
132	atb-MIR845a	845	CGGCUCUGA	21	12366099	12366119	CGGCUCUGA	251	12366099	12366349	(((((((((Gm06	+	5'	−145.7	−58.0478	−1.21417	25.49801	18.7251	29.08367	26.69323	47.80876	52.19124	1.553191	1.046875	CGGCUCUGA	1															
133	gma-MIR169a	169	UAGCCAAGG	21	13783337	13783317	UAGCCAAGG	99	13783337	13783239	(((((((((Gm06	−	5'	−48.4	−48.8889	−1.05217	21.21212	21.21212	25.25253	32.32323	46.46465	53.53535	1.190476	1.52381	CAGCCAAGG	3	1315	0.05	1278	21.83	1912	0.04	1875	21.84								
134	gma-MIR1517	1517	AGCCUUGAU	24	14889144	14889121	UUUUGCUUG	225	14889345	14889121	.((((..((Gm06	−	3'	−68.75	−30.5556	−0.80882	23.55556	16.44444	21.33333	38.66667	37.77778	62.22222	1.297297	1.641509	AGUCUUGGU	3															
135	tae-MIR1134	1134	CAACAAUAA	24	15929363	15929340	CAACAAUAA	394	15929363	15928970	.((((.((Gm06	−	5'	−92.82	−23.5584	−0.78	28.93401	14.2132	15.98985	40.86294	30.20305	69.79695	1.125	1.412281	CAACAACAA	3															
136	gma-MIR1525	1525	AGGGUUAAC	21	17517388	17517408	AGGGUUAAC	221	17517388	17517608	(((((((((Gm06	+	5'	−108.1	−48.914	−1.66308	35.74661	14.02715	15.38462	34.84163	29.41176	70.58824	1.096774	0.974684	UGGGUUAAU	2															
137	gma-MIR1517	1517	AGCCUUGGU	24	17656049	17656072	UUUAGUCCA	325	17655748	17656072	.((((.((Gm06	+	3'	−128.01	−39.3877	−0.99233	24	16.30769	23.38462	36.30769	39.69231	60.30769	1.433962	1.512821	AGCUCUGGU	3	983	0.14	946	19.7												
138	osa-MIR1863	1863	CGCUCUGAU	24	18863090	18863113	CGCUCUGAU	333	18863090	18863422	(((((((((Gm06	+	5'	−190.71	−57.2703	−1.9071	20.12012	14.41441	15.61562	19.81982	30.03003	39.93994	1.083333	0.985075	AGCUCUGAU	3	144	0.03	116	20.84												
139	atb-MIR845a	845	AGGCUCUGA	21	19195679	19195699	AGGCUCUGA	192	19195679	19195870	.((((((((Gm06	+	5'	−50.85	−26.4844	−0.69658	29.6875	21.35417	16.66667	32.29167	38.02083	61.97917	0.780488	1.087719	CGGCUCUGA	2															
140	gma-MIR1534	1534	UAUUUUGGA	20	20530816	20530835	UAUUUUGGA	231	20530816	20531046	((((..((Gm06	+	5'	−65.01	−28.129	−0.9703	32.46753	12.55411	16.45022	38.52814	29.00433	70.99567	1.310345	1.186667	UAUUUUGGG	1	397	0.1	360	21.53	1334	0.03	1320	19.93								
141	gma-MIR1520a	1520	CAGAACAUG	23	21956621	21956599	GAUGGUUGU	103	21956701	21956599	..((..((Gm06	−	3'	−49.1	−47.6699	−1.29211	32.03883	18.4466	18.4466	31.06796	36.8932	63.1068	1	0.969697	UAGAACAUG	3	1181	0.04	1166	20.5												
142	gma-MIR319a	319	UUGGACUGA	20	22581752	22581771	GGGAGUUCC	70	22581702	22581771	(((((((((Gm06	+	3'	−36.6	−52.2857	−1.01667	21.42857	22.85714	28.57143	27.14286	51.42857	48.57143	1.25	1.266667	UUGGACUGA	1															
143	gma-MIR1511	1511	AACCAGCCU	20	23635739	23635758	AACCAGCCU	350	23635739	23636088	(((((.((Gm06	+	5'	−68.72	−19.6343	−0.6804	39.42857	15.14286	13.71429	31.71429	28.85714	71.14286	0.90566	0.804348	AACCAGGCU	2	259	0.04	229	19.04												
144	gma-MIR1517	1517	AGCCUUGGU	24	34976402	34976425	UUGAUUGAC	120	34976306	34976425	(((((((((Gm06	+	3'	−49.2	−41	−1.04681	23.33333	15.83333	23.33333	37.5	39.16667	60.83333	1.473684	1.607143	AGUCUUGGU	2															
145	gma-MIR1525	1525	AGGAUUAAU	21	35493293	35493273	AGGAUUAAU	378	35493293	35492916	(((((((((Gm06	−	5'	−94.64	−25.037	−1.26187	37.03704	11.90476	7.936508	43.12169	19.84127	80.15873	0.666667	1.164286	UGGGUUAAU	2	1769	0.04	1732	20.03	1050	0.03	1014	17.46								
146	gma-MIR1534	1534	UAUUUUGGG	20	36352365	36352384	UAUUUUGGG	235	36352365	36352599	.....((((Gm06	+	5'	−72.11	−30.6851	−1.07627	33.61702	13.10149	15.31915	37.87234	28.51064	71.48936	1.185429	1.126582	UUUUUGGGG	1	484	0.04	448	20.96	1150	0.03	1117	19.21	1819	0.02	1783	19.13				
147	gma-MIR1519	1519	UAAGUUUUG	22	38778477	38778456	UAAGUUUUG	357	38778477	38778121	((((((.(Gm06	−	5'	−215.7	−60.4202	−1.69843	31.09244	17.64706	17.92717	33.33333	35.57423	64.42577	1.015873	1.072072	UAAGUGUUC	2	1828	0.04	1796	21.27	1146	0.02	1131	19.6								
148	gma-MIR1534	1534	UAUUUUAGG	20	42573090	42573071	UAUUUUAGG	238	42573090	42572853	(((((.((Gm06	−	5'	−63.9	−26.8487	−1.08305	33.19328	10.92437	13.86555	42.01681	24.78992	75.21008	1.269231	1.265823	UUUUUUGGG	1	389	0.21	355	21.43	1238	0.06	1202	22.36								
149	gma-MIR1517	1517	AGCCUUGGU	24	45170737	45170714	UUUUGUCCG	225	45170938	45170714	.((((..((Gm06	−	3'	−87	−38.6667	−1	25.33333	18.22222	20.44444	36	38.66667	61.33333	1.121951	1.421053	AGUCUUGGU	2															
150	gma-MIR1520a	1520	CAGAACAUG	23	45574440	45574418	UGACUGUCA	132	45574519	45574418	.(((((((((Gm06	−	3'	−52	−39.3939	−0.96296	29.54545	22.72727	18.18182	29.54545	40.90909	59.09091	0.8	1	UAGAACAUG	3															
151	gma-MIR171a	171	UGAGCCGUG	21	48920650	48920630	ACGGGAUAU	87	48920716	48920630	.((.((((((Gm06	−	3'	−41.4	−47.5862	−1.15	27.58621	18.3908	22.98851	31.03448	41.37931	58.62069	1.25	1.125	UGAGCCGUG	0	334	0.18	297	21.14	861	0.05	827	21.61								
152	gma-MIR1525	1525	UGGAUUAAU	21	851392	851372	UGGAUUAAU	291	851392	851102	.((((((((Gm07	−	5'	−69.8	−23.9863	−1.58636	39.17526	7.216495	7.90378	45.70447	15.12027	84.87973	1.095238	1.166667	UGGGUUAAU	1															
153	gma-MIR1517	1517	AGCCUUGGU	24	2118383	2118406	UUUGUCUUG	225	2118182	2118406	.((((..((Gm07	+	3'	−91.3	−40.5778	−1.0869	23.55556	16.44444	20.88889	39.11111	37.33333	62.66667	1.27027	1.660377	AGUCUUGGU	3															
154	gma-MIR164	164	UGGAGAAGC	21	3508931	3508951	UGGAGAAGC	60	3508931	3508990	.((((((((Gm07	+	5'	−31.4	−52.3333	−1.20769	21.66667	18.33333	25	35	43.33333	56.66667	1.363636	1.615385	UGGAGAAGC	2	1053	0.1	1033	21.69	156	0.07	142	20.4	1893	0.05	1859	20.84				
155	gma-MIR1520a	1520	CAGAACAUG	23	3791550	3791572	UGACUAUCA	136	3791437	3791572	.((((.((((Gm07	+	3'	−48	−35.2941	−1	31.61765	17.64706	17.64706	33.08824	35.29412	64.70588	1	1.046512	UAGAACAUG	2	864	0.05	849	19.44												
156	atb-MIR165a	165	UCGGACCAG	21	4453682	4453662	GGGGAAUGU	107	4453768	4453662	(((((((((Gm07	−	3'	−50.6	−47.2897	−0.95472	15.88785	23.36449	26.16822	34.57944	49.53271	50.46729	1.12	2.176471	UCGGACCAG	1	575	0.09	540	21.27	1526	0.05	1493	21.96								
157	gma-MIR1525	1525	UGGAUUAAU	21	7495705	7495725	UGGAUUAAU	327	7495705	7496031	.((((((((Gm07	+	5'	−73.7	−22.5382	−1.31607	43.73089	8.256881	8.868502	39.14373	17.12538	82.87462	1.074074	0.895105	UGGGUUAAU	1	1844	0.06	1830	21.5												
158	gma-MIR1520a	1520	AAGAACAUG	23	8896482	8896460	UGACUGUCA	132	8896591	8896460	.((((((((Gm07	−	3'	−57.8	−43.7879	−1.20417	31.81818	20.45455	15.90909	31.81818	36.36364	63.63636	0.777778	1	UAGAACAUG	3	1251	0.02	1217	19.94												
159	atb-MIR157a	157	UGACACAGA	21	9347149	9347169	UGACACAGA	103	9347149	9347251	.((((((((Gm07	+	5'	−40.95	−39.7573	−1.02375	32.03883	19.41748	19.41748	29.12621	38.83495	61.16505	1	0.909091	UGACACAGA	0	1730	0.16	1697	22.84	1034	0.08	998	20.84								
160	gma-MIR159a	159	UUUGGAUUG	21	9524956	9524936	UGGAGCUCC	175	9525110	9524936	(((((((((Gm07	+	3'	−87.54	−50.0229	−1.13688	19.42857	19.42857	24.57143	36.57143	44	56	1.264706	1.882353	UUUGGAUUG	0	1482	0.02	1445	17.99												
161	gma-MIR1534	1534	UAUUUUGGG	20	10034444	10034463	AGCAUCAUU	228	10034242	10034463	(((((((((Gm07	+	3'	−79.5	−35.8168	−1.69149	45.04505	10.36036	10.81081	33.78378	21.17117	78.82883	1.043478	0.75	UAUUUUGGG	1	981	0.06	957	20.81	1902	0.02	1864	20.83								
162	atb-MIR165a	165	UCGGACCAG	21	10198914	10198934	GGGGAAUGU	103	10198832	10198934	(((((((((Gm07	+	3'	−44.2	−42.9126	−0.92083	20.38835	22.3301	24.27184	33.00971	46.60194	53.39806	1.086957	1.619048	UCGGACCAG	1	1456	0.12	1432	22.87												
163	gma-MIR1525	1525	AGGGUUAAU	21	13715197	13715177	AGGGUUAAU	244	13715197	13714954	(((((((((Gm07	−	5'	−71.4	−29.2623	−1.15161	32.37705	14.7541	10.65574	42.21311	25.40984	74.59016	0.722222	1.303797	UGGGUUAAU	1															
164	gma-MIR1519	1519	UAAGUGUUG	22	15095407	15095386	UAAGUGUUG	99	15095407	15095309	(((((((((Gm07	−	5'	−30.9	−31.2121	−1.18846	36.36364	12.12121	14.14141	37.37374	26.26263	73.73737	1.166667	1.027778	UAAGUGUUC	2	569	0.07	536	22.3												
165	gma-MIR1525	1525	UGGGUUAAU	21	16015558	16015578	UGGGUUAAU	338	16015558	16015895	.((((((((Gm07	+	5'	−65.9	−19.497	−1.01385	44.08284	8.579882	10.65089	36.68639	19.23077	80.76923	1.241379	0.832215	UGGGUUAAU	1	439	0.11	405	21.63												
166	atb-MIR2111a	2111	UAAUCUGCA	21	16377871	16377851	UAAUCUGCA	68	16377871	16377804	(((((((((Gm07	−	5'	−26	−38.2353	−1.08333	29.41176	11.76471	23.52941	35.29412	35.29412	64.70588	2	1.2	UAAUCUGCA	0	1921	0.09	1885	21.77	1061	0.08	1040	19.26	265	0.06	232	21.37				
167	atb-MIR2111a	2111	UAAUCUGCA	21	16402423	16402403	UAAUCUGCA	230	16402423	16402194	(((((((((Gm07	−	5'	−98.4	−42.7826	−1.13103	24.78261	16.95652	20.86957	37.3913	37.82609	62.17391	1.230769	1.508772	UAAUCUGCA	0	1111	0.03	1087	21.01	1900	0.02	1863	20.97								
168	gma-MIR1525	1525	AGGGUUAAU	21	17702660	17702680	AGGGUUAAU	135	17702660	17702794	.((((((((Gm07	+	5'	−34.1	−25.2593	−1.00294	31.85185	11.11111	14.07407	42.96296	25.18519	74.81481	1.266667	1.348837	UGGGUUAAU	2															
169	gma-MIR2107	2107	CAAACCUCU	21	18489638	18489618	CAAACCUCU	353	18489638	18489286	((((.((((Gm07	−	5'	−137.35	−38.9093	−1.01741	43.34278	19.54674	18.69688	18.4136	38.24363	61.75637	0.956522	0.424837	CAAACCUCC	1															
170	osa-MIR1863	1863	GGCUCUGAU	24	19676229	19676252	GGCUCUGAU	74	19676229	19676302	.((((((((Gm07	+	5'	−53.7	−72.5676	−2.06538	33.78378	17.56757	17.56757	31.08108	35.13514	64.86486	1	0.92	AGCUCUGAU	3	1202	0.06	1173	20.54												
171	gma-MIR1517	1517	AACCUUGGU	24	20070912	20070889	UUGGUUGAU	400	20071288	20070889	((..((((Gm07	−	3'	−130.56	−32.64	−0.816	22.75	18.75	21.25	37.25	40	60	1.133333	1.637363	AGUCUUGGU	3															
172	gma-MIR1525	1525	AGGGUUAAG	21	29378413	29378433	AGGGUUAAG	287	29378413	29378699	.((((((((Gm07	+	5'	−110.5	−38.5017	−1.53472	35.8885	11.84669	13.24042	39.02439	25.08711	74.91289	1.117647	1.087379	UGGGUUAAG	2	1219	0.1	1186	20.4												
173	gma-MIR1534	1534	UAUUUUUGG	20	34248634	34248615	UAUUUUUGG	220	34248634	34248415	..((((((((Gm07	−	5'	−67.5	−30.6818	−1.02273	33.63636	15.90909	14.09091	36.36364	30	70	0.885714	1.081081	UUUUUUGGG	1															
174	gma-MIR1525	1525	UGGGUUAAU	21	35804419	35804439	UGGGUUAAU	392	35804419	35804810	.(..((((((Gm07	+	5'	−84.4	−21.5306	−1.31875	42.85714	8.418367	7.908163	40.81633	16.32653	83.67347	0.939394	0.952381	UGGGUUAAU	1															
175	gma-MIR1525	1525	AGGGUUAAU	21	38130801	38130821	AGGGUUAAU	369	38130801	38131169	.((((.((((Gm07	+	5'	−98.5	−26.6938	−1.38732	39.29539	10.56911	8.672087	41.46341	19.24119	80.75881	0.820513	1.055172	UGGGUUAAU	2															
176	gma-MIR1520a	1520	CAGAACAUG	23	40816056	40816078	UGACCGUCA	100	40815979	40816078	.((((((((Gm07	+	3'	−44.3	−44.3	−1.16579	30	18	20	32	38	62	1.111111	1.066667	UAGAACAUG	3	1749	0.11	1713	21.6	221	0.04	189	18.67	832	0.03	798	22.99				
177	gma-MIR1525	1525	UGGGUUAAU	21	42270393	42270413	UGGGUUAAU	331	42270393	42270723	.((((((((Gm07	+	5'	−74.5	−22.5076	−1.43269	43.80665	8.459215	7.250755	40.48338	15.70997	84.29003	0.857143	0.924138	UGGGUUAAU	0	205	0.06	172	19.2	921	0.03	892	18.36								
178	gma-MIR1525	1525	UGGGUUAAU	21	42270393	42270413	UUUAAAGUG	43	42270371	42270413	.((((((((Gm07	+	3'	−6.1	−14.186	−0.67778	32.55814	2.325581	18.60465	46.51163	20.93023	79.06977	8	1.428571	UGGGUUAAU	0	227	0.06	194	19.2	943	0.03	914	18.36								
179	gma-MIR171a	171	UGAGCCGUG	21	43679676	43679656	UGAGCCGUG	329	43679676	43679348	...(((((((Gm07	−	5'	−86.9	−26.4134	−0.73025	23.70821	14.58967	21.58055	40.12158	36.17021	63.82979	1.479167	1.692308	UGAGCCGUC	2	1530	0.13	1494	22.06	810	0.06	790	21.49								
180	gma-MIR171a	171	UGAGCCGUG	21	43679676	43679656	UUGAGAUAU	88	43679743	43679656	..(((((((Gm07	−	3'	−44.2	−50.2273	−1.26286	26.13636	15.90909	23.86364	34.09091	39.77273	60.22727	1.5	1.304348	UGAGCCGUC	2	1597	0.13	1561	22.06	877	0.06	857	21.49								
181	atb-MIR399a	399	UGCCAAAGG	21	9114388	9114408	UAGAGCAAA	80	9114329	9114408	(((((((((Gm08	+	3'	−38.2	−47.75	−0.97949	25	18.75	30	26.25	48.75	51.25	1.6	1.05	UGCCAAAGG	0	1694	0.02	1670	19.84												
182	atb-MIR399a	399	UGCCAAAGG	21	9118540	9118520	CAGGGCAAG	87	9118606	9118520	..((((((Gm08	−	3'	−40.6	−46.6667	−1.015	28.73563	20.68966	25.28736	25.28736	45.97701	54.02299	1.222222	0.88	UGCCAAAGG	1	1666	0.08	1629	21.14	269	0.03	235	18.14								
183	atb-MIR399a	399	UGCCAAAGG	21	9126548	9126528	CAGGGCAAG	95	9126622	9126528	..((((((Gm08	−	3'	−43.8	−46.103	−1.0186	25.26316	23.15789	22.10526	29.47368	45.26316	54.73684	0.954545	1.166667	UGCCAAAGG	1	1944	0.08	1929	19.4	331	0.06	311	20.34	921	0.05	887	21.54	1339	0.03	1304	20.83
184	gma-MIR1525	1525	UGGGUUAAU	21	12415254	12415234	UGGGUUAAU	384	12415254	12414871	.((((((((Gm08	−	5'	−104.22	−27.1406	−1.42767	39.84375	10.15625	8.854167	41.14583	19.01042	80.98958	0.871795	1.03268	UGGGUUAAU	0															
185	atb-MIR398a	398	UGUGUUCUC	21	14299277	14299257	CAGGGUCGU	95	14299351	14299257	(((((.((Gm08	−	3'	−43.3	−45.5789	−0.9413	20	25.26316	23.15789	31.57895	48.42105	51.57895	0.916667	1.578947	UGUGUUCUC	2	1900	0.04	1886	19.14												
186	gma-MIR1525	1525	UGGGUUAAA	21	14883566	14883546	CUUAGUAAC	53	14883598	14883546	.((((((((Gm08	−	3'	−12.1	−22.8302	−0.80667	33.96226	11.32075	16.98113	37.73585	28.30189	71.69811	1.5	1.111111	UGGGUUAAA	1															
187	gma-MIR1534	1534	UAUUUUGGG	20	15221817	15221836	UAUUUUGGG	232	15221817	15222048	(((((((((Gm08	+	5'	−64.4	−27.7586	−0.92	31.89655	15.08621	15.08621	37.93103	30.17241	69.82759	1	1.189189	UAUUUUGGG	0	770	0.13	739	20.9	1829	0.09	1797	21.4	170	0.03	141	18.71				
188	gma-MIR1520a	1520	CAGAACAUG	23	18748081	18748059	GACUGUCAC	99	18748157	18748059	(((((((((Gm08	−	3'	−37.4	−37.7778	−1.03889	34.34343	20.20202	16.16162	29.29293	36.36364	63.63636	0.8	0.852941	UAGAACAUG	3	645	0.08	608	20.9	1652	0.04	1614	21.3								
189	gma-MIR1517	1517	AGCCUUGGU	24	21200280	21200257	UUUGUCCGA	224	21200480	21200257	.((((...((Gm08	−	3'	−79	−35.2679	−0.92941	23.21429	16.96429	20.98214	38.83929	37.94643	62.05357	1.236842	1.673077	AGUCUUGGU	2															
190	gma-MIR1534	1534	UAUUUAGGG	20	23673876	23673857	UAUUUAGGG	239	23673876	23673638	...((((Gm08	−	5'	−94.74	−39.6402	−1.31583	31.38075	13.80753	16.31799	38.49372	30.12552	69.87448	1.181818	1.226667	UAUUUUGGG	1	171	0.09	134	21.23												
191	gma-MIR1517	1517	AGCCUUGGU	24	35073688	35073665	UUUGUCUUG	226	35073890	35073665	.((((..((Gm08	−	3'	−86.2	−38.1416	−0.96854	23.00885	17.69912	21.68142	37.61062	39.38053	60.61947	1.225	1.634615	AGUCUUGGU	1	795	0.03	780	22.54												
192	gma-MIR1517	1517	AGUCUUGGU	24	38299007	38299030	UUCGUCCCA	298	38298733	38299030	.((((..((Gm08	+	3'	−99.9	−33.5235	−0.86121	28.18792	17.78523	21.14094	32.88591	38.92617	61.07383	1.188679	1.166667	AGUCUUGGU	0	113	0.04	87	18.23												
193	gma-MIR1516	1516	CAAAAGAGC	21	39161964	39161944	UACAAGUCA	91	39162034	39161944	...((((((Gm08	−	3'	−53.3	−58.5714	−1.83793	36.26374	15.38462	16.48352	31.86813	31.86813	68.13187	1.071429	0.878788	CAAAAGAGC	1	652	0.08	630	19.21												
194	gma-MIR1522	1522	UUUAUUGUU	20	40368891	40368910	UUUAUUGUU	304	40368891	40369194	...((((((Gm08	+	5'	−78.6	−25.8553	−1.51154	40.78947	8.552632	8.552632	42.10526	17.10526	82.89474	1	1.032258	UUUAUUGCU	1	177	0.04	144	20.34	798	0.03	763	18.76								
195	gma-MIR1534	1534	UAUUUUGGA	20	43707981	43707962	ACUAUUUAA	376	43708337	43707962	(((((((((Gm08	−	3'	−154.43	−41.0718	−2.11548	38.56383	9.308511	10.10638	42.02128	19.41489	80.58511	1.085714	1.089655	UUUUUUGGG	1	223	0.02	189	20.13												
196	gma-MIR1520a	1520	CAAAACAUG	23	46431348	46431470	UGACUAUCA	100	46431371	46431470	.((((.((((Gm08	+	3'	−40.9	−40.9	−1.36333	35	16	14	35	30	70	0.875	1	UAGAACAUG	2	1463	0.05															
197	gma-MIR160	160	UGCCUGGCU	21	1261105	1261085	UGCCUGGCU	82	1261105	1261024	.(((((((Gm09	−	5'	−47.5	−57.9268	−1.31944	29.26829	21.95122	21.95122	26.82927	43.90244	56.09756	1	0.916667	UGCCUGGCU	1	1205	0.02	1171	19.27												
198	gma-MIR1517	1517	AGUUUUGGU	24	3978846	3978869	UUUGUCCCG	225	3978645	3978869	.((((..((Gm09	+	3'	−80.22	−35.6533	−0.92207	23.11111	16	22.66667	38.22222	38.66667	61.33333	1.416667	1.653846	AGUCUUGGU	2	219	0.04	184	19.17												
199	gma-MIR1525	1525	AUAGUUAAU	21	4055972	4055952	AUAGUUAAU	351	4055972	4055622	.((((..((Gm09	−	5'	−74.98	−21.3618	−1.59532	41.31054	7.977208	5.413105	45.29915	13.39031	86.60969	0.678571	1.096552	UGGGUUAAU	3	320	0.07	282	20.07	862	0.02	830	17.81								
200	gma-MIR169a	169	CAGCCAAGA	21	5264002	5264022	CAGCCAAGA	85	5264002	5264086	.((((((((Gm09	+	5'	−41.2	−48.4706	−1.2875	28.23529	16.47059	21.17647

253	gma-MIR1520a	1520 CAGAACAUG	23	2674204	2674226	UGAUUGUCA	132	2674095	2674226	(((((((((Gm11	+	3'	-48.7	-36.8939	-1.13256	31.06061	13.63636	18.93939	36.36364	32.57576	67.42424	1.388889	1.170732	UAGAACAUG	3										
254	gma-MIR1515	1515 UCAUUUUGC	22	6646930	6646909	UCAUUUUGC	125	6646930	6646806	(((((((((Gm11	-	5'	-42.9	-34.32	-0.93261	23.2	18.4	18.4	40	36.8	63.2	1	1.724138	UCAUUUUGC	0	1420	0.07	1406	22.7	1918	0.03	1885	20.14				
255	gma-MIR1517	1517 AGCCUUGGU	24	7252096	7252073	UUUGUCCUG	225	7252297	7252073	.(((((..(Gm11	-	3'	-81.6	-36.2667	-0.93793	24	17.33333	21.33333	37.33333	38.66667	61.33333	1.230769	1.555556	AGCUUCUGG	1	1012	0.05	978	20.5							
256	gma-MIR1525	1525 AGGCUUAAU	21	8685405	8685385	AGGCUUAAU	390	8685405	8685016	(((((((((Gm11	-	5'	-94.1	-24.1282	-1.17625	41.02564	9.487179	11.02564	38.46154	20.51282	79.48718	1.162162	0.9375	UGGGUUAAU	2	1020	0.08	998	20.66	567	0.07	534	20.33				
257	ath-MIR828	828 UCUUGCUCA	22	9033043	9033064	UCUUGCUCA	93	9033043	9033135	.((((((((Gm11	+	5'	-31.62	-34	0.7905	27.95699	23.65591	19.35484	29.03226	43.01075	56.98925	0.818182	1.038462	UCUUGCUUA	1	801	0.08	764	19.97	1294	0.06	1280	21.79				
258	gma-MIR1517	1517 AGCCUUGGU	24	13475327	13475304	UUUUUAGCC	276	13475579	13475304	.((((((((Gm11	-	3'	-95.7	-34.6739	-0.87798	24.27536	17.75362	21.73913	36.23188	39.49275	60.50725	1.22449	1.492537	AGCUUCUGG	3	304	0.12	275	21.5							
259	gma-MIR1534	1534 UAUUUUGAG	20	14870795	14870776	AUGACUAUU	400	14871175	14870776	(((((((((Gm11	-	3'	-183.4	-45.85	-2.10805	38.25	10	11.75	40	21.75	78.25	1.175	1.045752	UAUUUUGGG	1	1490	0.06	1453	20.89	365	0.05	341	22.17				
260	gma-MIR1517	1517 AAUCUUGGU	24	15698689	15698712	UUUGUCCUG	299	15698414	15698712	.(((....(Gm11	+	3'	-115.6	-38.6622	-1.00522	26.08696	16.05351	22.40803	35.45151	38.46154	61.53846	1.395833	1.358974	AGCUUCUGG	2	716	0.06	681	19.87	175	0.04	155	19.13				
261	gma-MIR1525	1525 UGGGUUAAU	21	15798993	15799013	CAUGUUAAC	283	15798731	15799013	..(((.((((Gm11	+	5'	-50.87	-17.9753	-0.70653	45.22968	8.480565	16.96113	29.32862	25.4417	74.5583	2	0.648438	UGGGUUAAU	1	1434	0.07	1397	19.86							
262	gma-MIR1520a	1520 UAGAACAUG	23	16028308	16028286	UGAUUGUCA	100	16028385	16028286	.(((((((((Gm11	-	3'	-39	-39	-1.14706	32	16	18	34	34	66	1.125	1.0625	UAGAACAUG	2	1304	0.1	1270	22.96	270	0.08	252	21.64	729	0.05	692	18.47	1934	0.02	1901	19.83
263	gma-MIR1517	1517 AGCCUUGGU	24	18001912	18001935	UUUGUCCGA	224	18001712	18001935	(((((..(((Gm11	+	3'	-92.3	-41.2054	-0.99247	23.66071	17.41071	24.10714	34.82143	41.51786	58.48214	1.384615	1.471698	AGCUUGGU	3	611	0.12	575	22.44							
264	gma-MIR1525	1525 AGGUUUAAU	21	18300661	18300641	AUGAAAUUA	65	18300705	18300641	((((((..(Gm11	-	3'	-6.5	-10	-0.92857	30.76923	3.076923	7.692308	58.46154	10.76923	89.23077	2.5	1.9	UGGGUUAAU	2	316	0.02	302	19.33							
265	gma-MIR1520a	1520 AAGAACGUG	23	20956427	20956449	UGAUUGUUA	164	20956286	20956449	.(((((((((Gm11	+	3'	-82.3	-50.1829	-1.34918	32.31707	20.73171	16.46341	30.4878	37.19512	62.80488	0.794118	0.943396	UAGAACAUG	3	615	0.08	580	20.29	1043	0.02	1007	18.06				
266	ath-MIR829	829 UGCUCUGAU	24	22989355	22989378	CUUCUAUAG	191	22989188	22989378	(((((((..Gm11	+	3'	-37.71	-19.7435	-0.56284	41.88482	13.08901	21.98953	23.03665	35.07853	64.92147	1.68	0.55	AGCUCUGAU	4	203	0.09										
267	gma-MIR1518	1518 UGUGUUGUA	21	24540201	24540221	UGUGUUGUA	274	24540201	24540474	(((((.(((Gm11	+	5'	-81.6	-29.781	-0.78462	27.37226	15.32847	22.62774	34.67153	37.9562	62.0438	1.47619	1.266667	UGUGUUGUA	3	122	0.04	102	19.29							
268	gma-MIR1520a	1520 CAGAACAUG	23	24643065	24643087	GACUGCCAC	99	24642989	24643087	(((((.(((Gm11	+	3'	-42.56	-42.9899	-1.09128	33.33333	22.22222	17.17172	27.27273	39.39394	60.60606	0.772727	0.818182	UAGAACAUG	3	1718	0.03	1682	20.26							
269	gma-MIR390a	390 AAGCUCAGG	21	30272772	30272792	AAGCUCAGG	75	30272772	30272846	(((((((((Gm11	+	5'	-37.29	-49.72	-1.28586	29.33333	20	18.66667	32	38.66667	61.33333	0.933333	1.090909	AAGCUCAGG	0	1854	0.13	1822	21.5	1401	0.04	1366	19.26	887	0.03	849	21.4			
270	gma-MIR319a	319 UUGGACUGA	20	32902221	32902240	GAGCUUCCU	170	32902071	32902240	(((((((((Gm11	+	3'	-80.9	-47.5882	-1.12361	24.70588	17.64706	24.70588	32.94118	42.35294	57.64706	1.4	1.333333	UUGGACUGA	0											
271	tae-MIR1134	1134 CAACAACAA	24	34969130	34969153	CAACAACAA	304	34969130	34969433	(((((((((Gm11	+	5'	-104	-34.2105	-0.92857	32.89474	17.10526	19.73684	30.26316	36.84211	63.15789	1.153846	0.92	CAACAACAA	3											
272	gma-MIR1533	1533 AUAAUAAAA	19	35237012	35236994	UCAUCAUCU	76	35237069	35236994	((((.(((..Gm11	-	3'	-25	-32.8947	-1.38889	35.52632	9.210526	14.47368	40.78947	23.68421	76.31579	1.571429	1.148148	AUAAUAAAA	0	1734	0.07	1709	21.19							
273	osa-MIR1863	1863 AGCUCUGAU	24	35768644	35768621	AUAUUUUAA	88	35768708	35768621	(((((((((Gm11	-	3'	-36.4	-41.3636	-1.1875	28.40909	12.5	23.86364	35.22727	36.36364	63.63636	1.90909	1.24	AGCUUCUGA	3	905	0.02	869	20.24							
274	gma-MIR1525	1525 AGGGUUAAU	21	36356774	36356754	AGGGUUAAU	388	36356774	36356387	...(((((((Gm11	-	5'	-125.3	-32.2938	-1.52805	37.8866	9.793814	11.34021	40.97938	21.13402	78.86598	1.157895	1.081633	UGGGUUAAU	2	115	0.09	82	20.31							
275	gma-MIR1517	1517 AGCCUUGGU	24	36441885	36441862	UUUGUCCUG	226	36442087	36441862	.((((..(((Gm11	-	3'	-84.7	-37.4779	-0.98488	23.89381	17.69912	20.35398	38.0531	38.0531	61.9469	1.15	1.592593	AGCUUCUGG	1	102	0.08	79	19.57	694	0.05	680	21.27				
276	gma-MIR1525	1525 AGGAUUAAU	21	37068684	37068704	AGGAUUAAU	354	37068684	37069037	.(((((((((Gm11	+	5'	-77.28	-21.8305	-1.2075	35.87571	9.887006	8.19209	46.0452	18.0791	81.9209	0.828571	1.283465	UGGGUUAAU	2	395	0.06	361	20.43	1470	0.05	1441	19.31				
277	gma-MIR1517	1517 AGCCUUGGU	24	38818134	38818111	UUUGUCCUG	225	38818335	38818111	.((((..(Gm11	-	3'	-79.9	-35.5111	-0.94	23.55556	15.55556	22.22222	38.66667	37.77778	62.22222	1.428571	1.641509	AGCUUCUGU	2											
278	ath-MIR828	828 UCUUGCUCA	22	3213774	3213795	UCUUGCUCA	90	3213774	3213863	.(((((((((Gm12	+	5'	-39.6	-44	-0.94286	26.66667	25.55556	21.11111	26.66667	46.66667	53.33333	0.826087	1	UCUUGCUUA	1	1368	0.05	1334	20.67	598	0.04	574	20.8				
279	gma-MIR1525	1525 AGGGUUAAU	21	4874429	4874409	AGGGUUAAU	376	4874429	4874054	.(((((((((Gm12	-	5'	-92.34	-24.5585	-1.42062	45.74468	7.978723	9.308511	36.96809	17.28723	82.71277	1.166667	0.80814	UGGGUUAAU	2											
280	gma-MIR1520a	1520 CAGAACAUG	23	14453532	14453510	UGACUGUCA	100	14453609	14453510	.(((((((((Gm12	-	3'	-41.85	-41.85	-1.1625	32	19	17	32	36	64	0.894737	1	UAGAACAUG	3											
281	gma-MIR1516	1516 CAAAAGAGC	21	15144802	15144782	UACAAGCCA	94	15144875	15144782	(((((((((Gm12	-	3'	-52.9	-56.2766	-1.55588	35.10638	17.02128	19.14894	28.7234	36.17021	63.82979	1.125	0.818182	CAAAAGAGC	1	731	0.13	697	21.19	1897	0.05	1864	19.53				
282	gma-MIR1517	1517 AGCCUUGGU	24	15197948	15197925	UUUGUCCUG	226	15198150	15197925	.((((..(Gm12	-	3'	-85.5	-37.8319	-0.92935	23.45133	19.02655	21.68142	35.84071	40.70796	59.29204	1.139535	1.528302	AGCUUCUGU	1	134	0.09	103	20.96	613	0.06	580	20.26				
283	gma-MIR1517	1517 AGUCUUGGU	24	24765976	24765999	UUUGUCUUG	296	24765704	24765999	.((((..(Gm12	+	3'	-110.69	-37.3953	-0.97096	27.7027	18.58108	19.93243	33.78378	38.51351	61.48649	1.072727	1.219512	AGCUUCUGU	1											
284	gma-MIR1516	1516 CAAAAGAGC	21	26509564	26509514	CAAAAGAGC	47	26509564	26509518	(((((((((Gm12	-	5'	-22.4	-47.6596	-1.31765	29.78723	17.02128	19.14894	34.04255	36.17021	63.82979	1.125	1.142857	CAAAAGAGC	0	901	0.06	866	19.09	1779	0.03	1746	18.93				
285	gma-MIR1525	1525 AGGGUUAAU	21	30924847	30924827	GUGAAAAAU	140	30924966	30924827	(((((((((Gm12	-	3'	-30.1	-21.5	-0.86	35.71429	7.857143	17.14286	39.28571	25	75	2.181818	1.1	UGGGUUAAU	2	637	0.09	606	21.51	1315	0.07	1286	20.87	197	0.05	183	20.09		
286	gma-MIR1517	1517 AGUCUUGGU	24	30969021	30969044	UUUGACCGG	378	30968667	30969044	.(((((..(Gm12	+	3'	-129.7	-34.3122	-0.88231	24.07407	17.19577	21.69312	37.03704	38.88889	61.11111	1.261538	1.538462	AGCUUCUGU	0											
287	gma-MIR1534	1534 UAUUUUGGG	20	31907377	31907396	UAUUUUGGG	233	31907377	31907609	.((((((((Gm12	+	5'	-65.3	-28.0258	-0.98939	33.04721	13.73391	14.59227	38.62661	28.32618	71.67382	1.0625	1.168831	UAUUUUGGG	1	1850	0.03	1836	20.2	658	0.02	620	20.8				
288	gma-MIR1525	1525 AUGGUUAAU	21	32008101	32008081	AUGGUUAAU	307	32008101	32007795	..(((((((Gm12	-	5'	-81.9	-26.6775	-1.4625	37.45928	8.143223	10.09772	44.29967	18.24104	81.75896	1.24	1.182609	UGGUUAAUU	2											
289	gma-MIR1517	1517 AGCCUUGGU	24	32168043	32168066	UUCCAGUUG	305	32167762	32168066	(((((..(Gm12	+	3'	-110.5	-36.2295	-0.92857	23.27869	17.04918	21.96721	37.70492	39.01639	60.98361	1.288462	1.619718	AGCUUCUGU	3	371	0.04	333	21.81								
290	gma-MIR1534	1534 UAUUUUGGA	20	32718976	32718957	UAUUUUGGA	239	32718976	32718738	..(((((((Gm12	-	5'	-63.7	-26.6527	-1.02742	34.72803	12.5523	13.38912	39.33054	25.94142	74.05858	1.066667	1.13253	UAUUUUGGG	1	280	0.08	266	19.83	1027	0.07	999	18.57				
291	gma-MIR1534	1534 UAUUUUGGA	20	32718976	32718957	GACUAUUUA	142	32719098	32718957	(((((((((Gm12	-	3'	-62.5	-44.0141	-1.95313	36.61972	10.56338	11.97183	40.84507	22.53521	77.46479	1.133333	1.115385	UAUUUUGGG	1	402	0.08	388	19.83	1149	0.07	1121	18.57				
292	gma-MIR1520a	1520 UAGAACAUG	23	32752125	32752147	GAUGUCACU	99	32752049	32752147	(((((((((Gm12	+	3'	-48	-48.4848	-1.45455	32.32323	16.16162	17.17172	34.34343	33.33333	66.66667	1.0625	1.0625	UAGAACAUG	2	1485	0.12	1457	21.33	1042	0.03	1012	19.36				
293	gma-MIR172a	172 UGAAUCUUG	21	33560724	33560744	AUGUAGCAG	114	33560631	33560744	(((((((((Gm12	+	3'	-45.6	-40	-0.95	26.31579	16.66667	25.4386	31.57895	42.10526	57.89474	1.526316	1.2	AGAAUCUUG	1	933	0.09	906	21.07								
294	ath-MIR170	170 UGAUUGAGC	21	35489159	35489179	GGUAUUGGC	80	35489100	35489179	(((((((((Gm12	+	3'	-32.94	-41.175	-0.96882	25	20	22.5	32.5	42.5	57.5	1.125	1.3	UGAUUGAGC	1	103	0.11	72	18.4	1205	0.04	1171	20.99	1623	0.03	1590	19.69		
295	gma-MIR1525	1525 AGGGUUAAU	21	35805050	35805030	AGGGUUAAU	341	35805050	35804710	(((((((((Gm12	-	5'	-160.33	-47.0176	-1.6033	36.95015	12.90323	16.42229	33.72434	29.32551	70.67449	1.272727	0.912698	UGGGUUAAU	2	521	0.03	488	21.63								
296	gma-MIR1525	1525 UGGGUUAAU	21	36824709	36824729	UGGGUUAAU	106	36824709	36824814	.(((((((((Gm12	+	5'	-35.82	-33.7925	-1.70571	41.50943	11.32075	8.490566	38.67925	19.81132	80.18868	0.75	0.931818	UGGGUUAAU	2	1082	0.06	1045	21.13								
297	gma-MIR169a	169 CAGCCAAGG	21	368551	368531	CAGCCAAGG	99	368551	368453	.(((((((((Gm13	-	5'	-35.85	-36.2121	-0.94342	23.23232	22.22222	16.16162	38.38384	38.38384	61.61616	0.727273	1.652174	CAGCCAAGG	0	1888	0.08	1853	21.5	1313	0.08	1299	22.7	655	0.03	622	19.03		
298	gma-MIR169a	169 AAGCCAAGG	21	371189	371169	AAGCCAAGG	98	371189	371092	.(((((((((Gm13	-	5'	-39.1	-39.898	-0.86889	27.55102	19.38776	26.53061	26.53061	45.91837	54.08163	1.368421	0.962963	CAGCCAAGG	1	1910	0.08	1876	20.9	836	0.04	803	20.17				
299	gma-MIR1516	1516 CAAAAGAGC	21	776715	776695	UACAAGCCA	64	776758	776695	(((((((((Gm13	-	3'	-51.5	-80.4688	-1.98077	28.125	20.3125	20.3125	31.25	40.625	59.375	1	1.111111	CAAAAGAGC	0											
300	gma-MIR169a	169 CAGCCAAGG	21	5838684	5838704	CAGCCAAGG	285	5838684	5838968	.(((((..(Gm13	+	5'	-99.01	-34.7404	-0.81826	27.36842	19.29825	23.15789	30.17544	42.45614	57.54386	1.2	1.102564	CAGCCAAGG	0	315	0.03	281	19.81	1309	0.03	1274	18.76				
301	gma-MIR1534	1534 UAUUUUGGG	20	7934266	7934247	UAUUUUGGG	234	7934266	7934033	.((((..(((Gm13	-	5'	-67.84	-28.9915	-0.98319	33.76068	14.95726	14.52991	36.75214	29.48718	70.51282	0.971429	1.088608	UAUUUUGGG	0	568	0.07	543	19.94								
302	gma-MIR1520a	1520 CAGAACAUG	23	9229648	9229626	GACUGCACC	99	9229724	9229626	(((((((((Gm13	-	3'	-40.53	-40.9394	-1.12583	35.35354	22.22222	14.14141	28.28283	36.36364	63.63636	0.636364	0.8	UAGAACAUG	3	1902	0.08	1866	19.87	951	0.05	921	21.19				
303	gma-MIR1517	1517 AGCCUUGGU	24	9832919	9832942	UUUGUCCUG	226	9832717	9832942	.((((..(Gm13	+	3'	-87.8	-38.8496	-0.94409	23.45133	19.46903	21.68142	35.39823	41.15044	58.84956	1.113636	1.509434	AGCUUGGU	1	1473	0.03	1459	22.83								
304	gma-MIR1526	1526 CCGUAAGAG	22	14478349	14478328	UUAUUAUUU	110	14478437	14478328	...(((((((Gm13	+	3'	-64.74	-58.8545	-1.6185	30.90909	18.18182	18.18182	32.72727	36.36364	63.63636	1	1.058824	CCGUAAGAG	2	1907	0.04	1872	21.67								
305	gma-MIR2910	2910 UAGUUGGUG	21	15071716	15071696	UAGUUGGUG	375	15071716	15071342	(((((((((Gm13	-	5'	-137	-36.5333	-0.70984	21.86667	25.06667	26.4	26.66667	51.46667	48.53333	1.053191	1.219512	UAGUUGGUG	0											
306	peu-MIR2910	2910 UAGUUGGUG	21	15358193	15358173	UAGUUGGUG	374	15358193	15357820	(((((((((Gm13	-	5'	-139.8	-37.3797	-0.73194	21.92513	24.59893	26.47059	27.00535	51.06952	48.93048	1.076087	1.231707	UAGUUGGUG	0											
307	peu-MIR2910	2910 UAGUUGGUG	21	15440769	15440749	UAGUUGGUG	375	15440769	15440395	(((((((((Gm13	-	5'	-136	-36.2667	-0.70466	21.86667	25.06667	26.4	26.66667	51.46667	48.53333	1.053191	1.219512	UAGUUGGUG	0											
308	peu-MIR2910	2910 UAGUUGGUG	21	15463541	15463521	UAGUUGGUG	375	15463541	15463167	(((((((((Gm13	-	5'	-136	-36.2667	-0.70466	21.86667	25.06667	26.4	26.66667	51.46667	48.53333	1.053191	1.219512	UAGUUGGUG	0											
309	gma-MIR2107	2107 CAAACCUCC	21	15779213	15779233	CAAACCUCC	137	15779213	15779349	(((((((((Gm13	+	5'	-87.3	-63.7226	-1.24714	27.73723	24.81752	26.27737	21.16788	51.09489	48.90511	1.058824	0.763158	CAAACCUCC	1	113	0.04	88	18.54								
310	gma-MIR1517	1517 AGCCUUGGU	24	18939317	18939294	UUUGUCUUG	226	18939519	18939294	.((((..(Gm13	-	3'	-79.8	-35.3097	-0.89663	23.00885	17.69912	21.68142	37.61062	39.38053	60.61947	1.225	1.634615	AGCUUGGUG	3											
311	gma-MIR156a	156 UGACAGAAG	20	20521472	20521491	UGACAGAAG	85	20521472	20521556	.(((((((((Gm13	+	5'	-40.8	-48	-0.99512	23.52941	25.88235	22.35294	28.23529	48.23529	51.76471	0.863636	1.2	UGACAGAAG	0	166	0.07	153	22.06								
312	gma-MIR1525	1525 UUCGUUAAU	21	23088931	23088951	UUCGUUAAU	316	23088931	23089246	...(((((((Gm13	+	5'	-54.51	-17.25	-1.13563	38.92405	6.962025	8.227848	45.88608	15.18987	84.81013	1.181818	1.178862	UGGGUUAAU	2	1018	0.1	990	18.93	215	0.02	191	21.41				
313	gma-MIR160	160 UGCCUGGCU	21	23750066	23750046	UGCCUGGCU	80	23750066	23749987	.((((((((Gm13	+	5'	-44.1	-55.125	-1.1025	23.75	23.75	26.25	26.25	50	50	1.105263	1.105263	UGCCUGGCU	0	820	0.08	783	19.9								
314	gma-MIR1534	1534 UAUUUUAGG	20	26289036	26289017	UAUUUUAGG	226	26289036	26288811	...(((((((Gm13	-	5'	-61.3	-27.1239	-0.97302	32.74336	12.38938	15.48673	39.38053	27.87611	72.12389	1.25	1.202703	UAUUUUGGG	1	304	0.04	271	20.93								
315	gma-MIR1520a	1520 CAGAACAUA	23	27429417	27429439	GACUAUCAU	99	27429341	27429439	(((((((((Gm13	+	3'	-35.76	-36.1212	-1.15355	35.35354	17.17172	14.14141	33.33333	31.31313	68.68687	0.823529	0.942857	UAGAACAUG	3	162	0.1	128	22.27								
316	ath-MIR170	170 UGAUUGAGC	21	30650859	30650879	GAUAUUGGU	78	30650802	30650879	(((((((((Gm13	+	3'	-43.4	-55.641	-1.44667	26.92308	17.94872	20.51282	34.61538	38.46154	61.53846	1.142857	1.285714	UGAUUGAGC	1	1477	0.12	1444	22.06	181	0.08	148	22.69				
317	gma-MIR1516	1516 CAAAAGAGC	21	32311767	32311747	UACAAGCCA	88	32311834	32311747	(((((((((Gm13	-	3'	-70.1	-79.6591	-2.12424	31.81818	19.31818	18.18182	30.68182	37.5	62.5	0.941176	0.964286	CAAAAGAGC	0											
318	gma-MIR1520a	1520 CAGAACAUG	23	32965402	32965424	GAUGUCACU	131	32965294	32965424	(((((((((Gm13	+	3'	-52.9	-40.3817	-1.058	28.24427	17.55725	20.61069	33.58779	38.16794	61.83206	1.173913	1.189189	UAGAACAUG	3	1026	0.06	993	18.94	206	0.04	184	19.11				
319	ath-MIR397a	397 UCAUUGAGU	21	34383111	34383091	UCAUUGAGU	104	34383111	34383008	..(((((((Gm13	-	5'	-42.37	-40.7404	-1.00881	27.88462	20.19231	20.19231	31.73077	40.38462	59.61538	1	1.137931	UCAUUGAGU	0	338	0.07	314	22.06	1715	0.06	1680	20.11				
320	gma-MIR159a	159 AUUGGAUUG	21	35265495	35265475	AGGAGCUCC	201	35265675	35265475	.(((((((((Gm13	-	5'	-105.8	-52.6368	-1.15	25.37313	20.39801	25.37313	28.85572	45.77114	54.22886	1.243902	1.137255	UUGGAUUGG	2	1381	0.04	1345	21.27	359	0.03	326	20.33				
321	gma-MIR1525	1525 AGGGUUAAU	21	37445734	37445714	AGGGUUAAU	397	37445734	37445338	(((((((((Gm13	-	5'	-88.6	-22.3174	-1.24789	38.53904	8.312343	9.571788	43.57683	17.88413	82.11587	1.151515	1.130719	UGGGUUAAU	2	102	0.1	71	21.64	891	0.08	855	17.23				
322	ath-MIR170	170 UGAUUGAGC	21	39325528	39325508	GGUAUUGCC	80	39325587	39325508	(((((((..(Gm13	-	3'	-27.9	-34.875	-0.87188	30	22.5	17.5	30	40	60	0.777778	1	UGAUUGAGC	1	1259	0.08	1235	21.19	127	0.06	94	19.89	1880	0.04	1865	19.54		
323	gma-MIR1520a	1520 CAGAACAUG	23	41449248	41449226	GACUGCACU	99	41449324	41449226	(((((((((Gm13	-	3'	-46.5	-46.9697	-1.25676	31.31313	17.17172	20.20202	31.31313	37.37374	62.62626	1.176471	1	UAGAACAUG	3	913	0.07	877	20.64	1747	0.03	1718	19.04				
324	gma-MIR172a	172 GGAAUCUUG	21	41635615	41635635	GUGCAGCGG	158	41635478	41635635	(((((((((Gm13	+	3'	-55.32	-35.0127	-0.86438	27.8481	17.72152	22.78481	31.64557	40.50633	59.49367	1.285714	1.136364	AGAAUCUUG	1	1912	0.06	1884	20.16	1061	0.03	1031	19.87				
325	gma-MIR1520a	1520 AAGAACAUG	23	2335677	2335655	GACGGUCAU	164	2335818	2335655	(((.((((Gm14	-	3'	-80.63	-49.1646	-1.22167	31.70732	20.12195	20.12195	28.04878	40.2439	59.7561	1	0.884615	UAGAACAUG	3	955	0.04	923	19.53								
326	gma-MIR393	393 UCCAAAGGG	21	5053430	5053450	UCCAAAGGG	122	5053430	5053551	.(((((((((Gm14	+	5'	-44	-36.0656	-0.97778	22.13115	22.95082	13.93443	40.98361	36.88525	63.11475	0.607143	1.851852	UCCAAAGGG	0	1297	0.05	1262	20.49								
327	gma-MIR169a	169 CAGCCAAGA	21	5324808	5324828	CAGCCAAGA	94	5324808	5324901	.(((((((((Gm14	+	5'	-38.1	-40.5319	-1.12059	29.78723	14.89362	21.2766	34.04255	36.17021	63.82979	1.428571	1.142857	CAGCCAAGC	1	1885	0.12	1851	21.01	485	0.03	459	18.44	1310	0.02	1288	19.07		
328	gma-MIR169a	169 CAGCCAAGA	21	5324808	5324828	GUGCAGAGU	314	5322515	5324828	(((((((((Gm14	+	3'	-80.5	-25.6369	-0.65447	32.48408	20.38217	18.78981	28.34395	39.17197	60.82803	0.921875	0

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507	ath-MIR399a	399	UGCCAAAGG	21	38251217	38251197	UAGGGCUUC	74	38251270	38251197	(((((..(Gm20	-	3'	-33.7	-45.5405	-1.05313	25.67568	21.62162	21.62162	31.08108	43.24324	56.75676	1	1.210526	UGCCAAAGG	1	1578	0.04	1545	20.23						
508	gma-MIR393	393	UCCAAAGGG	21	38670507	38670487	UCCAAAGGG	115	38670507	38670393	(((.(((((Gm20	-	5'	-49.3	-42.8696	-0.986	20	23.47826	20	36.52174	43.47826	56.52174	0.851852	1.826087	UCCAAAGGG	0	1677	0.1	1644	22.71	371	0.05	336	21.21		
509	gma-MIR1520a	1520	AAGAACAUG	23	40158638	40158616	UGACUGCCA	164	40158779	40158616	.((.(.(((Gm20	-	3'	-67.3	-41.0366	-1.10328	34.14634	21.34146	15.85366	28.65854	37.19512	62.80488	0.742857	0.839286	UAGAACAUG	3	179	0.1	147	21.6	754	0.07	719	18.57		
510	gma-MIR1525	1525	AGGGUUAAU	21	40267176	40267196	AGGGUUAAU	374	40267176	40267549	...((((((Gm20	+	5'	-100.51	-26.8743	-1.39597	36.09626	7.486631	11.76471	44.65241	19.25134	80.74866	1.571429	1.237037	UGGGUUAAU	1	808	0.07	781	20.29	1668	0.04	1648	20.23		
511	gma-MIR1531	1531	UCGUCCAUA	23	40357047	40357025	GACAAGUCU	108	40357132	40357025	(((((((((Gm20	-	3'	-67.5	-62.5	-1.40625	29.62963	23.14815	21.2963	25.92593	44.44444	55.55556	0.92	0.875	UCGUCCAUA	1										
512	gma-MIR160	160	UGCCUGGCU	21	40554897	40554917	UGCCUGGCU	79	40554897	40554975	.((.(((((Gm20	+	5'	-47.2	-59.7468	-1.27568	22.78481	21.51899	25.31646	30.37975	46.83544	53.16456	1.176471	1.333333	UGCCUGGCU	0	1563	0.09	1525	20.53	167	0.06	131	20.7	791	0.05	768	19.94
513	gma-MIR172a	172	AGAAUCUUG	21	40895771	40895751	GUGCAGCAG	82	40895832	40895751	(((((((.Gm20	-	3'	-40.2	-49.0244	-1.005	24.39024	21.95122	26.82927	26.82927	48.78049	51.21951	1.222222	1.1	AGAAUCUUG	0	337	0.08	305	18.31	1549	0.07	1513	19.6	1036	0.05	1003	19.79
514	ath-MIR165a	165	UCGGACCAG	21	43105421	43105401	GGGGAAUGG	91	43105491	43105401	(((((((((Gm20	-	3'	-45.22	-49.6923	-1.00489	24.17582	26.37363	23.07692	26.37363	49.45055	50.54945	0.875	1.090909	UCGGACCAG	1	743	0.06	730	21.8	1642	0.02	1605	17.81		
515	gma-MIR1516	1516	CAAAAGAGC	21	43282264	43282244	UACAAAUCA	91	43282334	43282244	(((((.(((Gm20	-	3'	-39	-42.8571	-1.5	35.16484	17.58242	10.98901	36.26374	28.57143	71.42857	0.625	1.03125	CAAAAGAGC	1	259	0.07	224	19.74	1738	0.03	1705	20.3		
516	gma-MIR1520a	1520	AAGAACAUG	23	43865328	43865306	GACUGUCAU	163	43865468	43865306	(((((((((Gm20	-	3'	-84.56	-51.8773	-1.43322	34.35583	19.0184	17.17791	29.44785	36.19632	63.80368	0.903226	0.857143	UAGAACAUG	3	1231	0.06	1194	18.29						
517	gma-MIR1520a	1520	AAGAACGUG	23	43865447	43865469	UGACUGUCA	164	43865306	43865469	.((((((((Gm20	+	3'	-96.5	-58.8415	-1.63559	29.87805	17.07317	18.90244	34.14634	35.97561	64.02439	1.107143	1.142857	UAGAACAUG	3	195	0.1	162	20.47	848	0.03	816	17.73		
518	gma-MIR167a	167	UGAAGCUGC	21	44765103	44765123	UGAAGCUGC	64	44765103	44765166	.(((((.(((Gm20	+	5'	-36.2	-56.5625	-1.29286	25	20.3125	23.4375	31.25	43.75	56.25	1.153846	1.25	UGAAGCUGC	1	286	0.08	268	21.9	1879	0.07	1864	21.33		
519	gma-MIR164	164	UGGAGAAGC	21	45788196	45788176	UGGAGAAGC	92	45788196	45788105	.(((((((.Gm20	-	5'	-44.8	-48.6957	-1.04186	19.56522	26.08696	20.65217	33.69565	46.73913	53.26087	0.791667	1.722222	UGGAGAAGC	0	1072	0.1	1034	20.81	1950	0.05	1916	20.14	427	0.03	396	20
520	gma-MIR164	164	UGGAGAAGC	21	45788196	45788176	UGCACCAGC	96	45788271	45788176	.(((..(((Gm20	-	3'	-37.2	-38.75	-0.75918	20.83333	25	26.04167	28.125	51.04167	48.95833	1.041667	1.35	UGGAGAAGC	0	1147	0.1	1109	20.81	502	0.03	471	20		
521	gma-MIR1527	1527	UAACUCAAC	20	46654268	46654249	UUUGUGGGG	371	46654619	46654249	(((((((((Gm20	-	3'	-94.12	-25.3693	-0.69206	36.38814	19.94609	16.71159	26.95418	36.65768	63.34232	0.837838	0.740741	UAACUCAAC	1										