Supplementary Table 1. 1,500 rMitChip Genes and Probe Sequences

GeneID	Symbol	Probe
25120	Aanat	5'-[AminoC6]AGGGACCACTTCCAAAGCTGGGGAACCCCAGGGAGGGGTCAGTGGCCAGA
296925	Aass	5'-[AminoC6]TTGGCATTAGACATCCATCTGGACATTTAGAAAACAAGACCATTGATCTT
81632	Abat	5'-[AminoC6]TGGACAAGCTCCGGGAGTCCTTGATGTCGGTGGCGCCCAAAGGCATGTGT
310836	Abca4	5'-[AminoC6]CACCCGGTGGATCGCTGAGCCTGCTAGAGAGCCCGTTTTTGATGAAGATG
361439	Abcb10	5'-[AminoC6]CCAGTTCTGGAACAGTCAGTCTTGATGGCCATGACATTCGTCAGCTAAAC
140669	Abcb6	5'-[AminoC6]TTTCAGGGTTTGGAGTGGAAGTCAACGGCTTCACTGGTTTTACTGAATCA
302395	Abcb7	5'-[AminoC6]AAGTGGCCATTGTAGGAGGTAGTGGGTCAGGAAAAAGCACGATAGTGAGG
362302	Abcb8	5'-[AminoC6]CGCTGGATGGGCATGACCTGCGTACTCTCGACCCCTCCTGGCTCCGGGGC
363516	Abcd1	5'-[AminoC6]TGGCCAGCCTCAACATCAGGGTGGAGGAAGGCATGCACCTGCTCATCACA
311959	Abcf2	5'-[AminoC6]GGACCTGGACCTTTCCCCTTTGGAGTACATGATGAAGTGCTACCCAGAGA
303953	Abhd10	5'-[AminoC6]GGTAACTTAGCAGAGTGCTCAGTGGGGAAGTGGAGAAAGGATGTTCTTTC
24157	Acaa1	5'-[AminoC6]GAATGTGGCTGAGCGGTTTGGCATCTCACGGCAGAAGCAAGATGCCTTCG
170465	Acaa2	5'-[AminoC6]GTGCTGGGGTCGTCATCATAGCCAGCGAAGATGCTGTCAAAAAACATAAC
116719	Acacb	5'-[AminoC6]GTTCTGGAGCCCGAGGGCACTGTGGAGATTAAGTTCCGGAAGAAAGATTT
294973	Acad9	5'-[AminoC6]TGAACATCCTCAACAGTGGACGATTCAGCATGGGCAGTGCTGTGGCCGGG
25287	Acadl	5'-[AminoC6]GTGTATTGGTGCCATAGCCATGACAGAGCCTGGGGCTGGAAGTGACTTAC
24158	Acadm	5'-[AminoC6]CCAGAGAGCCCTGGACGAAGCTACTAAGTATGCCCTGGACAGGAAAACAT
25618	Acadsb	5'-[AminoC6]GGATGCGTCCGTGGCTCTCCTATGTGACATCCAGAACACAGTCATTAACA
25363	Acadvl	5'-[AminoC6]CCTCTTGGAAATGTTGGCCTCCTCATAGGAGAAGCAAGCAAACAGCTGAG
25014	Acat1	5'-[AminoC6]CTGCAGAGGCAGCCCAGCGGCTCAAGGTTAAGCCACTGGCACGAATCGCA
308100	Acat2	5'-[AminoC6]GCACCGTTATGCACGGCCCCCAATATGATCCATTCAAGGAATGGGGATGT
289312	Acbd3	5'-[AminoC6]ATGGACAGACTCTCCAAACGCTGCTGTCAGTGTGCATGTCAGTGAGTCCA
24159	Acly	5'-[AminoC6]AACTGTGGCTCCTTCACCCGGGAGGAAGCTGACGAGTATGTTGACATTGG
50655	Aco1	5'-[AminoC6]AAACCCTCGATGTGTTCGATGCCGCTGAGCGGTACCAGCAGGCTGGACTT
50559	Acot1	5'-[AminoC6]AAGACCATGGAAACCATGCGCATTGAGTACTTTGAAGAAGCCGTGAACTA
291135	Acot13	5'-[AminoC6]AGTGGAGGAGCAGCACACTAATAAGTTTGGTACTCTCCACGGCGGCTTGA
302640	Acot9	5'-[AminoC6]GTCCTCCTGCCTTTGGGTTCTGACCCTGATCTACGAGACAAATATTTGAC
50681	Acox1	5'-[AminoC6]AGCTGTCACAAGTAAACGCTCGGATCCTGGAGCTGCTCACCCTGATCCGC
295305	Acp6	5'-[AminoC6]GGCCTTGTACATGCTGCAACAGGAAGACAGGGAAAGTATCCAGATGGCCG
171410	Acsbg1	5'-[AminoC6]GTATGGCAGTCAGGCTGGGGACATCCAGCCAGCGGAAGTGCAGCAAGAGG
114024	Acsl3	5'-[AminoC6]CTTTCTGCAACGACACAGCGATTCATGAATATCTGCTTCTGTTGTCCCGT
113976	Acsl4	5'-[AminoC6]GCTGCTAATTCTTCATGAAAATCCTAACACACACGTTAAGGGACCAGGGA
94340	Acsl5	5'-[AminoC6]GTGTTTTCAAAGATCCAAAGCAGCCTGGGTGGGAAGGTTCGTCTCATGAT
117243	Acsl6	5'-[AminoC6]CGCCAGGGGACTGGACATCAGGGCACGTGGGAGCCCCTCTGCCCTGCAAC
296259	Acss1	5'-[AminoC6]CACTGGAGATGGAGCTCACCGGACGGAGGGTGGCTATTACCAGATCACAG
29437	Acta1	5'-[AminoC6]CATCTATGAGGGTTATGCCCTGCCACACGCCATCATGCGTCTGGACCTGG
81633	Acta2	5'-[AminoC6]AAGGACAGCTATGTGGGGGACGAAGCGCAGAGCAAGAGAGGGATCCTGAC
81822	Actb	5'-[AminoC6]TGGGTATGGAATCCTGTGGCATCCATGAAACTACATTCAATTCCATCATG
287876	Actg1	5'-[AminoC6]ACAACGAGCTGCGTGTGGCCCCTGAGGAGCACCCGGTGCTTCTGACCGAG
25365	Actg2	5'-[AminoC6]ACTCCTTCTACAACGAGCTGCGAGTAGCACCAGAAGAGCACCCGACCCTG
294010	Actr1a	5'-[AminoC6]GCTCATGAGCGGACCTTGCACACAGACATTCTCTTTGGATTGATCAAAGA
300981	Acy1	5'-[AminoC6]GAGCTGTCAGAAAATAGAGGTGGCGCCTGGCTATGTGATCACTGTGCTGA
24165	Ada	5'-[AminoC6]CGTCCACCTGGATGGAGCCATCAAGCCAGAAACCATCTTGTACTATGGCA
305509	Adcy1	5'-[AminoC6]TATCTACCTTCTGGTAATCCCACAGAGCGTGGCTGTCCTGCTGCTGCTGG

24172	Adh1	5'-[AminoC6]AGCAGGAGCAGCCAAGATCATTGCCGTGGACATCAACAAAGACAAGTTTG
29646	Adh4	5'-[AminoC6]TCAATTTACCACTTCATGGGAGTCAGTTCCTTCTCTCAGTACACTGTGGT
100145871	Adh5	5'-[AminoC6]GATCCTGAGGGGTGTTTCCCCGTGATCTTAGGACATGAAGGCGCTGGCAT
310903	Adh6	5'-[AminoC6]TAGTGCATCAGTATATCGCTCTCGGCAGCTTCTCGGAATACACAGTCCTA
25369	Adora2a	5'-[AminoC6]CACATCATCAACTGTTTCACCTTCTTCTGCTCCACGTGCCGGCACGCCCC
24925	Adrb1	5'-[AminoC6]AACCGGGCCTACGCCATCGCCTCGTCCGTCGTCTCCTTCTACGTGCCCCT
361436	Afg3l1	5'-[AminoC6]TAGTCTGCCTCACTGATGGAGCATCCATCTTAACAACAGTCCTTTCTCTC
290923	Aga	5'-[AminoC6]CGGGGCTCCAACCCTCTACCCCTGGTCGTCAACACTTGGCCTTTTAAGAA
304375	Agfg2	5'-[AminoC6]TGCCCGTGTCTGTATAATCAAACCTGGGGCCCCAGGGCTCCAGGGAGGAC
502749	Agk	5'-[AminoC6]CCTGACGAGCAAAGAGGACTTTATGAACATTTGCATTGAGCCTGACACTG
298607	Agmat	5'-[AminoC6]CCGGCTAATCCGAGAGGCCTATCAGAACATCCTAGCAACTGGCTGCATTC
24792	Agxt	5'-[AminoC6]GTGCACCAGATGATCAAGAAGCCTGGAGAACATTACACACTGCAGGAGGT
83784	Agxt2	5'-[AminoC6]TGCTCCACCAGGGACACATGGAATGGCTCTTTGATTCGGAAGGAAACAGA
428743	Agxt2l1	5'-[AminoC6]TTTGTATTTCAGGAAAAAGACAACATCTATTTCCTTTGAAGTTTTCATAC
29443	Ahcy	5'-[AminoC6]GATGAAGGATGATGCCATTGTCTGTAACATTGGACACTTCGACGTGGAGA
25690	Ahr	5'-[AminoC6]AGTAGGAAAGACTGGGCTCCCCAGTCAACCCCGAGTAAGGATTCTTTCCA
83533	Aifm1	5'-[AminoC6]CTGTGGGCCTAGAACCCAATGTCGAGTTGGCCAAGACTGGTGGGCTGGAA
24183	Ak1	5'-[AminoC6]TTTGAACGGAAGATCGCACAGCCCACACTGCTACTGTATGTGGACGCAGG
24184	Ak2	5'-[AminoC6]AGTTCAACCCTCCAAAGGAGGCCATGAAAGATGATATCACTGGGGAGCCC
29223	Ak3l1	5'-[AminoC6]TGGTGACGTGGCAAAACAGTACCTAGAAAAAGGTCTTTTGGTTCCGGACC
114124	Akap1	5'-[AminoC6]GGTTGCAGGCAGGACAGTGCAGCGATGAGAATTCAAAAGTGGTACTCTCC
360540	Akap10	5'-[AminoC6]TCTAAACACAGTGAAACAGAGTTCACTGGCTGAGCCTGTCTCTCCATCTA
24192	Akr1b1	5'-[AminoC6]CAAGATGCCCACCCTGGGTCTGGGCACCTGGAAGTCTCCTCCTGGCCAGG
24185	Akt1	5'-[AminoC6]CCTGCAGTGGACCACGGTCATTGAGCGCACCTTCCATGTGGAAACGCCTG
65155	Alas1	5'-[AminoC6]GCCCCAAGATGATGGAAGTCGGGGCCAAGCCGGCTCCTCGGACCGTGTCC
25748	Alas2	5'-[AminoC6]CTCAAATCCATCTTAAGGCAACCAAGGCTGGAGCAGACTCTCCGTCTTGG
24186	Alb	5'-[AminoC6]CGACCTGTTGGAATGCGCGGATGACAGGGCGGAACTTGCCAAGTACATGT
361755	Aldh18a1	5'-[AminoC6]AGCAGAAGCGCAGAAATCTCAACGGCACACTACACGAGCTGCTTCGGATG
116676	Aldh1a2	5'-[AminoC6]GAGGAGATTTTTGGACCAGTCCAGGAAATTTTGAGGTTTAAGACTATGGA
266603	Aldh1a3	5'-[AminoC6]GCCTGCCTTGCCGCGCCCCATCCGCAACTTGGAGGTCAAGTTCACTAAGA
298079	Aldh1b1	5'-[AminoC6]CTTTTCAGGAGTCTTATGTCTTGGACCTGGATGAAGTCATCAAGGTATAC
29539	Aldh2	5'-[AminoC6]GGACGGAGCAGGGGCCGCAGGTGGATGAGACTCAGTTTAAGAAGATCCTG
309147	Aldh3b1	5'-[AminoC6]GCCCAAGACCTACACAAGTCAGCCTTTGAGTCGGAGGTGTCCGAGATTGC
688800	Aldh3b2	5'-[AminoC6]GATCGTCATGGCTGCTGCTGCCAAACACCTGACGCCCATCACCCTGGAGC
291133	Aldh5a1	5'-[AminoC6]GCCATGATCACCCGGAAAGTGGGGGCTGCCCTGGCAGCTGGCTGCACTGT
24189	Aldoa	5'-[AminoC6]TTGGAGGGGTGATCCTTTTCCACGAGACACTGTACCAGAAGGCAGATGAT
24191	Aldoc	5'-[AminoC6]TCTTCCACGAGACACTCTACCAGAAAGATGACAATGGTGTCCCCTTTGTC
363235	Als2	5'-[AminoC6]GGAGTGTACAGCTATGCCTCTGGTGAAGTGTTTGAAGGCTGCTTTCAAGA
25284	Amacr	5'-[AminoC6]TGGAAAACTCAGGCCATGGGTCTGTGGGCACAGCCTCGAGGGCAAAACCT
81640	Amd1	5'-[AminoC6]CTCTGACTGTATGAATCTTTACGACACTTGTGAAAACGATTCGACTTGGT
362015	Ampd2	5'-[AminoC6]CAAGGAGAGGGACAGGGGGACAGGGGTCTTTGGGAACGTGATGTGGTACT
309374	Ankrd2	5'-[AminoC6]ACTCCTGGGAAGACGTCCATGGACATGCTAGTGCTAGAGGACGAGAAGCG
25380	Anxa1	5'-[AminoC6]CATTGACATCCTTACCAAGAGAACCAATGCTCAGCGCCAGCAGATCAAGG
290527	Anxa11	5'-[AminoC6]TCCTGGAGGTGGCTATCCTCCAGTCCCTCCTGGTGGCTTTGGGCAGCCCC
56611	Anxa2	5'-[AminoC6]GGAGGGTGATCATTCTACACCCCCAAGTGCCTATGGGTCGGTCAAACCCT
25291	Anxa3	5'-[AminoC6]GGCTTGAGAGCAAGGTGGACAGCCATGGCGGCGTCTTTGTGGGTTGGACC
79125	Anxa6	5'-[AminoC6]CATTGAAATTTTGGCTTCCCGGACCAATGAGCAGATACACCAGCTGGTGG

78963	Apaf1	5'-[AminoC6]ATAGCAACCTGCTCAGTGGATAAGAAAGTTAAGATTTGGGATTCTGGGAC
29339	Apcs	5'-[AminoC6]AATCTGAAACTGATTATGTGAAGCTGATCCCATGGCTAGAAAAACCGCTG
79116	Apex1	5'-[AminoC6]CCTAAGGGCTTTCGTTACAGCGATGCCGAAGCGGGGGAAGAGAGCGGCAG
289662	Apex2	5'-[AminoC6]TCCCACAGCCTTGAGACATATTTTAAGGGAACTGGATGCCGATATAGTCT
362170	Api5	5'-[AminoC6]TACAGTTCAGTTATGTGGAGTGCTTATTATATAGTTTTCATCAGTTGGGC
25081	Apoa1	5'-[AminoC6]ATGCAGTCAAGGACAGCGGCAGAGACTATGTGTCCCAGTTTGAATCCTCC
287774	Apoh	5'-[AminoC6]GACCTGTCCGAAGCCGGATGAACTACCGTTTGCTGTGGTTGTTCCCTTAA
54226	App	5'-[AminoC6]TCTCGTGCCCGACAAGTGCAAGTTTCTACACCAGGAGCGGATGGACGTTT
286758	Aqp11	5'-[AminoC6]CCGCGTGATCGCCCGGCAACAGCTGCACAGGCCCATGGTCCACGCCTTCG
25293	Aqp4	5'-[AminoC6]AGTGGAGATGCATTTTCTAGCAGTGGCAGAGTGCTGGGCACACAGTAGGT
64310	Arf1	5'-[AminoC6]AGCTTATGAGGATGCTAGCTGAAGATGAGCTCCGAGATGCCGTTCTCTTG
29215	Arg2	5'-[AminoC6]GCCATATAAAAGACTTTGGAGACTTGAGTTTTACTAACGTTCCCAAAGAT
311193	Arhgap1	5'-[AminoC6]ACAGCTCCCAAGCCCATGCCACCACGGCCCCCCCTGCCTAATCAGCAATT
303559	Arl4d	5'-[AminoC6]CCTTTCTGCCACACTTCCAGGCACTGCATGTTGTGGTCATTGGGTTGGAT
25242	Arnt	5'-[AminoC6]AAGGAGAGCCTCACTTTGTGGTAGTCCACTGCACAGGTTACATCAAGGCC
25243	Arnt2	5'-[AminoC6]ACTGATAAAAGGCTCCTGCTTGCCCCGTCCCCAGTCTTATCTAGGAAGGT
29657	Arntl	5'-[AminoC6]GAAAAAAGCAGATCGAAAGAGCTTCTGCACAATCCACAGCACAGGCTACT
170903	Arntl2	5'-[AminoC6]AGGGCAGTGCAGTACTTGAGGTCTCAGAGAGTGTGCTTGGCCCGGCATAG
114104	Asah2	5'-[AminoC6]TCCTTGGAGGCGTTCCTCATTTTCCTTCTGGTAATGATGACGGCCATCAC
298682	Atad3a	5'-[AminoC6]CGATCGAGAGAATGCAGACATCATCCGGGAACAGATTCGACTCAAGGCTG
25389	ATF3	5'-[AminoC6]CTGCGCTGGAGTCAGTCACCATCAACAACAGACCTCTGGAGATGTCAGTC
79255	Atf4	5'-[AminoC6]CTGTTTCGAATGGATGACCTGGAAACCATGCCAGATGAGCTTTTGGCCAC
282840	Atf5	5'-[AminoC6]CTGGCCCCTGCCCCCCTGGGCCCCTATGAGGTCCTTGGGGGTGCCCTGGA
499973	Atg9b	5'-[AminoC6]ATCATTGATTTTTTCCATCACTTCACTGTGGATGTGGCTGGTGTTGGGGA
365564	Atoh7	5'-[AminoC6]TTTGGGGTGGGGTGGGGTGGGAGGAATGACTTTTTCCTGAGCATCACTTC
84355	Atox1	5'-[AminoC6]CCTCGCCGCCGCCTGTGCCGCCGCCTGTGCCGCCTGTGCCGCCTGTGCCG
24211	Atp1a1	5'-[AminoC6]GTGCAGTAGCGGGAGATGCTTCCGAGTCGGCGCTCTTAAAGTGCATCGAG
24213	Atp1a3	5'-[AminoC6]GGAGGAACAGTTCCCCAAGGGCTTTGCCTTTGACTGTGATGACGTGAACT
29693	Atp2a2	5'-[AminoC6]GGTGCTGCTGCGTGGTGGTTCATCGCTGCTGACGGTGGTCCGAGAGTCTC
24216	Atp4a	5'-[AminoC6]GAGGGCAGTGGAGACCCTGGGTCCAAGTCTGTCTCAGAGAAAGGCTCAGA
65262	Atp5a1	5'-[AminoC6]AAGCTGAGGAGATGGTAGAGTTTTCTTCCGGCTTAAAGGGTATGTCCCTG
171374	Atp5b	5'-[AminoC6]ACCGTCAGAACTATTGCTATGGATGGCACTGAAGGCTTGGTTAGAGGCCA
116550	Atp5c1	5'-[AminoC6]CGAGTATTGTCGGGCTGTCGGCCTGCTCCTTGCAGCCGCAATGGATCCAA
245965	Atp5d	5'-[AminoC6]GTGGATGTGCCTACGCTGACTGGAGCCTTTGGCATCCTGGCATCCCATGT
245958	Atp5e	5'-[AminoC6]AAGACTGAGTTCAAAGCGAACGCTGAGAAGACTTCGGGCACCAGCATAAA
171375	Atp5f1	5'-[AminoC6]GGTGGTACTTTCTGCCGCCGCCACAGCGGCCCCGTGTCTGAAGAACGCGG
29754	Atp5g1	5'-[AminoC6]GCAGCTCCCCTCTCCAGGTGGCCAGACGGGAATTCCAGACCAGTGTTATT
171082	Atp5g2	5'-[AminoC6]TCCAAGTTCGTCTCTACCCGCTCCCTGATCAGGAGCACCTCTCAGCTGCT
114630	Atp5g3	5'-[AminoC6]CGCCAAGCTCGCCTGCACCCCCTCTCTGATCCGAGCTGGATCCAGAGTTG
641434	Atp5h	5'-[AminoC6]ATGTGGACAAGCCTGGCTTGGTGGATGATTTTAAAAACAAGTATAATGCT
140608	Atp5i	5'-[AminoC6]CAGGTCTCTCCGCTCATCAAGTTCGGCCGGTACTCCGCTCTGATCCTCGG
94271	Atp5j	5'-[AminoC6]GGGTAGGCGTGTGTAGGCGGAGCCAGGGCCGGAAGTAGAACGGTGGCGGC
690441	Atp5j2	5'-[AminoC6]TGGCGTCTATCGTGCCATTGAAGGAGAAGAAGCTCATGGAGGTTAAACTT
300677	Atp5l	5'-[AminoC6]GGCCAAGTTCATCCGTAACCTCGCGGACAAGGCACCGTCGATGGTGGCGG
192241	Atp5o	5'-[AminoC6]TGTGGTCAGGCCCTTTTCGAAGCTTGTAAGGCCCCCTGTCCAGGTCTACG
362749	Atp5s	5'-[AminoC6]TAAGAACCTCAAGTATTTGTTCTTAAGTGATCTTCCTGGAATAAAAGATA
29757	Atp6v0a1	5'-[AminoC6]ATGCTCTGTGTCCCCTGGATGCTGCTGTTTAAGCCGTTGATCCTTCGCCA

297566	Atp6v1e1	5'-[AminoC6]TTGTTTGGTGCAAATGCCAATAGGAAGTTTCTGGACTGAGCCTAAGGAGG
24218	Atp7b	5'-[AminoC6]CGTCCTGTGCATCGCCTGCCCCTGCTCCCTCGGGCTGGCCACACCCACAG
313510	Atpaf1	5'-[AminoC6]AAACAGATTTGGCAGCAGTATTTTTCAGCAAAAGACACTGTCTACGCAGT
303190	Atpaf2	5'-[AminoC6]ACGTATGGGTCCACCCAAACCCTTGGGCATGATGTGGCGAATCTACCCCC
25392	Atpif1	5'-[AminoC6]GGCTCCATCCGAGAAGCTGGTGGGGCCTTCGGGAAACGAGAGAAGGCTGA
361215	Auh	5'-[AminoC6]GATATTCTGTGCTGGCGCTGACCTTAAGGAAAGAGCCAAGATGCATTCCA
311299	Aven	5'-[AminoC6]GACCAGGAGCCAGAAAGAGATGGGCAGATAGCCCAGGAGGAAATAGCTCC
24221	Avp	5'-[AminoC6]CTACGCTCTCTGCTTGCTTCCTGAGCCTGCTGGCCCTCACCTCTGCCTGC
25107	Avpr1a	5'-[AminoC6]GTGGCTGTGCTGGGCAATAGCAGTGTGCTGCTGGCGCTGCATCGCACGCC
58961	Azin1	5'-[AminoC6]GGGTCCATCCTGTGACGAGCTTGATCAAATTGTGGAAAGTTGTCTTCTTC
288752	B3gnt4	5'-[AminoC6]CATGTGCAGCGCTGGATAGCCGCTGCCTGCACACAGGCCCACTTCATACT
64639	Bad	5'-[AminoC6]GGCGCTGGGACTATGGAGACCCGGAGTCGCCACAGTTCGTACCCAGCGGG
116502	Bak1	5'-[AminoC6]CGCCTCCAGCCTATTTAAGAGCGGCATCAGCTGGGGCCGTGTGGTGGCTC
24887	Bax	5'-[AminoC6]GATGGCTGGGGAGACACCTGAGCTGACCTTGGAGCAGCCGCCCCAGGATG
317673	Bbc3	5'-[AminoC6]GGACCCTGGCCTCCCAAAAGCCAGGGAAGGGAGGGCTGAAGGACTCATGG
64564	Bbox1	5'-[AminoC6]CCTCCACCATCCACCTGGGGTTCAGCTTCTGCACTGTATCAAGCAAACAG
293852	Bcap31	5'-[AminoC6]CATCTGTTGGAAACCTTTAAGTCACAGGATGAGTCTGCAGTGGACTGCAG
25414	Bcar1	5'-[AminoC6]CCTAGTGTGGAGAAAGGCCTGCCGCCGTCCAACCATCATTCGGTGTATGA
29592	Bcat1	5'-[AminoC6]GGGATCTTATTTTTCTAATGGGACCTTTTCTCCGGTGTCCCTGTGGGCCA
64203	Bcat2	5'-[AminoC6]GGTTCAGGTGACCAGAGAGCCACAGAAGAAGCCAGCCCCTAGCCAGCCTC
361666	Bccip	5'-[AminoC6]AAGCGAGCAGTGGGAAATGGGGTCCAGCGGCCGCTTGAAGCACCGAGCCA
25244	Bckdha	5'-[AminoC6]ATCTCCGGCATCCCCATCTACCGCGTCATGGACCGACAGGGCCAGATCAT
29711	Bckdhb	5'-[AminoC6]ATAACAAGTGCCTTGGATAACTCATTGGCCAAAGACCCTACTGCAGTAAT
29603	Bckdk	5'-[AminoC6]CCACTCACTCTCTCTCTACTCCTGCTTTGGGGTCACCGTTGCCTGTCGAG
24224	Bcl2	5'-[AminoC6]GAGATCGTGATGAAGTACATCCATTATAAGCTGTCACAGAGGGGCTACGA
170929	Bcl2a1d	5'-[AminoC6]CCAGAGTGCTACAGAGAGTTGCTTTCTCTGTACAAAAGGAAGTTGAAAAG
24888	Bcl2l1	5'-[AminoC6]CCCAGAAAGGATACAGCTGGAGTCAGTTTAGCGATGTCGAAGAGAACAGG
114552	Bcl2l10	5'-[AminoC6]GTGAGCTTGCTGTACAATCGACTCACAGGACGGCATCGCTCCTGGCTGGA
312682	Bcl2l13	5'-[AminoC6]CGCTGCTCCTGTACCCTGTGGGAAGCACCTGCTGCCACCGCCGTCTCCTT
360551	Bcl6b	5'-[AminoC6]AGTCCCCGGCTGGGCATAAGACCGGGGCTGTCGAGCAGCAAGCGGAGGAG
315644	Bco2	5'-[AminoC6]CCAGTTCAAAATGGAGAAGGGTACAGTGACATACAAGAGCAAGTTTCTAC
301514	Bcs1l	5'-[AminoC6]CGGCGTGCCAGACGGAGGACAGAGTGGCGGTGGAGGAGCGTTGCAGGAGA
117099	Bdh1	5'-[AminoC6]CTTTCAGCCCTGACACCCGTCGGACCTACACCAGTCAGGCAGATGCGGCT
24225	Bdnf	5'-[AminoC6]GAAACAAAGTGGCTGTCCACTGTGACTCAGGGAGTGAAGATACCATCAGC
79431	Bhlhe40	5'-[AminoC6]GTGCCACTGTTATACCCAGGCCTCAACACCTCAGCAGCAGCCCTCTCCAG
64625	Bid	5'-[AminoC6]CTCAGGCCTGGGGGCCGAGCACATCACAAACCTGCTGGTGTTCGGCTTTC
60371	Birc2	5'-[AminoC6]GTTGATGAGATTCAAGCTAGATATCCTCATCTTCTTGAGCAGCTGTTGTC
364403	Blk	5'-[AminoC6]ACCTGCAAGTGCTAAAGGGAGAGAAGCTCCAAGTCTTGAAGAGCACTGGA
83470	Bmp1	5'-[AminoC6]CAGTACAACAACATGCGTGTGGAGTTCAAGTCTGACAATACTGTGTCCAA
140932	Bnip1	5'-[AminoC6]CTTGCCATCGACAACCTGGAGAAAGCAGAACTTCTGCAAGGAGGAGACTC
140923	Bnip3l	5'-[AminoC6]TTGGCCTGTAAAACACTTTAGAGATTCCTAACAGAGTTTACTGTTGTTTA
296973	Bpgm	5'-[AminoC6]GCTGTACTGCTGTTCTCGAACCTCACCCAATTGAGAACTCCAGGGCAGCC
114486	Braf	5'-[AminoC6]GGTCTTCAAAAGGTTGGGTAATTTAGTAGCTGAGTTCCCTAGGTAGAAAT
25246	Bsg	5'-[AminoC6]GCTGCTCTTGGACGAGGCGACATGGCGGCGGCGCTGCTGCTGGCGCTGGC
287609	Bzrap1	5'-[AminoC6]CCTCAGGACCCCCGAGAACATTGCAGCCGGCTTCTTGGCAATGGCGGGCC
360887	Cabc1	5'-[AminoC6]AGTGAGCGGGCTCGGGAGCGGAAGGTGCCAGTTACCCGGATTGGGCGGTT
300992	Cacna2d2	5'-[AminoC6]GCAGTGCCACGGGAGTCACCCGCTATTACCCAGCCACACCGTGGCGAGCC

24240	Cad	5'-[AminoC6]CCTCGGCGGATCTTCCACCTGCCTCTCCAGGAGGACACCTATGTAGAGGT
24245	Camk2b	5'-[AminoC6]CCCTTCCCTGCCACCAGCAGCTGAGCGAGAGTGGCCCACCCCTGGCCCGG
24246	Camk2d	5'-[AminoC6]GATACCCACCCTTCTGGGATGAAGATCAGCATAGACTGTATCAGCAGATC
171140	Camk2g	5'-[AminoC6]AGGGTGCTGCGGTCAAGCTAGCTGATTTTGGCCTGGCCATCGAAGTGCAG
25050	Camk4	5'-[AminoC6]CCTGGTTCTTGAGCTAGTCACAGGAGGAGAACTGTTTGACAGGATTGTGG
29144	Canx	5'-[AminoC6]ATGATGGGTGGGGCCTGAAGAAAGCTGCTGATGGGGCTGCAGAGCCAGGT
116653	Cap2	5'-[AminoC6]CGAGAGCATCGCCGCCCTGGGGTGGATAGCCGTGTCTCCCAAACCTGGTC
29153	Capn1	5'-[AminoC6]GAAATTACCTGACCATCTTCCGAAAGTTTGACCTGGACAAGTCTGGCAGC
29154	Capn2	5'-[AminoC6]ATGACGAACTCATCATCGACTTTGACAACTTTGTGCGGTGTTTGGTTCGG
29155	Capn3	5'-[AminoC6]GGTGATTTGCAGCTTCCTCGTGGCTCTGATGCAGAAAAATCGGCGCAAGG
493810	Capza2	5'-[AminoC6]ACCATTATTGCATGCATCGAAAGCCATCAGTTTCAAGCAAAAAACTTTTG
54233	Car5a	5'-[AminoC6]GCACATGGGACCTCTCTGTGCCACAAGGCCACAGCACTGGCGCTTCCAGC
302669	Car5b	5'-[AminoC6]TGCCTCCACATCTGGAACAATGGGTACTCCTTTCTTGTGGAATTTGAAGA
315120	Card10	5'-[AminoC6]TGGGGCTGGTGAGGCCCAAGCCTGCAGGGGGCACTGCAGGAGACTCAGCG
304314	Card11	5'-[AminoC6]GGAGCAGGTCAACCTCATGTTCCGGAAGTTCTCTTTAGAAAGGCCCTTCC
294770	Card6	5'-[AminoC6]TGGGACAGCGGCCTCTCATGTTGGTCACATACATTCTTCTGGTTCACAAG
64171	Card9	5'-[AminoC6]TGCAAAGTCCTGAACCCCGATGATGAGGAGCAGGTGCTCAGTGACCCCAA
25166	Casp1	5'-[AminoC6]GTGCGATCATGTCACTAAAAAAGGACCCCGGGCAAGCCAGATGTTTATCA
156117	Casp12	5'-[AminoC6]ATGGACAAAAATGTTTTAAATGGCGATGAGTTACTCAAAATCGGAGAAGG
299587	Casp14	5'-[AminoC6]GCCCGCCTGGCCCTGACGCTGTGTGTCACCAAAGCCCGGGAGGGTTCTGA
64314	Casp2	5'-[AminoC6]AATTAATGAAGATGAGACTTCCTACTCGCTCAGACATGATATGTGGCTAT
25402	Casp3	5'-[AminoC6]TAAGTCATGGAGATGAAGGAGTAATTTTTGGAACGAACGGACCTGTGGAC
114555	Casp4	5'-[AminoC6]AAACACAACCAAGTGGGCAAAATGCTTCTCCAGACATTTCTTAATGTGGA
83584	Casp6	5'-[AminoC6]CAGGGGAAAGTAAAACATGACGGAGACAGATGGCTTCTACAGAAGTAGGG
64026	Casp7	5'-[AminoC6]ACCACAGCAACTCAGCCTGCTTCGCCTGCGTCCTGCTGAGCCACGGAGAA
64044	Casp8	5'-[AminoC6]TACCCTAAAATCAATCTGTTTCCGGGTCAACAGGAGCTTGCTGGGAAGGA
58918	Casp9	5'-[AminoC6]CGGGCAGGCTCTGGGTCTCGGCGGGATCAGGCCAGGCAGCTGGTCATAGA
686019	Casq1	5'-[AminoC6]GTGGCCAAGAAACTAGGCCTAACTGAAGAGGACAGCGTGTATGTGTTCAA
29209	Casq2	5'-[AminoC6]CAAGGTCGCACAGAAGCAGTTCCAACTGAAGGAGATCGTACTGGAGCTTG
24248	Cat	5'-[AminoC6]TCCACAGTCGCTGGAGAGTCAGGCTCAGCTGACACAGTTCGTGACCCTCG
25298	Cck	5'-[AminoC6]CTGGCCGCATGTCCGTTCTTAAGAACCTGCAGGGCCTGGACCCTAGCCAC
310395	Ccrn4l	5'-[AminoC6]GTTCCGATCAGCTCAGGGATGTGACCTCCTCCAGAACCTGCAGAACATCA
29374	Cct4	5'-[AminoC6]GCCAGGGAGACCGTTACTCCACAGCAGGCCGGAATCCGTGTCCATCGGTC
288620	Cct6a	5'-[AminoC6]GCGCTTCAAACAGCATCGTTTATTATAATACTCCCTAATTGGGAACCAGT
25668	CD38	5'-[AminoC6]GAAAATTGTCCCAACAACCCTGTTGCTGTGTTCTGGAATGTGATTTCCCA
25407	Cd59	5'-[AminoC6]ATGCTACAACTGTTTAGACCCGGTTTCTTCATGCAAAACAAACAGCACTT
192248	Cdh13	5'-[AminoC6]TGGAGAATGAGGACCCATTGGTACCCGACGTCTCCTATGGCCCCAGCTCC
54237	Cdk1	5'-[AminoC6]TGCCCAGTACGGCAATCCGGGAAATCTCTCTGTTAAAAGAACTTCGACAT
94201	Cdk4	5'-[AminoC6]ATCGGGACATCAAGGTCACCTTAGTGTTTGAGCATATAGACCAGGACCTA
252827	Cdk5rap1	5'-[AminoC6]TGTTGCTTAGGACCTTCAGGGCACATAACAGCACTTCCTGTCCTGATCCA
114101	Cds2	5'-[AminoC6]AAAGTTAGATGGAGAGACCGCATCAGACAGCGAGAGTCGAGCGGAAACAG
312680	Cecr5	5'-[AminoC6]AGAGGCGAAGGGGGCCGTTGGAACATGCACCTCAGGGACTCCTGTGTGCC
366624	Cfl2	5'-[AminoC6]ACCGTTAAAAAGCAAGATGATTTATGCTAGCTCTAAAGATGCCATTAAAA
117279	Cflar	5'-[AminoC6]ATTTGAATCAATCTGATGTATCCTCCTTAATTTTCCTTACAAAGGATTAC
288242	Chaf1b	5'-[AminoC6]GACTCTGACTATGACAAGCTGAGTGACATGGTAAAATACCTGGATCTGGA
296966	Chchd3	5'-[AminoC6]CGATATTCCAGTGTTTATGGTGCTTCAGTTTCTGATGAAGAATTGAAAAG
308215	Chd1	5'-[AminoC6]GAGGAAGCAGTATACAATCCCATGCCATACAAAGGCTGCTCACTTCGATA

308738	Chd2	5'-[AminoC6]CTAGGGGAGCTGGTTCATAATAGCTGTGTGTCAGCAATGCAGGAGTATGA
303241	Chd3	5'-[AminoC6]AGATGTAAAAGCAGATCGGGAGCTTCGACTTGGGCCTCCTCGGGATGAGC
117535	Chd4	5'-[AminoC6]AAGAGGAGGTAGAACGGGAAATCATAAAACAGGAAGAAAGTGTGGATCCT
691589	Chd5	5'-[AminoC6]GATCGACGGGGGTATCACTGGGGGCCTCCGGCAAGAAGCCATCGACAGAT
311607	Chd6	5'-[AminoC6]TTGATACAGAGCTTGGTGACATGCCCCCTTCTCCTTCTCTTTCAAGTCCC
65027	Chd8	5'-[AminoC6]GAGAATGCTGTTCAGGTCCCCAGTCTGGACAGTCTGACTTTAAAACTAGA
64152	Chp	5'-[AminoC6]TCTCCATTCAGTCTTTCAGCTGTCCTCCTGTCGTTGAGATTCCCTGCATT
25302	Chrna7	5'-[AminoC6]GCATATTCAAGAGCTCCTGCTACATTGACGTTCGCTGGTTCCCTTTTGAT
309361	Chuk	5'-[AminoC6]ACGTTAGCACAAATGATAGAAGAAAATCTGAACTGTCTTGGCCATTTAAG
364388	Cideb	5'-[AminoC6]GACTGCGGTGGAGACTGAAGACTTCTTCGAGCTGCTAGAGGATGACACAT
362859	Ckap4	5'-[AminoC6]CCACGTGGTGAAGGATGCCCGAGAGCGGGACTTCACGTCCCTGGAGAACA
24264	Ckb	5'-[AminoC6]ATATGGCCAAGGTGCTGACCCCCGAGCTGTACGCGGAGCTCCGTGCCAAG
29593	Ckmt1	5'-[AminoC6]GTCGCGACCCCTATTTTGGCTCCAGTCTCCGACCCTGCTCCGTCCTCTCT
688698	Ckmt2	5'-[AminoC6]GTGCCTTCTCTAAGTTGCTAACTGGCCGAAATGCATCTCTGCTGTTTACG
365395	Clcf1	5'-[AminoC6]CTACCTGGAGCATCAACTCCGCAGCTTAGCTGGGACCTACCTGAACTACC
84360	Clcn3	5'-[AminoC6]GTGCTTTGCCCAACACACTCCATCTCTTCCAGCAGAAAGTCCTCGGCCAT
406864	Clic1	5'-[AminoC6]CCGGGCCGTGAGACCCGCCTTCCCTTGCCCGGGCCCCTCCCAGTTCCCCC
83718	Clic4	5'-[AminoC6]TGCCCCTTTTCACAGAGGCTCTTCATGATTTTGTGGCTCAAAGGAGTCGT
293485	Cln3	5'-[AminoC6]TTTTCTTGACGCTAACTCCTAACACACGCTGACTTTAGGTCCTTTGGGGG
60447	Clock	5'-[AminoC6]TACTGTTGAAGAACCGAATGAAGAGTTCACATCTAGACACAGTTTAGAAT
301117	Clpp	5'-[AminoC6]GACAGGCTGCCAGCATGGGCTCCCTGCTCCTTGCTGCTGGCAGCCCAGGG
300786	Clpx	5'-[AminoC6]ATGTGCCAGTTTTAGGAAGACTGGGGACCTTGGACACTCAGATTCTGCGC
59322	Cnksr2	5'-[AminoC6]GCCTCGAAGTTTTACTCTGCCTCGAGATAGCGGGTTCAACCATTGCTGTC
25248	Cnr1	5'-[AminoC6]GTAATCGCTGTGTTGCCTCTCCTGGGCTGGAACTGCAAGAAGCTGCAATC
294337	Col6a1	5'-[AminoC6]TGTGGACATGATTAAAAATAATGTGGAGCAAGTGTGTTGTACTTTTGAGT
24267	Comt	5'-[AminoC6]TTTGAGTACGTGCTGCAGCCAGTCCACAACCTGATCATGGGTGACACAAA
60384	Copb2	5'-[AminoC6]AACGGTGCGAATTTGGCACTCCAGCACCTACCGGCTGGAGAGCACACTGA
498332	Coq2	5'-[AminoC6]GCTGTCAAGGGCTCCTGTGATCCAGCTGTGTGCCTGCCTCTTTATTTTTC
29309	Coq3	5'-[AminoC6]CAAAACCTTCCAGGCCCTGGCTCACTCATGGTGGGATGAGCAAGGGAAGT
366013	Coq4	5'-[AminoC6]GCCGCGAGCCATGGCGCCCGCCTGCTGTACCCAGACCACATCCCTACTAC
304542	Coq5	5'-[AminoC6]AGAGCGTGGCCAGGAAGTACGACCTGATGAATGACATGATGAGCCTCGGC
299195	Coq6	5'-[AminoC6]AACCCTGGAGAAACTGTCAGAAACTTACAGCAACAGAGTCAGCTCCATAT
25249	Coq7	5'-[AminoC6]CATCTATGCAGGGCAGATGGCTGTGCTTGGACGGACCAGTGTTGGCCCTG
498909	Coq9	5'-[AminoC6]TGAGACACAGGGGCCAGAGTTTTCTCGTCCACCCCCCAGGTACACAGACC
25305	Cort	5'-[AminoC6]ATGAGTGGGCTTCCCAAGACAGCTCCAGCACCGCTTTCGAAGGGGGTACC
690300	Cox11	5'-[AminoC6]ATCAGCAGTGGCTGGGCATGCCTCAGACCAGATTGAAAACATGGTGCCTG
309391	Cox15	5'-[AminoC6]AAACCCGACAGCTCCTGTGGCTGAGACGCTTTGCTGGTGGAACAGCAGGC
89786	Cox17	5'-[AminoC6]CCCTGCTGTGCCTGCCCGGAGACCAAGAAGGCGCGTGATGCGTGCATCAT
289522	Cox18	5'-[AminoC6]TCCTGCGTGGTGCTGTCACTCTGCCCCTGGCCGCCTATCAACATTACATC
304330	Cox19	5'-[AminoC6]ACCGCAATGAACTTCGGGACCAAAAGCTTCCAGCCGCGGCCCCCAGACAA
29445	Cox4i1	5'-[AminoC6]TTGCCTGATGTGGCCCACGTCAAGCTGCTGTCTGCCAGCCAGAAGGCCCT
361425	Cox4nb	5'-[AminoC6]TCGTGTTTCGTACTGTGGTGCGTTGGTCGCGACGCGACCAGCTAGGCTCA
252934	Cox5a	5'-[AminoC6]TATTCTCATGGGTCACATGAGACAGATGAGGAGTTTGATGCTCGCTGGGT
94194	Cox5b	5'-[AminoC6]CTTCGGGCACCAAGGAAGACCCCAATCTAGTCCCATCCGTTAGCAACAAG
25282	Cox6a1	5'-[AminoC6]AGTGCGTCTCGAGTCTCTGGGCTGCTGGGCCGGGCCCTCCCACGGGTGGG
54322	Cox6c	5'-[AminoC6]GGGAAGGACGTTGGTATAGAGGACATTGGCTACCATGAGTTCCGGTGCTC
29507	Cox7a2	5'-[AminoC6]TCAGTAGTCGCGGTTGGTGGGTAACAACTGAGCTAAGATGCTGCGGAATG

298762	Cox7a2l	5'-[AminoC6]GAGCAGTCGCCGAGGTTTCTCTGTGTGTACGGCACCCTAGGCAAGGGTTT
303393	Cox7b	5'-[AminoC6]GTAGTCACCGCAGTTCCATCCTTGTCTCCGCGATGTTGCCCTTGGCCAAA
100188937	Cox7c	5'-[AminoC6]GTGAAGAAAGTAGGGTGAGGTGGTACGGTCATTTCTTCTGCCTTCCGTCT
171335	Cox8a	5'-[AminoC6]TGTGTTGTCTTCTACCTGCGGGCTGGGTCCTGTCACACCTGGAAAGCTAC
25250	Cox8b	5'-[AminoC6]CTAAAGCCCGTATCTCTTCCAAGCCAGCCAAATCTCCCACTTCCGCCATG
360229	Cox8c	5'-[AminoC6]TCTGGTGGTCTCCCATTTGCTCTTCCTCGGTGGCCCTTTTCTGACCTGTG
304024	Cpox	5'-[AminoC6]GAAGGAGGTGGTGGCATCACCTGTGTGCTTCAGGACGGGCGTGTGTTTGA
497840	Cps1	5'-[AminoC6]AAGTTTCCAGAAGGCTCTGAGGATGTGCCATCCATCTGTGGATGGGTTCA
25757	Cpt1a	5'-[AminoC6]GAAAACGGACCCTCGTGATACAAACCAAATGAATAGATGTTGCTCCTGAC
25756	Cpt1b	5'-[AminoC6]GGGAAACACCGTTCACGCCATGATCATGTATCGCCGCAAACTGGACCGAG
308579	Cpt1c	5'-[AminoC6]CGCGGGACTGACCAGAGAGAACCCCGCAGCTTCCCTGGACACCTATGCCC
25413	Cpt2	5'-[AminoC6]GTTTCTGCAGTCCGGTTTCTGAAGACACTTCAGGCTGGCCTTTTAGAACC
311849	Crat	5'-[AminoC6]GGGCCTCCTCAAGCCCTCCTCCTTGATGAAGGTGTCTGGTCGATTTAAGG
81646	Creb1	5'-[AminoC6]GTCCTCCCCAGCACTTCCTACACAGCCTGCTGAAGAAGCAGCACGAAAGA
25620	Crem	5'-[AminoC6]GTGGTGATGGCTGCCTCACCAGGAAGCCTGCACAGTCCCCAGCAACTAGC
81648	Crh	5'-[AminoC6]CCGGAGCAGCCCCAGCAACCTCAGCCGATTCTGATCCGCATGGGTGAAGA
83842	Crot	5'-[AminoC6]ATCAGAAGTTACTTGAAAGGGCTAAAGGAAAAAGAAACTGGCTGGAAGAG
60446	Crx	5'-[AminoC6]CGGATGTGTATGCACGTGAGGAGGTTGCTCTCAAGATCAACCTGCCTGAG
299691	Cry1	5'-[AminoC6]GCACGACAACCCCGCCCTGAAGGAGTGCATCCAGGGCGCCGACACCATCC
170917	Cry2	5'-[AminoC6]ATTCCTTGCTGGCCAGCCCCACAGGCCTCAGCCCCTACCTGCGCTTTGGC
25420	Cryab	5'-[AminoC6]AGTCTGACCTCTTTTCTACAGCCACTTCCCTGAGCCCCTTCTACCTTCGG
362061	Cryz	5'-[AminoC6]TGTTTGAATTTGGTGGACCGGAAGTGCTGAAGCTCCAGTCTGATGTGGTA
170587	Cs	5'-[AminoC6]CCTTGCTGCCCGGCACGCCAGTGCTTCTTCCACGAATTTGAAAGACATAC
171081	Csf2rb	5'-[AminoC6]CAGCAAGAGCCTCCTTTTCCAGGATGGAGGTAAAGGACTCTGGCCTCCTG
113927	Csnk1a1	5'-[AminoC6]CGGAAGATCGGATCTGGTTCCTTCGGGGACATTTATCTAGCGATCAACAT
64462	Csnk1d	5'-[AminoC6]AGACCTTGAGAGCCATATAGGCTGCTGGAGAATTCCAAGATTCAAAGCTG
58822	Csnk1e	5'-[AminoC6]CATTGACTTCGGCCTGGCCAAGAAGTACCGGGATGCCCGTACACACCAGC
64086	Csnk1g1	5'-[AminoC6]GCACTTCAACATCCTCTGGGGTTCTCATGGTGGGACCCAACTTCAGGGTT
65278	Csnk1g2	5'-[AminoC6]ACTGGGCCGGCAAGCCCCTGCCGACACCTATCGGCACCGTCCATCCTGAT
64823	Csnk1g3	5'-[AminoC6]GAGAATATTCTGGAGAGAGGGTGGGCAGGGTGCTTTGCCTCCATAGCTTT
116549	Csnk2a1	5'-[AminoC6]GCATGGGGATTATGCACAGAGACGTGAAACCGCATAATGTCATGATTGAT
307641	Csnk2a2	5'-[AminoC6]AGCAGAACAAGAACCAAATCAAAACGTCTTAACGCGTGTAGCGAGATCAC
81650	Csnk2b	5'-[AminoC6]TCTTCTGTGAGGTGGATGAAGACTACATCCAGGACAAATTTAATCTTACT
683927	Cstf2	5'-[AminoC6]ACCCCAGAGCAGCTATGCAGCGGGGAGCCTTGCCTGCCAACGTCCCAACT
307505	Ctnna1	5'-[AminoC6]GGCTTTAGCGGCAAAGCCACAGAGTAAACTGGCCCAAGAGAACATGGATC
171293	Ctsd	5'-[AminoC6]TAAAAAACTACCTGGATGCCCAGTACTATGGTGAGATCGGCATTGGGACT
64001	Cyb5a	5'-[AminoC6]GCCGAGCAGTCAGACAAGGATGTGAAGTACTACACTCTGGAGGAGATTCA
80773	Cyb5b	5'-[AminoC6]ACAATTCATGCCAAAGTTCCTGGGCATATTGGATTGTCCCCATCGTGGGT
304805	Cyb5r1	5'-[AminoC6]TCCGGGGGCCGAGTGGGTTGCTCAGTTATGCTGGGAAAGGGAATTTTAAC
365345	Cyb5r2	5'-[AminoC6]AAAACAGTCACTTGCCTATGAAGGTGCTAGTGAGTCCCCAAGCCACTCAC
25035	Cyb5r3	5'-[AminoC6]GGCGCTTCCGATTTGCACTCCCTTCGCCCCAGCACATCCTGGGCCTTCCT
79129	Cyba	5'-[AminoC6]TGCTTACTCTATTGTTGCAGGAGTGCTCATCTGTCTGCTGGAGTACCCCC
66021	Cybb	5'-[AminoC6]GCTCTGGCCCGGGCACCTGCAGCCTGCCTGAATTTCAACTGCATGCTGAT
300047	Cyc1	5'-[AminoC6]GCAAGAGCTGCTAACAATGGAGCTTTACCCCCTGACCTCAGCTACATCGT
25309	Cycs	5'-[AminoC6]ACACTGTGGAAAAAGGAGGCAAGCATAAGACTGGACCAAACCTCCATGGT
29680	Cyp11a1	5'-[AminoC6]GTCCTAAACCAAGAGGTGATGGCCCCTGACTCCATCAAGAACTTCGTGCC
500892	Cyp11b1	5'-[AminoC6]GCGCTTCAACCGACTGCAGCTGAATCCAAATATGCTGTCACCAAAAGCCA

24294	Cyp11b2	5'-[AminoC6]GCGCTTCAACCGACTGAAACTGAACCCAAACGTGCTGTCACCAAAAGCTG
25146	Cyp17a1	5'-[AminoC6]TGTCGGACCAAGGGAAAGGCGTGGCCTTTGCAGATGCTGGTAGCTCCTGG
25147	Cyp19a1	5'-[AminoC6]TAATGTCACCATCATGGTCCCGGAAACTGTGCCTGTCAGTGCCATGCCAC
24296	Cyp1a1	5'-[AminoC6]GGAAGAGCACGTGAGCAAAGAGGCTGAATACTTAATCAGCAAGTTCCAGA
24297	Cyp1a2	5'-[AminoC6]CTACTTGGAGGAGCACGTGAGCAAAGAGGCTAACCATCTAATCAGCAAGT
25426	Cyp1b1	5'-[AminoC6]TTAGGTTCTGACTGAGCCAAGAGTGGGTGCTAAAGCAGCGGGCCTCAGGT
25279	Cyp24a1	5'-[AminoC6]GAAGGACAGGAGTGGCAAAGGGTCCGCAGCGCCTTCCAGAAGAAACTCAT
301517	Cyp27a1	5'-[AminoC6]ATAAGAGACAGCATGGAGCAGTGGAAGGAGCACCGAGACCACAAAGGCCT
114700	Cyp27b1	5'-[AminoC6]ACCAGCGGGCTTGCGGGTTGCTAACGGCGGATGGTGAAGAATGGCAGAGG
24300	Cyp2b1	5'-[AminoC6]ATGAGAGACTTTGGGATGGGAAAGAGGAGTGTGGAAGAACGGATTCAGGA
29277	Cyp2c11	5'-[AminoC6]GAGTTTACCCTTGAAAGCTTGGTGGCTACTGTAACTGACATGTTTGGAGC
100359554	Cyp2c26l	5'-[AminoC6]ACCGTGTTCAAGAGGAAACACAGTGCCTTGTGTAGGAACTGAGGAAAACC
29298	Cyp2c7	5'-[AminoC6]ACAGCCCACTGTCATATTGCATGGATATGAAGCAATAAAGGAAGCTCTGA
25086	Cyp2e1	5'-[AminoC6]CAAGAATGAGTTTTCTGGACGGGGGGACATTCCTGTGTTCCAGGAGTACA
65210	Cyp2j4	5'-[AminoC6]CGCCCCAAGAACTATCCCCCGGGGCCTTGGGGTCTCCCATTCGTGGGCAA
25642	Cyp3a23/3a1	5'-[AminoC6]ACACAGAAATGATCAAGAATGTGCTAGTGAAGGAATGCTTTTCTGTCTTC
170509	Cyp3a62	5'-[AminoC6]TCCATTCCTTACCCCAGTTTTTGAAGCATTTGACATAACTGTGTTTCCAA
171352	Cyp3a9	5'-[AminoC6]TATATGGAACTCATTCACATGGAATTTTTAAAAAGTTGGGAATTCCTGGG
25429	Cyp7b1	5'-[AminoC6]TCTGGGCCTCTCTAGCAAACACCATTCCAGCTATGTTCTGGGCAATGTAT
81924	Cyp8b1	5'-[AminoC6]GGTTTGTCTACTCCCTGCTGGGGCCCCTGGAGTGGGTAGAAGTGAGCCAG
25699	Dbh	5'-[AminoC6]AGTCTCCGACCCAATGAGGCAGGCATCATGGAGCTTGGACTGGTGTACAC
24309	Dbp	5'-[AminoC6]CAGATATCTGTGCGGGCAGCCTTCCTGGAGAAGGAAAACGCCCTATTGCG
29611	Dbt	5'-[AminoC6]GCTCAGTACCACAGACCTCACGGGAGGGACATTCACTCTTTCCAACATTG
29740	Dci	5'-[AminoC6]GAAGGAGGGCGAGGCAGGAATCGCAGTGATGAAGTTCAAGAACCCTCCAG
29167	Dctn1	5'-[AminoC6]TGTATGAGCGTGGAGGTGGGGCGGCTGCGTGCCTTCTTGCAGGGTGGGCA
299850	Dctn2	5'-[AminoC6]GGATGATCAAGCAGAGTTTGATGCGGAGGAGCTGAGCAGCACAAGTGTGG
362504	Dctn3	5'-[AminoC6]GGGTGAAGATTCTCTACAAAAAGATTGAAGACCTGATCAAATACCTGGAT
84428	Dctn4	5'-[AminoC6]CACACCCTCTCCACCCGAGCTACAAGCATCTCCACACAGCTTCCAGACGA
308961	Dctn5	5'-[AminoC6]AAGCCAGAACATCGTTCTCAATGGCAAGACCATTATAATGAATGACTGTA
290798	Dctn6	5'-[AminoC6]GAAGATCGCTCCCGGAGCAGTAGTATGTGTAGAAAGTGAAATCCGAGGAG
171408	Dcxr	5'-[AminoC6]TGCTGTGGCTACGTTGCAGCCCTTCCTGGAGGTCACCAAGGAGGCCTGTG
24311	Ddc	5'-[AminoC6]CACGGCCAGCTCCTACCCAGCTATGCTTGCGGACATGCTGTGCGGGGCTA
313648	Ddost	5'-[AminoC6]ACGCACTCACTGTTCTTCCGCAGCCTGAAGGACCGGGGCTTTGAGCTCAC
25678	Ddr1	5'-[AminoC6]ATGCCCTGGGCATGCAGGACCGCACCATTCCAGACAGCGATATCTCTGTG
685781	Ddr2	5'-[AminoC6]CAGCCCTATTCCCAGCTGTCGGACGAGCAGGTTATTGAGAATACTGGAGA
84474	Ddx1	5'-[AminoC6]GCAACTATTAAAACTGGTGCTTCTGTGCTCAACAAGTGGCAGATGAACCC
300710	Ddx10	5'-[AminoC6]TCTACAATGAATTTGTCCGAAAGAGGGCTGCAGTCCTTTTTGCTACTGAT
316767	Ddx11	5'-[AminoC6]TACCGCTTGCAGCTCAAAGGGGTTCGATCCTTGAATCCTCCCCAGATTGA
315133	Ddx17	5'-[AminoC6]GTCCTGCACGGCACTGATCCTTCTTTACTCTGTTGGGATGAGTCTTCTTT
308490	Ddx18	5'-[AminoC6]ACTAGGAAAAGGTGGAAAAGCTAAAAAGGCCCTGAAGCATTCTGTGACTG
292022	Ddx19a	5'-[AminoC6]CACTGCAAACAGGAAAAGTGATTGAGCAGATGGGCAAATTTCATCCAGAA
84473	Ddx20	5'-[AminoC6]AAGAATGCTTGGATTGCGATGTGGAAGTTAAAGCTGCGATGCACACTTAC
317399	Ddx21	5'-[AminoC6]GTGACCATGATCCTGCGGTGTTCTGTTGAGATGCCCAACATTAGTTATGC
300208	Ddx23	5'-[AminoC6]AGGATGAGGAGGGCCGGCAGAAGATCCGGGAGGAGAAGGACAAGAGCAAG
373065	Ddx24	5'-[AminoC6]CTTGGAGCTGCTGAGACAGGAAGCGGGAAAACGCTGGCTTTTGCCATCCC
58856	Ddx25	5'-[AminoC6]GGAAGAACCTTCGTGGTATTAGGAGTACCACAGTCCCAAACATAGACGGC
362274	Ddx27	5'-[AminoC6]CCGGCTCATCGACCACCTCCACAACTGCCCTTCCTTCCACCTGAGCAGCA

364995	Ddx28	5'-[AminoC6]AAGAGGCGCCCGCCATGAGGAACCTCTCGTCCCGGGGCAACTTCGTGGAC
311835	Ddx31	5'-[AminoC6]ATACAGCGTAGTGATGGCCCCTATGCTTTGGTCCTAGTGCCCACCAGAGA
89827	Ddx39	5'-[AminoC6]TCCATCCACAGTTCTGGCTTCCGGGACTTTCTGCTGAAGCCGGAGCTCCT
317335	Ddx3x	5'-[AminoC6]TATGGAGGCTTTTACAACAGTGATGGATACGGAGGAAATTACAACTCCCA
310090	Ddx4	5'-[AminoC6]TGAATAACAACATTGCTAAGGCTGGCTATACCAAGCTCACTCCTGTGCAG
314336	Ddx41	5'-[AminoC6]ATCAGCACCAGCACCTCAAAGAGAAGGCTGAAGCACGCAAGGAGTCCGCC
303607	Ddx42	5'-[AminoC6]CTGGTAGAGTTTACTTCTTCCGGGAGTGTCCTCTTGTTTGTTACCAAGAA
287765	Ddx5	5'-[AminoC6]TGAAGCAAACTTTCCTGCAAATGTCATGGATGTGATTGCAAGGCAGAACT
117543	Decr1	5'-[AminoC6]ATCAAAGCATCGATGCTCCACAGTCTAAATTCTTCCCACCCATTTTAAAG
64362	Des	5'-[AminoC6]GCAGAGGCTCAAGGCCAAGCTACAGGAGGAAATCCAACTGAGAGAAGAAG
114214	Dffa	5'-[AminoC6]CCACCCGCACTCCCTCCACCTCCCGCCCTGCGGTGAGCTCTCCTCGCTCC
84359	Dffb	5'-[AminoC6]TACACAGCTCGTGCAAGTTCGGCGTGGCGGCCCGGAGCTGCCAGGAGCTG
297389	Dguok	5'-[AminoC6]AGCGTCTTTCCGTTCCCAGCCTCGGAACGCGCTCGTGGACGCACCACGCG
65156	Dhodh	5'-[AminoC6]CTCTTCACCTCTTACCTGACGGCCACAGGGGATGACCATTTCTATGCTGA
288923	Dhps	5'-[AminoC6]GGTAGATTACCACGCGCTTCTGGAAGCCTACGGCACCACCGGCTTCCAGG
266686	Dhrs4	5'-[AminoC6]GGGAAGGCAGAGGATCGAGAAAAGCTGGTAAACATGGCTCTGAAGCTTCA
289693	Dhx15	5'-[AminoC6]AAGTTGGTGATATTAAAATCATTCCATTATATTCTACACTTCCACCCCAG
294232	Dhx16	5'-[AminoC6]ATAGACCTGTGGATCCTATACAGGCCGCTGGACTTCACCCAACTGCTGAG
367172	Dhx30	5'-[AminoC6]TTGTCCATGACCCAGCAAGACTCCCACAACCCACTCAGGGACTCAAGGGG
361667	Dhx32	5'-[AminoC6]GTATTCATCGCGATATTACAAACTTCTGAAAGAGAGAGAGGAGCTTCCGA
287464	Dhx33	5'-[AminoC6]CAACGCGGTCCTCATCGGGGAAACTGGCTCTGGGAAGACAACTCAGATCC
362260	Dhx35	5'-[AminoC6]GGGTTCTCCCCATGTATGCAGGACTGCCTTCTTTTGAGCAGATGAAGGTG
310461	Dhx36	5'-[AminoC6]TGTTTGTTTGCTTGTTTTTTAATTTTTTTAAAAGGTTCTTATATTAACCT
288647	Dhx37	5'-[AminoC6]AGCTGGTCTGGGTGACCACCTGGCCCGCCGGGTTCAGAGTGAGGACCTGC
292007	Dhx38	5'-[AminoC6]CCAGATCGTAGAGCACCTAGAGGAGCTGGAGAACGCGCCTGCCTTGGCTG
287727	Dhx8	5'-[AminoC6]TTCCTGAGTGGAAGAAGCATGCCTTTGGGGGCAACAAAGCTTCTTACGGG
304859	Dhx9	5'-[AminoC6]AAACTCCCCATTGAGCCTCGTTTTGGAAAAATGATGATAATGGGGTGTAT
81654	Dlat	5'-[AminoC6]TGCAGGCAGGCACCATAGCCCGCTGGGAAAAAAAAGAAGGGGAAAAAATC
298942	Dld	5'-[AminoC6]AGGGGGCTTCTTCAGTTCCATTAAGAACTTATTCAGATCAACCAATTGAT
245961	Dmgdh	5'-[AminoC6]TCCCTATGAAAGTCAGGAGAAGATGAAACTTCAAGCCTCCTGGGTCGCTC
117251	Dnah9	5'-[AminoC6]CTCCAGTACAGGCAGGAACTCCCAGCCCAATGGAGTTCCTGTCCCACCAG
140694	Dnm1	5'-[AminoC6]AGCTACGCTATCAAGAACATTCATGGCATCAGGACAGGCCTCTTCACTCC
114114	Dnm1l	5'-[AminoC6]TCTTCACACCAAAAACAAGCTTTACACAGATTTTGATGAAATTCGACAAG
84350	Dnmt1	5'-[AminoC6]GGTATCAGAGCCCAAAGAGCCCGAGGCAGCCATCAAACTGCCTAAGCTGC
81656	Dpyd	5'-[AminoC6]ACATGTACAGGCTGCACTCTCTGCCTCAGCGTCTGCCCTATTATGGACTG
24316	Drd1a	5'-[AminoC6]CGAACTGTATGGTGCCCTTCTGTGGCTCTGAGGAGACCCAGCCATTCTGC
24318	Drd2	5'-[AminoC6]TGTTCATCATCTGCTGGCTGCCCTTCTTCATCACGCACATCCTGAATATA
29238	Drd3	5'-[AminoC6]ATTTCAGCCGCATTTGCTGTGACGTTTTTGTCACCCTGGATGTCATGATG
25432	Drd4	5'-[AminoC6]TCGTGGTGCACATCACACGGGCGCTGTGTCCGGCTTGTTTCGTGTCCCCA
266807	Duox1	5'-[AminoC6]ACTTCCACCGCTTCATCGCCTCCACAGCCATCATCCTTACAGTCTTACAC
79107	Duox2	5'-[AminoC6]TGCGCAGGCCTGTTTGCAGACCGTGCCTACTACTATGGCTTTGCCTCGCC
361003	Dupd1	5'-[AminoC6]ATAATAAAGCTACACGGAGGGACTCCAGCCAACTTCCTTGATGTTGGTGG
114856	Dusp1	5'-[AminoC6]CGGCCACATCGTGGGCTCAGTGAACGTGCGCTTCAGCACCATCGTGCGGC
63995	Dusp10	5'-[AminoC6]TGTGACGCCATCCCAACCACTTCACATAGTTCTCGAGTCCCTGAAGAGAG
297412	Dusp11	5'-[AminoC6]CGTGGTGGTCATCTGGAATCGTCCCAGCATGTTCAGACCCAGAGCTCAGC
64014	Dusp12	5'-[AminoC6]GAACAGGACTGTCTTCCGTACTTACCACAGGGAATCAGGCTCAGTGTACA
361002	Dusp13	5'-[AminoC6]TGGGTGAGTGTGGCCAAGCCAGTGGCCTCCTGGGTGCCGGTTTCTTTTTC

360580	Dusp14	5'-[AminoC6]AGATCGTGGACGAGGCCAATGCCCGGGGAGAGGCTGTTGGAGTGCACTGT
297682	Dusp16	5'-[AminoC6]CTGTCCAGGCCCTTCCCTAGTGCACCTTAGCGCTAAGACTGAGCCAGCTG
305477	Dusp18	5'-[AminoC6]CCCAGTTCAGTTCCCACAGCCCTCAATCAGTGGCCTCTCACAGATCACCA
311151	Dusp19	5'-[AminoC6]CTCATGTAATGCACTCCCTGAACCAAGAAATCAAAGCATTCTCCCGGGAT
311406	Dusp2	5'-[AminoC6]CCTACCTATACTTGGGCAGCTGCAACCACTCCTCAGATCTTCAGGGGCTG
302867	Dusp21	5'-[AminoC6]CTGGTGCCCAGGAACCTAATGCTGAGCTGACCTGTCACTGTGATGACAAC
361242	Dusp22	5'-[AminoC6]TTCTGTGCACGACACTGCCAGGCCCATGCTGGAGGGAGTTAAATACCTGT
360881	Dusp23	5'-[AminoC6]CCCCATGAACCACCTTTGGCCTAACCAGGCCCCTTACACCGTGTGCAACA
306527	Dusp26	5'-[AminoC6]GTTGGGCAATGTGGTCGGTGGGGGCTGCTGACCAGGAAGCAGTGGGGCTC
498267	Dusp27	5'-[AminoC6]AAACAACTGCGGGAGCTCAATGAGAAATTGATGGAGGAGAGGGAAGAGGA
498003	Dusp3	5'-[AminoC6]GGGTGTCACTCCCAGGGTGAAGACCTCCGATCCCAGCAGGAGCAGAGCTG
60587	Dusp4	5'-[AminoC6]GAGCGCAGCCCGCGCGCCGAGAGTCTCCGGGAGGACAGCACAGTGTCGCT
171109	Dusp5	5'-[AminoC6]TACTCACAGTATCCTGAGTGCTGTGTGGATGCGAAGCCCATTTCACAAGA
116663	Dusp6	5'-[AminoC6]ACTCCGATGGCAGCCCGCTGTCCAACAGCCAGCCTTCCTTCCCGGTGGAG
300980	Dusp7	5'-[AminoC6]GCTGCCCAGCAGTGCCACTGAGTCGGATGGCAGCCCTGTGCCATCCAGCC
361679	Dusp8	5'-[AminoC6]CCGAAAGGGTGTGCAGCTGCTGCTGAGTGAGCGGGTGAGCAACCTGGAGG
293847	Dusp9	5'-[AminoC6]TTTATTGACATGTTTGTTCAGTAAAGGGAGTAGAGAGGGCTCCTGTCTCC
497778	Dut	5'-[AminoC6]TAGCTGTTCCTTCTGGGTGCTATGGAAGAGTGGCTCCACGTTCTGGCTTG
64526	Ech1	5'-[AminoC6]TGCTGATGCAGCAGCTGAGAGGTACCCGCCAGCTGTACTTCAACGTCAGC
361465	Echdc1	5'-[AminoC6]GAGGTGTATAACTTCCCTGCCGGAGGCGTTGGTATGGGGATGTACAACAC
298381	Echdc2	5'-[AminoC6]GCTGACAGGTCCCAACCAAGGAATCACTGAGATTCTGATGAACAGACCTC
140547	Echs1	5'-[AminoC6]ACATCATCACGGAAAAGAAAGGAAAGAATAGCAGCGTGGGGCTGATCCAG
300447	Ecsit	5'-[AminoC6]CCAGCAATGCACGAAGACCTGTTCAGGCCATCAGGAAACGGGGAGCAGGA
24323	Edn1	5'-[AminoC6]GGACATCATCTGGGTCAACACTCCCGAGCGCGTCGTCCCGTATGGACTAG
24799	Eef1a2	5'-[AminoC6]CAGAGCCAGAGCCCCCACAGTGCCAGCCCGTCCCTCACTCAGGCAGAATG
24329	Egfr	5'-[AminoC6]CCAAAGTTCCGAGAGTTGATTCTCGAATTCTCCAAAATGGCCAGAGACCC
24330	Egr1	5'-[AminoC6]CCGCATGCGCAAGTACCCCAACCGGCCCAGCAAGACACCCCCCCATGAAC
361512	Ehd2	5'-[AminoC6]CTCGAAGATGCTGACTTCGATGGTAAACCCATGGTGCTGGTGGCTGGCCA
192249	Ehd3	5'-[AminoC6]AGGGAGATGTGGAGGGGATCATCCCTGGGAACGCCCTGGTGGTGGATCCG
192204	Ehd4	5'-[AminoC6]CCTCTTCAGAGACATCCAGAGCCTGCCCCAGAAGGCTGCAGTGCGCAAAC
171142	Ehhadh	5'-[AminoC6]TCGAAGACATGAACCTGAAGAAAAAGGTCTTTGCTGAGCTGTCAGCCCTG
192234	Eif2b5	5'-[AminoC6]AGCGTGGATCCCGAGGAGCTGGACAGCCGAGCAGGCTCCCCTCAGCTGGA
296302	Eif2s2	5'-[AminoC6]TATGAAACCTCCACAGGTCGTCCGAGTAGGAACTAAGAAAACTTCTTTTG
314436	Elk1	5'-[AminoC6]GCTCCACTGAAGACTGCCCACCCCAGCCTGAGGTGTCTGTAACCTCGGCC
362871	Elk3	5'-[AminoC6]TCGGATGCTCTGCAGGGAAGGCTTCATGTGCCGTGGGTCAGGGCTGTGAA
304786	Elk4	5'-[AminoC6]ACTAGGAATATAGAAGTGAGATGATCAAGAAGTTCAGGGTTTCATCCTTG
309918	Ell2	5'-[AminoC6]GATGCAGTGCCTGAGAGGAAAAGGTCAACGCCCATGAACCCTGCAAATAC
362100	Endog	5'-[AminoC6]CGCGTACCACCGCGCCACCAATGCGGACTACCGCGGCAGTGGCTTTGACC
29496	Erbb3	5'-[AminoC6]GGGGTCGTGAACAGTTCTCCCGTCCCATCTCTCTGCACCCAATTCCACGG
292673	Ercc1	5'-[AminoC6]CGTGAGCCCGCGGCAGAGGGGCAACCCCGTGTTGAAGTTTGTTCGCAGTG
291703	Ercc3	5'-[AminoC6]GAGGCTACTGAACTCATCACAGAGACGTTTACGAGCAAATCTGCTATTTC
304719	Ercc4	5'-[AminoC6]GCACCTCCATGTTCGTGAATGCTCGTGCCCGAGTTTACCGTGTCCCAGAT
301382	Ercc5	5'-[AminoC6]AGAAACAGTATCTCCTGCTCATGTGGTGAGTGAAGCATCTCAGATAAGTA
306274	Ercc6	5'-[AminoC6]CGAAGTGTGGCCGCATGACAGTTCCAGGCAGTGAGATGGAAAACGCCAAC
310071	Ercc8	5'-[AminoC6]GACTATATCTTGGCAACAGCAAGCGCTGACAGTAGAGTAAAATTATGGGA
24890	Esr1	5'-[AminoC6]TGGTTGGAGATCCTGATGATTGGTCTGGTCTGGCGCTCCATGGAACACCC
25149	Esr2	5'-[AminoC6]AGTGGTATCTCCTCCCAGCAGCAGTCAGTCCGACTGGCCAACCTCCTGAT

293701	Esrra	5'-[AminoC6]AGTGATGGGGTTTTTGAGCTGGATCCCACATAAAGCTGTCTGGAGCTGCT
299210	Esrrb	5'-[AminoC6]GCCATTGACTAAGATTGTCTCGTATCTACTGGTGGCCGAGCCGGACAAGC
360896	Esrrg	5'-[AminoC6]AAGAAATATAAAAGCATGAAGCTAGAGAAGGAAGAATTTGTCACCCTCAA
300726	Etfa	5'-[AminoC6]CAAGTGGAGGTAGTGCCAGTTCAGAAAAGGCACCAAGTTCTTCATCAGCA
292845	Etfb	5'-[AminoC6]CCACAAGGAGCCATTCCTGAAGGAATTGAGCAAGAAATCTATTTCAAAGT
295143	Etfdh	5'-[AminoC6]AAGCATCACCCCAGCATCCGACCAACCCTGGAAGGTGGGAAAAGGATAGC
292710	Ethe1	5'-[AminoC6]CTGATCTCGTCTGCAGTCGCCCACGACTAGACCGGCAGGCCACCTACACA
54319	Ezr	5'-[AminoC6]ACTCTATAAGTCTAGAAACCCCCTTGCCGTGTTCCAGTCCCTTAAAGAGC
79131	Fabp3	5'-[AminoC6]CCTGACTCTCACCCATGGCAATGTGGTGAGCACTCGGACTTACGAGAAGG
79451	Fabp4	5'-[AminoC6]GTCGTCATCCGGTCAGAGAGTACTTTTAAAAACACCGAGATTTCCTTCAA
266610	Fadd	5'-[AminoC6]TGGGGAGAGACTGGAAAAGACTGGCCCGTGAGCTGAAGGTGTCTGAGGCC
500419	Fam82b	5'-[AminoC6]AAGAGAGGCCTTTTGTTCTCAGCCTTGTCTTATTTGGGTTTTGAAACCTA
312641	Fancd2	5'-[AminoC6]CGCTCAGCCCTTGAGGTCCTTGCGAGCCGACTGAAGCAGACGGAAGAGGG
306879	Fars2	5'-[AminoC6]CCAGCTGCATCGCAGTTTGCTGTCCAAGGTGCTCCAGGCCGTGTGCTGGA
246097	Fas	5'-[AminoC6]ACAAAGAGAGGAGAGAGCCTGCCACCTATGACGGGCACCAAAATGAAAGC
83727	Fbn1	5'-[AminoC6]AAGCTTCACCTGTGAATGCCAGCGGGGATTCTCCCTCGATCAGAGTGGTG
29580	Fdft1	5'-[AminoC6]TAGCCCTTGAAGGGCCATGTGGAAAATAACACGTGGTGAGGGAACATGTG
29189	Fdx1	5'-[AminoC6]TGGTGAAACGCTAACGACCAAGGGGAAAGTTGGTGACTCTCTGCTAGATG
79122	Fdxr	5'-[AminoC6]TGAAGCACCACACCCGGGCCCACGTAGACATCTATGAGAAGCAGCTCGTC
361338	Fech	5'-[AminoC6]TCTGTAAGAACAAAAATCTTACAAACAGGAGTGTCACTTTATAATACGAC
81730	Fez1	5'-[AminoC6]GAAGATATCAGGCCCTGCTGCACTGAGGACCCAGAGGAAAAGCCACAAAG
84488	Fgf13	5'-[AminoC6]AATCTGAATTGGCATCTGAGACTCAGAGTAACGGCGTTCTTAAGGTTTTT
79113	Fgr	5'-[AminoC6]AGGGCATGGCCTACATGGAGCGCATGAACTATATCCACCGAGACCTGAGA
24368	Fh1	5'-[AminoC6]TTGGCAGCAAGAAGCCCGTGCACCCCAATGATCACGTTAACAAAAGCCAG
25177	Fhl1	5'-[AminoC6]TTCCCACTGAGATGCCTTTGGGGCTCAGTCGGGACGCACTGTGCGGTCAC
282837	Fibp	5'-[AminoC6]CAGTGGCTCTGCGAGTACGCTCCGGAATCCTGGAGCAGACGGGAGCCACC
288584	Fis1	5'-[AminoC6]CGGGCGCAGGCAGCGCTGGCGGTGAACATCAGCGCGGCACGGGGCCTGCA
287375	Flii	5'-[AminoC6]GAGGAAGCAGCAGCTGAGACAGAGGAGAAGCAGCCAGAGGAGGATTTTCA
314322	Fos	5'-[AminoC6]CGGCAGAAGGGGCAAAGTAGAGCAGCTATCTCCTGAAGAGGAAGAGAAAC
25446	Fosl2	5'-[AminoC6]AAGAGCCTCTGCACACCCCCATCGTGGTGACCTCCACACCTGCCATCACT
79209	Frk	5'-[AminoC6]TATATTCAAGAAGATAAAATGGGCAACTTAACCCCTTAGACCATTATCCT
291470	Ftmt	5'-[AminoC6]AGACTGCAGAACCAGCGAGGAGGCCGGATCTGCCTCCAGGACATCAAGAA
84384	Fxc1	5'-[AminoC6]GCACCACCGAGCTCTGGACGCTGAGGAGGAGGCCTGCCTGCACAGCTGTG
499335	Fxn	5'-[AminoC6]GCCCTGGCAGAATTCTTTGAAGACCTTGCAGACAAGCCCTACACCCTGAA
58971	Fxyd1	5'-[AminoC6]CTGCGGATCGGCGGCCTCACTGCTGGGATCCTCCTCTTCATCTTGGGCAT
29639	Fxyd2	5'-[AminoC6]GGCCTGATCTTCGCGGGCCTTGCCTTCGTCGTGGGACTCCTCATTCTCCT
363735	Gabpa	5'-[AminoC6]ACAATCTCTAGGCCTTGACTTCAGATGACAATTAGGTTCTCCCCATCTCA
499883	Gabpb1	5'-[AminoC6]CCACGCCGCAGTTCATCATTGGACCCGGAGGGGTGGTGAACCTTACAGAT
24379	Gad1	5'-[AminoC6]CTGCAGGACAGATGGTACCCCCACTGCAGTGTCCTAGGGACCCAGGGAAA
24383	Gapdh	5'-[AminoC6]ATGGGAAGCTGGTCATCAACGGGAAACCCATCACCATCTTCCAGGAGCGA
297113	Gars	5'-[AminoC6]TAACGTTGTACAGTTTGAGCCCAACAAGGGAGCCGTGGGCAAGGCGTACA
81660	Gatm	5'-[AminoC6]CTTTCCAGAGCACCCAGGCAGCTACAGCTTCCTCCCAAAATTCCTGTGCA
366959	Gcat	5'-[AminoC6]CGCCTGGTGGCCACGGATGGAGCCTTCTCCATGGATGGTGATGTCGCTCC
364975	Gcdh	5'-[AminoC6]GAGCAGCGACAGAAGTATCTGCCCCGACTGGCCAAGGGTGAACTTCTGGG
171133	Gcsh	5'-[AminoC6]GATGGTATTGGAACAGTGGGAATCAGCAACTTTGCACAGGAAGCTTTGGG
29455	Gdf15	5'-[AminoC6]CTGCAGCCCGACAGAGTGCCGGCCCCGTGCTGTGTCCCCTCCAGCTACAC
29662	Gdi2	5'-[AminoC6]GTGAAATCTGAAGGAGAGATTGCTCGCTGTAAGCAGCTCATCTGTGATCC

27100	Gfer	5'-[AminoC6]GGCCCCGGCGCCGAAAGGTTTGGAGCACGGGAAGCGACCGTGCCGGGCCT
114017	Gfm1	5'-[AminoC6]GGTGCCGGCCAGTATGGGAAAAGTGATAGGGGTGCTGGAGCCCTTGGCCC
25235	Ghr	5'-[AminoC6]AGACTACACCACGGTTCACACCGTGAAGTCCCCAAGGGGCCTTATACTCA
29446	Ghrh	5'-[AminoC6]GGTGCGGCGGCATGCAGACGCCATCTTCACCAGCAGCTACCGGAGAATCC
59301	Ghrl	5'-[AminoC6]CTACTCCTCAGCATGCTCTGGATGGACATGGCCATGGCAGGTTCCAGCTT
24392	Gja1	5'-[AminoC6]AACATTTTTAAAACAGTCATAACGTCATTTTTAGTTTAGTTTTTTTTTTT
84403	Gjb6	5'-[AminoC6]GGTGGCCATGCACGTGGCCTACTACAGACATGAAACTGCCCGAAAGTTTA
79223	Gk	5'-[AminoC6]AAACAAATAGTGCATTAATGCTTCTTCACTGGTATTCTTGTTTTTTTGAA
289481	Gk2	5'-[AminoC6]ATGACATCCGGGGCTTTGGAAGGCGTGCCAATATCCGGATGTTTGGGGGA
309312	Gldc	5'-[AminoC6]TGGAGCGCAGGGGGAGTATGCTGGCCTGGCCACCATCCGAGCGTACTTAG
64045	Glrx1	5'-[AminoC6]TGTTCATCAAACCCACCTGCCCCTATTGCAGAAAGACTCAAGAAATCCTC
114022	Glrx2	5'-[AminoC6]CACTACTCCTGTGAACCAGATCCAAGAAACAATTTCTAATAATTGTGTGG
58815	Glrx3	5'-[AminoC6]TGACTCACGCTGCCCCCTGCATGCTCTTCATGAAGGGAACACCTCAGGAA
192268	Gls2	5'-[AminoC6]ACAAGCTGGGGAACAGCCACAGGGGCATCAGCTTCTGCCAGAAGTTGGTG
24399	Glud1	5'-[AminoC6]ATCTGATGGGAGTATATGGAATCCAGATGGTATTGACCCAAAAGAACTGG
293779	Glyat	5'-[AminoC6]AAACACTCAGAAAACATCCTCTATGTGGTATCAGAGACAGTTAGGAAACT
81662	Gna11	5'-[AminoC6]CATCTTCACCGCCATGCAGGCTGTGGTGCGCGCTATGGACACGCTCAAGA
81663	Gna12	5'-[AminoC6]GGACGTCCAGCGCTACCTGGTCCAGTGCTTTGACAGGAAGCGCAGGAACC
303634	Gna13	5'-[AminoC6]CCGAGAGAAGCTTCATATTCCCTGGGGAGATAACAAAAACCAGGTCCACG
309242	Gna14	5'-[AminoC6]TTTGGAAGAGAAAATCATGTACTCTCATCTAATCAGCTACTTCCCAGAGT
89788	Gna15	5'-[AminoC6]GCGCATCATTCACGGCGCCGGCTACTCTGAGGAGGACCGCAGAGCCTTCC
25686	Gnai1	5'-[AminoC6]CCGGATGCATGAAAGCATGAAGCTGTTCGATAGCATATGTAACAACAAGT
81664	Gnai2	5'-[AminoC6]CATGCATGAGAGCATGAAGCTGTTTGATAGCATCTGCAATAATAAGTGGT
25643	Gnai3	5'-[AminoC6]TTGCTAGGAGACGTCTAAGAGTATAACAACTGTGCATGCCTTTCCTTTGT
14680	Gnal	5'-[AminoC6]TACCCAGTGTCTGCCCCTTCTGGTCTGCATTGGCCCAGGGCTTAAAGCAG
50664	Gnao1	5'-[AminoC6]AAGATCATCCATGAAGATGGCTTCTCTGGAGAAGACGTAAAGCAGTACAA
81666	Gnaq	5'-[AminoC6]GACAAAATCATCTACTCGCACTTCACGTGTGCCACAGACACGGAGAACAT
24896	Gnas	5'-[AminoC6]TCCAGGTGGACAAAGTCAACTTCCACATGTTCGATGTGGGCGGCCAGCGC
363143	Gnat1	5'-[AminoC6]GGACGACGAAGTGAACCGAATGCACGAGAGCCTGCACCTGTTCAACAGCA
365901	Gnat2	5'-[AminoC6]AGTGCTGAGGACAAAGAACTTGCCAAGAGGTCCAGGGAGCTGGAAAAGAA
286924	Gnat3	5'-[AminoC6]TAAGGAAATCTATTCTCACATGACCTGCGCTACTGACACACAAAACGTCA
25740	Gnaz	5'-[AminoC6]GGCGTGACGGCCATCATCTTCTGTGTGGAGCTCAGTGGCTATGACCTGAA
24400	Gnb1	5'-[AminoC6]CTGGCAAAGATTTATGCCATGCACTGGGGCACAGACTCAAGGCTCCTTGT
81667	Gnb2	5'-[AminoC6]GGCTGCTGGTCAGCGCCTCCCAGGACGGAAAGCTCATCATTTGGGACAGC
83427	Gnb2l1	5'-[AminoC6]GTTATGGAATACTCTGGGTGTCTGCAAGTACACTGTCCAGGATGAGAGTC
60449	Gnb3	5'-[AminoC6]GTCAAGGTCAGCCGGGAACTCTCGGCTCACACAGGTTATCTCTCCTGTTG
294962	Gnb4	5'-[AminoC6]GAGGGGAACGTGAGAGTGAGCCGGGAGCTGCCAGGGCACACAGGCTACTT
83579	Gnb5	5'-[AminoC6]CTTCACTACTAACAAGGAGCACGCGGTCACCATGCCTTGCACCTGGGTGA
114119	Gng10	5'-[AminoC6]AGGACGCCCTGCTGCTTGGTGTTCCGGCTGGAAGCAACCCCTTCCGGGAG
64199	Gng11	5'-[AminoC6]ATCCCTGCAGCAGTGTCCTTGGGAAATGGGACAAGTATGTGAATGGGAAA
114120	Gng12	5'-[AminoC6]AGACCTGATGTCATACTGTGAGGAGCATGCCCGGAGCGACCCTCTGCTGA
685451	Gng13	5'-[AminoC6]GTGCCCCAGATGAAGAAGGAGGTGGAGAGCCTCAAGTACCAACTGGCCTT
114117	Gng3	5'-[AminoC6]AGGCAGCAGCAGACCTGATGACTTACTGTGATGCCCACGCTTGTGAGGAT
79218	Gng5	5'-[AminoC6]TAGCTCCGTGAGAACGAGGCAGAAAGGGATACAGGTGCCTGACACTGCCA
58979	Gng7	5'-[AminoC6]AGTTACTCCCTGCAGCTCTGGTGGAAATCTGCTTCCCAAACCCTGTGCCA
245986	Gng8	5'-[AminoC6]GAACATCGATCGCATGAAGGTGTCGCAGGCGGCAGCGGAGCTATTGGCTT
680149	Gngt1	5'-[AminoC6]TTGTTCTTGAGGAGTTGGTTATCACAGGCAATTTGAAAGAAAACCCAAAA

690825	Gngt2	5'-[AminoC6]AGGGCCGAGTAGGAAGTCCTGTGACCAGTACTTTGTGCCTAATGAAGATT
24401	Got1	5'-[AminoC6]ATCGCCGCCGTCATGAAGCGCCGTTTTCTGTTCCCCTTCTTTGACTCAGC
25721	Got2	5'-[AminoC6]CACAGCTGAAGATCCTGATCCGCCCCTTGTATTCCAACCCGCCTCTCAAT
29653	Gpam	5'-[AminoC6]CTGGTCATCCCTGTGGGCATCTCGTATGATCGGATAATCGAAGGTCACTA
60666	Gpd1	5'-[AminoC6]TGAAGTGATTGGGGAGAGCCTTGGCATCCCTATGAGCGTGCTGATGGGGG
363159	Gpd1l	5'-[AminoC6]AAGGGTATAGATGAGGGCCCGGACGGGCTGAAGCTCATCTCCGACATCAT
25062	Gpd2	5'-[AminoC6]CTTCGGAAGACGACATTAACTTCATCTTAAATGAAGTGCGGAACTACCTG
292804	Gpi	5'-[AminoC6]TGGAGTGGTGACTGATGGTGTGAAGCACTCCATGAACCCCTTCTGTGAGA
171407	Gprasp1	5'-[AminoC6]CTGAAAGCATAGTGGGACCCTGGTTCTGGGAAGGAGATGAAGCTAGCTTT
81670	Gpt	5'-[AminoC6]GAAGGACTCTTCTTGATGGCTGATGAGGTATACCAGGACAACGTGTATGC
24404	GPX1	5'-[AminoC6]GAGATTCTGAATTCCCTCAAGTATGTCCGACCCGGTGGTGGGTTCGAGCC
29328	GPX4	5'-[AminoC6]CGATACGCCGAGTGTGGTTTACGAATCCTGGCCTTCCCTTGCAACCAGTT
298376	Gpx7	5'-[AminoC6]CCTACAGTGTCTCTTTCCCCATGTTTAGCAAGATCGCAGTCACTGGCACT
498416	Grb10	5'-[AminoC6]TTTGTATTGATCACTTTTTTGCACTCCTTCTTCGTTGTCAATGTTGTACT
58844	Grb14	5'-[AminoC6]TCAGCACTAGTAATGTTTACATGTCACTGGCAGGCAAAAAAAAGCATGGA
81504	Grb2	5'-[AminoC6]TTTCATAATGCCAAAACTTAACCTATTGAATGAATTACAGTTTTTATTAC
680021	Grhpr	5'-[AminoC6]GCAGCAGGACTGGATGTGACCACCCCAGAACCACTGCCTCCAAGCCACCC
50592	Gria1	5'-[AminoC6]TCGTCACTACTATCCTCGAAGATCCTTACGTGATGCTTAAAAAGAATGCC
29627	Gria2	5'-[AminoC6]AGTATTTAAGGTTGTGTAGGAGCAGTAATCAATATAGATAAAGTCAGAAA
29628	Gria3	5'-[AminoC6]TGTCGGAGGTCTGGGCCTGGCCATGATGGTGGCTTTGATAGAATTCTGTT
29629	Gria4	5'-[AminoC6]AGTGAGGCAGGCGTCTTAGACAAGCTGAAAAACAAATGGTGGTACGATAA
79219	Grid1	5'-[AminoC6]CGTGGTTGAGTATGCAGCCCTGACAGATGACGACTGCTCAGTGACTGTCA
79220	Grid2	5'-[AminoC6]GGCACGTCCATATGAGCAGCAGACAGCTCGGCCTATATCCTAGGACTGCC
288484	Grid2ip	5'-[AminoC6]TCCTTTGTCAGAAAAGATGAATGAGACATAGTAGTTGTAGCGTGAAGGAT
29559	Grik1	5'-[AminoC6]GAGCTGACCTGGCAGTGGCCCCTCTCACCATCACATACGTACGGGAGAAA
54257	Grik2	5'-[AminoC6]TCGTGAACTAATCGATCATAAAGCTGACCTTGCAGTTGCTCCACTGGCTA
298521	Grik3	5'-[AminoC6]CCTGTCCCCAGACATCTGGATGTACGTGCTACTCGCCTACCTGGGTGTCA
24406	Grik4	5'-[AminoC6]TTCCAAAATTCCCGCTACCAGACCTACCAGCGCATGTGGAATTACATGTA
24407	Grik5	5'-[AminoC6]CTACCTGCGCATGGTAGAGTATGACGGGCTGACTGGGCGGGTTGAGTTCA
24408	Grin1	5'-[AminoC6]GTGGAACGGAATGATGGGCGAGCTACTCAGTGGCCAAGCGGACATGATTG
24409	Grin2a	5'-[AminoC6]CACAGGCTATGGAATTGCGCTGCAGAAGGGCTCACCCTGGAAGAGGCAGA
24410	Grin2b	5'-[AminoC6]GCGAGGTAGAGAGAACATTTGGTAACCTGCAGCTGAAGGACAGCAATGTG
24411	Grin2c	5'-[AminoC6]GGGTCTTCTACATGCTGTTGGTGGCCATGGGACTGGCCCTTCTGGTCTTT
24412	Grin2d	5'-[AminoC6]CACGGAAAAGAACATCCGGAGCAACTACCCTGACATGCACAGCTACATGG
191573	Grin3a	5'-[AminoC6]GCACAGACTGCTGTTACCACGCATCAAAAACAAATCCAAGCTGCAGTACT
170796	Grin3b	5'-[AminoC6]CGCCGCGCGGCCGCAACCGTGGCACTGTCTTCTCTTACTCCTCCGCGCTC
266668	Grina	5'-[AminoC6]TTGTCGGGGAGGTGAAGGGCTTTGTCCGGGCCAATGTCTGGACCTACTAT
192147	Grinl1a	5'-[AminoC6]TGTTGAGCTTACATTGTCTCATTGAACTTCCTAACAAGTATCAAGACAGT
84016	Grip1	5'-[AminoC6]CCCAACTCCCGTGGAGCTTCACAAGGTGACCTTATACAAAGACTCTGGCA
171571	Grip2	5'-[AminoC6]TTGGTCTTTCAATTATTTCACGGGTGATTCTGAACCTCAGAGCAGAACTG
306400	Grlf1	5'-[AminoC6]AGTGTCTCCCTTCCTGGGGGTCTGTGTCGGGTGCTGTGGCCTGGAATCAA
24414	Grm1	5'-[AminoC6]GTAGCAAATACTATCAACCAGTCGGACTTCTAAGATTCAGTTTCAGTTTC
24415	Grm2	5'-[AminoC6]GTGCCCGGAGAACTTCAACGAAGCCAAGTTCATCGGCTTCACCATGTACA
24416	Grm3	5'-[AminoC6]TGCATTGCTCGCATCTTCGATGGGGTCAAGAACGGCGCTCAGAGGCCGAA
24417	Grm4	5'-[AminoC6]GTGCCCAAGCGCAAGCGCAGTCTCAAAGCCGTGGTCACCGCCGCCACCAT
24418	Grm5	5'-[AminoC6]TAAGCTCCAACGGAAAATCTGTGACTTGGGCCCAGAATGAGAAGAGTACC
24419	Grm6	5'-[AminoC6]ACATCATTCTGCCCCTCCGACCCACTGTAAGAAATACTGCTTCCAGGAAT

81672	Grm7	5'-[AminoC6]TGCTGGACCTGTGAGCCCTGTGATGGATACCAGTATCAGTTTGATGAGAT
60590	Grm8	5'-[AminoC6]GGGCCGTGAATTTTAATGGCAGTGCTGGTACACCTGTCACTTTTAATGAA
171101	Grp	5'-[AminoC6]AAGGGGAAGGAAGGAACTGCCAGCTGAAGGGACCATGACAAGGGCGGCTT
79563	Grpel1	5'-[AminoC6]GGGCTCGTGATGACTGAAGTCCAGATTCAGAAGGTGTTCACAAAACACGG
688777	Grpel2	5'-[AminoC6]TGAGTTTTTGGGAAAGGGAAATGGTGGGGATTGGTTTTGACATTTAGGTA
84027	Gsk3b	5'-[AminoC6]GACACTAAAGTCATTGGAAATGGGTCATTTGGTGTGGTATATCAAGCCAA
296654	Gsn	5'-[AminoC6]TGGGAAAATCTTTGTTTGGAAAGGCAAGCAGGCCAACATGGATGAGCGGA
116686	Gsr	5'-[AminoC6]AGAGTAAATTCAATTGGCATGTCATCAAGGAGAAGCGGGATGCTTACGTG
25458	GSS	5'-[AminoC6]GGATCGCCAAAGCCTGGGAGCTCTATGGCTCAGCCAATGCCGTGGTGCTA
297029	Gstk1	5'-[AminoC6]CCCCCTACTCCTGGCTGGGCTTTGAGGTCCTATGCAGATACCAACACCTC
681913	Gstz1	5'-[AminoC6]TCCAAGCAGGCCCAGAAATGAATGAATTGTAGTAGAGGATTTGAACTTTA
290633	Gtpbp3	5'-[AminoC6]GCCTCCGACCTGGCTTCCTCCTCTAGCTGCAGCTTCCTGGACACTGTGGT
301233	Guca1a	5'-[AminoC6]CTCTCGTGAGCCTGGACCATGGGCAACGTCGTGGAGGGCAAGTCGGTGGA
316218	Guca1b	5'-[AminoC6]AATGAGGAGGCCACCCAGTATGTGGAGGGCATGTTCCGAGCCTTCGACAA
25656	Guca2a	5'-[AminoC6]CAGTGAAACAACTTAAGCACCTCCGGGAAGTACAGGAGCCCACACTGATG
64055	Guca2b	5'-[AminoC6]TGCTGCTGGTGCTGCAGAGTGCCCAGGGTGTCTACATCAAGTACCATGGC
66012	Gucy1a2	5'-[AminoC6]TAGAAAAAACTCACCAGGCCCTGGAAGAAGAGAAAAAGAAGACAGTGGAT
497757	Gucy1a3	5'-[AminoC6]TCAAGAAGAGGTTGGGAAAGCTGAAGGCAACCTTGGAGCATGCCCACCAA
25206	Gucy1b2	5'-[AminoC6]AGAGCAAGATGCATCTTTCTGATATCGCTCCGCACGACACGACCAGGGAT
25202	Gucy1b3	5'-[AminoC6]TGAATGGCAGCCTTTGTGGGGCAAAAAGAACTGTCAGCTGGGCTCTGGTG
25711	Gucy2c	5'-[AminoC6]GTGGACAGTCGCATGGTGGTGAAGATCACTGATTTTGGGTGCAATTCCAT
113911	Gucy2d	5'-[AminoC6]TGACCAAGTCACCATCTATTTCAGTGACATCGTGGGCTTTACCACCATCT
79222	Gucy2e	5'-[AminoC6]CTTCGGCCTTCCATGGACCTCACCTTTGACCTGTTCAAGGGCATCAACAA
116556	Gucy2f	5'-[AminoC6]ATGATGTCTATAAGGTAGAGACCATTGGAGATGCCTATATGGTGGCCTCA
245708	Gucy2g	5'-[AminoC6]CGTGTATGACATAGTCAACGGCATGCTGTTCCTCCACGGGAGCCCACTGA
171528	Gzmb	5'-[AminoC6]TTGGGGGCCCACAACATCAAAGAACAGGAGAAGATGCAACAAATCATCCC
266704	Gzmf	5'-[AminoC6]TGGCACATGTGAAATTTGTGAAAGTTGATGGGAATAGAAGTGTCTGCGGA
113965	Hadh	5'-[AminoC6]GAAGAGAGCCTTAAGAGAATGGCAAAGAAGAAGTTCACAGAAAACCCTAA
171155	Hadhb	5'-[AminoC6]ATCTCAATAAAGCCAAGACTCTGGCCCAGCGCCTGTCCTTACTCACTAAA
24439	Hagh	5'-[AminoC6]AAAAAGCACCGTGTGAAGCTGACCACAGTGCTCACCACTCACCACCACTG
291202	Hax1	5'-[AminoC6]AGACACTTCGTGACTCAATGCTTAAGTACCCAGATAGTCACCAACCCAGG
502359	Hbe2	5'-[AminoC6]CAGAGATTCTTTGACAAGTTTGGAAACCTCTCTTCTGCTCCGGCCATCAT
317444	Hccs	5'-[AminoC6]CAGTTCACTATCCTGGATGTGCGTCCGGCCTTTGACTCATTCTCAGCAGT
288077	Hcls1	5'-[AminoC6]ACTGCTCGAGGCAGGGGTGGGGCTGAGGGGTGGGGTTGAGGGGTGGGGTT
25723	Hcrt	5'-[AminoC6]ACCATCTCTCCGGATTGCCTCTCCCTGAGCTCCAGACACCATGAACCTTC
84578	Hdac3	5'-[AminoC6]TCTGCTGGTAGAAGAGGCCATTAGTGAGGAACTTCCCTATAGTGAATACT
24443	Hdc	5'-[AminoC6]TCTCACAGAAAGTGTGTTAAAGGAAATAGCCAAAACTGGCCAGGTCTTCC
63938	Hibadh	5'-[AminoC6]TTTAAAGAGGCTGGTGAACAGGTAGCGTCCTCCCCAGCAGATGTAGCGGA
690660	Hint1	5'-[AminoC6]CCAGATTTCTGTGGCAGATGATGATGATGAAAGTCTTCTAGGACATTTAA
313491	Hint2	5'-[AminoC6]TTCTCCCGGATTTTGGACCGGAGCCTCCCAGCTGACATTCTATATGAAGA
306969	Hist1h2bf	5'-[AminoC6]AGTGCATCCGGACACGGGCATCTCTTCCAAGGCCATGGGCATAATGAACT
25059	HK2	5'-[AminoC6]CATCTGGCTGCGAGGGTGAGGATGTGGTCACCTTGCTGAAGGAAGCGATT
79238	Hmgcl	5'-[AminoC6]CATCTGTCAAGCCCTGAACAGAAAAACCAGTTCCAAAGTGGCACAGGCCA
367112	Hmgcll1	5'-[AminoC6]AAGCACGACTTGAATGAGTTTATGGTTTGAGAAAGAGAAGAGCCATTCCC
24450	Hmgcs2	5'-[AminoC6]CGTGCAATATATGATCTTCCACACACCCTTTTGCAAGATGGTCCAGAAAT
29578	Hnrnpa1	5'-[AminoC6]AGCAGTAGCTATGGCAGTGGCAGGAGGTTCTAATTACAGCCAGGAAACAA
290046	Hnrnpc	5'-[AminoC6]ATGTTACCAACAAGACAGATCCTCGATCCATGAATTCCCGTGTATTCATT

117271	Hrk	5'-[AminoC6]TTGTTTTCTGAGACACGGAGCCAGGCTGGCCTTGAACTCTCTATACAGCA
65151	Hrsp12	5'-[AminoC6]GATTAGCATGTCGTCAATAATCAGAAAAGTGATCAGCACTTCAAAAGCCC
293451	Hs3st2	5'-[AminoC6]GAGACACCAAGCTGATAGTGGTGGTGCGGAACCCGGTGACCCGAGCCATC
25116	Hsd11b1	5'-[AminoC6]CCTCCTCCCCGTCCTGGTGCTCTGCCTGGGTTACTACTATTCTACAAATG
63864	Hsd17b10	5'-[AminoC6]TAACTCAGAGGGTGAGACCGAAGCCAAGAAGTTAGGAGGAAACTGCATAT
286964	Hsd17b6	5'-[AminoC6]ATTCCCTCATAATGTGGTTTTACCTGGTGACTCTTGTGGGCCTTTACTAC
360348	Hsd3b1	5'-[AminoC6]TGCTCAGATCACCTCCTCTCTCTTCTTGGGCAGAGCCAGTGTGGCCTCCA
29632	Hsd3b6	5'-[AminoC6]CCCAGTGCCTGAGGAGAGCGTGCCAGGGCATCTCTGTTGTCATCCACACT
301252	Hsp90ab1	5'-[AminoC6]TGTCAGAGTATGTGTCTCGCATGAAGGAGACACAGAAGTCCATCTACTAT
29734	Hspa13	5'-[AminoC6]GGAGGAATGTTTCTAACACGCGCAATGTCTGGAAACAACAAACTTGGAGG
24472	Hspa1a	5'-[AminoC6]GAGGGCCAAGAGGACGCTGTCGTCCAGCACCCAGGCCAGCCTGGAGATCG
24963	Hspa1l	5'-[AminoC6]GGAGCTGCAGTCCAGGCAGCTATTTTAATGGGCGACAAATCTGAAAAAGT
60460	Hspa2	5'-[AminoC6]GTGACTCCCTTGTCGCTTGGCATTGAAACAGCTGGCGGTGTCATGACCCC
25617	HSPA5	5'-[AminoC6]GTATTGAAACTGTGGGAGGTGTCATGACAAAACTGATTCCGAGGAACACT
24468	Hspa8	5'-[AminoC6]TCCTCTTTCCCTTGGGATTGAAACTGCTGGTGGAGTCATGACTGTCCTCA
63868	Hspd1	5'-[AminoC6]ACACTGGTTTTGAACAGGCTAAAAGTTGGTCTTCAGGTTGTAGCAGTCAA
24473	Htr1a	5'-[AminoC6]TCTATATCCCGCTGTTGCTCATGCTGGTTCTCTACGGGCGCATCTTCAGA
25075	Htr1b	5'-[AminoC6]GCCCTGGAAAGTCCTGCTGGTTGCTTTGTTAGCGCTCATCACCTTGGCCA
25323	Htr1d	5'-[AminoC6]CTGATAGCATCTTAGAACGCAAGAGGATCTCTGCAGCCCGAGAAAGGAAA
60448	Htr1f	5'-[AminoC6]ACTCGGAAGCTGCACCACCCAGCCAACTATTTAATCTGTTCCTTGGCAGT
29595	Htr2a	5'-[AminoC6]ATTGCTGGAAATATACTGGTCATCATGGCAGTGTCCCTAGAAAAAAAGCT
29581	Htr2b	5'-[AminoC6]ACAAGGATAAAATTCTACCTAACTCAACTGATGAGACACTGATGAGAAGA
25187	Htr2c	5'-[AminoC6]GTGTTCTTAACACACAGCATAGATAAATTGAACAGTCTGCCACGGGGGCA
79246	Htr3a	5'-[AminoC6]TCGATGTGCAGAACTGCTCTCTGACCTTCACCAGCTGGCTGCATACCATC
58963	Htr3b	5'-[AminoC6]CTCCGCATGCAGTTTGCAGACATACGCTTTCCCCTTTGATATCCAGAACT
25324	Htr4	5'-[AminoC6]TGCTGGCCTATTACCGTATCTATGTCACTGCTAAGGAGCATGCCCAGCAG
25689	Htr5a	5'-[AminoC6]GACACGTGGAGGGAACAGAAGGAGCAAAGGGCAGCCCTCATGGTGGGCAT
79247	Htr5b	5'-[AminoC6]GCCGTCCTCATTTCACCAGAGACCTGGGGGCTTCTCCCCGCCGCCCACAC
64354	Htr6	5'-[AminoC6]CCCTGGCCAGTGCCGCCTATTGGCCAGCCTGCCTTTTGTCCTCGTGGCGT
65032	Htr7	5'-[AminoC6]TCGCAGGCAACTGCCTGGTGGTGATCTCGGTGTGCTTCGTCAAGAAGCTC
297376	Htra2	5'-[AminoC6]GTGAGGCTACCTAGCGGAGACACTTATGAGGCCATGGTCACAGCTGTGGA
361596	Idh2	5'-[AminoC6]TCTTGAACAAGGATCTGATGACCCAAAATGGAATAAGCTATGTCCTCAAT
114096	Idh3a	5'-[AminoC6]GTTCACGGGACAGCCCCGGACATTGCAGGCAAGGACATGGCCAACCCCAC
94173	Idh3b	5'-[AminoC6]GCCACCAAAAAAGGGCGGAGCAAGGTCACAGCTGTCCATAAAGCCAACAT
25179	IDH3G	5'-[AminoC6]CATGGCCATCCGCCGGAACCGTGTGGCTCTAAAGGGCAACATCGAAACAA
25712	Ifng	5'-[AminoC6]CACACTCATTGAAAGCCTAGAAAGTCTGAAGAACTATTTTAACTCAAGTA
25718	Igf1r	5'-[AminoC6]GAACTGCATGGTAGCTGAAGATTTCACAGTCAAAATTGGAGATTTTGGTA
24483	IGF2	5'-[AminoC6]GGGAGCAAGTGGCTGCCTTCTGAGCACTTGGGGGAGGTCCTCCCCGTGCC
25663	Il1r1	5'-[AminoC6]CTTGACGATGGAAACTTCTTTGGATTCAAGAATAAACTGATGGTGATGAA
24498	Il6	5'-[AminoC6]CTGAAACCCTAGTTCATATCTTCAAACAAGAGATAAAAGACTCATATAAA
691145	Immp1l	5'-[AminoC6]ATGGAACCTACAATTCAAAATTCAGATATTGTCTTTGCAGAAAATCTTAG
312444	Immt	5'-[AminoC6]GACAATTCTGAGATTGCAGGTGAGAAGAAGTCAGCCCAGTGGCGAACAGT
362329	Impdh1	5'-[AminoC6]AGTGAAGATCGCACAGGGTGTCTCGGGCTCCATCCAGGATAAAGGCTCCA
361057	Ints6	5'-[AminoC6]CATGTGTCATTAAAGCAGAGTTGGGTACAACAGCTGGTATAACAGGTGGT
314870	Irak3	5'-[AminoC6]AAAGGCAGTGAATTCACCAGAAGATAAAGCACATATCGCTAAAGGCACCT
500709	Itpk1	5'-[AminoC6]ACAGTACTGCAAGGCCAGAGCACAGGAGGAGCTGCCACAGAGGAAGTGGC
81677	Itpka	5'-[AminoC6]GATGGGTGTCAGAACTTACCTGGAAGAAGAGCTGACCAAAGCCCGAGAAC

25262	Itpr1	5'-[AminoC6]CAAATGAGACGGAGGGACTGTACTCAACCCTTTTTAAATTATTGTCAGCG
81678	Itpr2	5'-[AminoC6]TCAAACACACCCCATGAGAACCATCACATGCCACCGCACTGACACCATGG
25679	Itpr3	5'-[AminoC6]GCGACATCCTCCGCAAGCCCTCCAAAGACGAGTCGCTCTTCCCAGCCAGG
499370	Itprip	5'-[AminoC6]TACCGAGTTGGAGAGAGTGCAAGCACTGGTTTGAATGCAAGCCTTTCCAT
84598	Jak1	5'-[AminoC6]AGAAAAGCAGCCAATAACAGAGGTGGATCCCACTCATTTTGAAAAGCGTT
24516	Jun	5'-[AminoC6]TCATTCAGTATTAAGGGGGGTGGGTGGGGGCTTACAAACTGCAATAGAGA
24518	Jund	5'-[AminoC6]GGAAGAAGAAAAAAAAAATCCTCCCCCCTTATCCCCCGCGCTCTCTCCTC
313385	Kank4	5'-[AminoC6]GAGGACACCAGTGGGGAAGACAGCTCCCCTGAGGACTTGTCTGACAGTGA
292028	Kars	5'-[AminoC6]AGGCAGTTACAAGATCACCTATCACCCAGATGGGCCAGAAGGCCAAGCCT
246325	Kcnh8	5'-[AminoC6]AAATCAGGCCAGAGCCCAGGATTTCCCCTTCCCTTGGAGAATCAGAGATT
83731	Kcnma1	5'-[AminoC6]GATGCAGTTTGACCACAACGCTGGCCAATCCCGGGCCAGTCTGTCTCATT
65206	Kcnn4	5'-[AminoC6]CGTCGTACCTGGCACCCTATGGGGCAAGATTGTCTGCTTGTGCACCGGAG
117548	Kif1b	5'-[AminoC6]TCCACATGCCCCTCCCTGGTGGACTCCAGGAGCAGCTCTATGGATCAGAA
117550	Kif5b	5'-[AminoC6]TAAAAGACCTTGCAGAAATAGGAATTGCTGTGGGAAATAATGATGTAAAG
171041	Klc1	5'-[AminoC6]AGGAAGCTGCCCTGAGGTCACGTAAGCAGGGTCTTGACAATGTTCACAAA
305078	Lamb3	5'-[AminoC6]TGCTCAGGAGGGCTTTGAGAGACTTAAGCAAAGGTATACAGAGTTGAAAG
363172	Lars2	5'-[AminoC6]ACAGGTCCTACTCCTGTTTGTGCAAAAACGAAAGAGAGGTTAGAGGTGAC
170496	Lcn2	5'-[AminoC6]GTGGCTGACTGGGATGTGCAGTGGCCTGATGGTTCAGGTCCCACCTGTCT
498587	Ldb3	5'-[AminoC6]TCCCCATTGCCAGTGATCCCCCACCAAAAGGTGGTAGCCAATTCTCCAGC
24533	Ldha	5'-[AminoC6]CGGCTTCCCCAAAAACAGAGTTATTGGAAGTGGTTGCAATCTGGATTCGG
24534	Ldhb	5'-[AminoC6]GAAGACAAGCTCAAAGGAGAAATGATGGATCTGCAGCACGGGAGCTTATT
680066	Lemd3	5'-[AminoC6]AGAAACGTTAGCTCCTGTTCCATGTGCAGTGTAAAGCAGCATGCATTGCT
25608	Lep	5'-[AminoC6]TGTCCTATGTTCAAGCTGTGCCTATCCACAAAGTCCAGGATGACACCAAA
305457	Letm1	5'-[AminoC6]GACAGGGGAGAGACCCAGCAATGAAGAAATCATGCGTTTTTCCAAATTAT
83781	Lgals3	5'-[AminoC6]TCCACTTTAACCCCCGCTTCAATGAGAACAACAGAAGAGTCATCGTGTGC
305348	Lias	5'-[AminoC6]GACAATACGGCCAGAGCAATCGCAGAGTGGGGTCTGGACTATGTTGTGCT
316342	Lipt1	5'-[AminoC6]CTCATTAAACTTCAGACAAGAAACTATGTCCTTTTCCTTAAGGCTAACTC
170946	Lkap	5'-[AminoC6]GGGAGTTTTATTTTTAAACCAAGAAGAAAAAACAGAAATTCCAATACCAG
60374	Lmna	5'-[AminoC6]AACGCCACTGGAGAAGAAGTGGCCATGCGCAAGCTGGTGCGCTCACTGAC
299625	Lmnb2	5'-[AminoC6]GGCCAGACGGTCACGGTGTGGGCAGCTGGCGCAGGGGCTACACACAGCCC
681754	LOC681754	5'-[AminoC6]TGCTCCGGGACAGTCTTTAGGAGTCAGGATGGCCGAAGACATCAAGACTA
687842	LOC687842	5'-[AminoC6]ACGAAATCCAGAGATATATTAACCTCATCCCCAACAATGTGCCCCATGCA
170916	Lonp1	5'-[AminoC6]GGGCCATGCCTGGGAAGATTATCCAGTGTCTGAAGAAAACCAAGACAGAG
502020	Lrch1	5'-[AminoC6]AATCCACATATTTAAATACCTGAACATACAAGCTTGTAAGATTGCTCCAG
360779	Lrch4	5'-[AminoC6]CCGGGACGTCGTTATGATGGTGGCCTGGACTCAGGCTTCCATAGTGTTGA
313867	Lrpprc	5'-[AminoC6]TTGTGGTTTGGAGATGACAGGTCTTCCCTGAGTTCATCCTCACCCTCAGC
679668	Lrrtm1	5'-[AminoC6]AAGTGTTTCCCAGCCAGCCTCAGGCAGCTCAGACAGTGCTTTGTCACGCA
292734	Ltbp4	5'-[AminoC6]GTCAGCAGGGGCTTCACACCCATGACGGTTCCAGACCTTCTGAGAGGAGC
289357	Lyplal1	5'-[AminoC6]GTGAAGTGTAAACATCTCCCTAAGGGTGGAGAGCTGGATGACCCGCTGTC
85419	Lyst	5'-[AminoC6]GAACCATGGAGGGCAGCGGCTCACACAGAGGTCCTCATGCGCACCAGCTG
25211	Lyz2	5'-[AminoC6]GGATACCCTGCAGCGCTCTGCTGCAGGATGACATCACTCAAGCCATACAA
246233	Macrod1	5'-[AminoC6]AAAATCTCCCTGTTCCGTGGGGACATCACCAAGCTGGAGGTGGATGCCAT
29253	Maoa	5'-[AminoC6]AGAGAGGAACCTGCCTTCCGTGCCTGGTCTGCTCAAGATCACTGGTGTTT
25750	Maob	5'-[AminoC6]CCCTTGCTGAAGAGTGGGACTACATGACAATGAAAGAGTTGCTAGATAAG
170851	Map2k1	5'-[AminoC6]TGAACTACAGTGAAACCCTGGTGACCTGGGTGGTCTTCTTACTGATGTTT
362045	Map2k1ip1	5'-[AminoC6]GTGCCTGTTATTAAAGTGGCTAACGACAGTGCTCCAGAACATGCCCTGAG
58960	Map2k2	5'-[AminoC6]TGAGGGCCCGTCCCCCACCAGCGAGGGCGCCTCCGAGGCACACCTGGTGG

303200	Map2k3	5'-[AminoC6]TCTACCGGAAGGTGCTAGAGAAGAACATGAAAATTCCGGAAGACATTCTG
287398	Map2k4	5'-[AminoC6]GAGAGACTGAGAACCCACAGCATTGAGTCATCAGGAAAACTGAAGATCTC
29568	Map2k5	5'-[AminoC6]AAATGGCCAGCTAATAGAGCCGCTGCAGATCTTTCCAAGAGCCTGCAAGC
114495	Map2k6	5'-[AminoC6]TGCTCATTAACACGCTGGGCCAAGTGAAGATGTGTGACTTTGGAATCAGC
363855	Map2k7	5'-[AminoC6]TGACCAAAAGCTGCAGGAGATCATGAAGCAGACAGGGTACCTGACTATCG
116667	Map3k1	5'-[AminoC6]AAATGGAGAGGATATCATCATCATCCAGCAGGATACACCAGAAACCCTAC
308463	Map3k10	5'-[AminoC6]ACGTGAACTGCACCTGCTCATGAGCCAGCTGAGCCAGGAGAAGCCCAGGG
309168	Map3k11	5'-[AminoC6]GCCCTGAGCCAGAGGAGCCACGGCGGTCTGGGCCCACAGAACGGGGCAAT
25579	Map3k12	5'-[AminoC6]CTGGTTGACTGGTCCATGGGCATCGCTGGAGGCATGAATTACCTACACCT
360640	Map3k14	5'-[AminoC6]CCTGGCCCACCTGCCTGCTCACCTAGCCAAGCGTCTCAGCCTTCCAATCC
171492	Map3k2	5'-[AminoC6]TACTTTGACTGTCACAGACATCAGCCCACCCAGCCGTTCACCTCGAGCTC
303604	Map3k3	5'-[AminoC6]TATCTCAGATCCATATTTGATGGTTTTTATATATATCAATTCTAGACTGT
308106	Map3k4	5'-[AminoC6]CCGACTGTTTGAAGAGAGGAGGTATCGAGAGATGAGGAGGAAGAATATCA
313022	Map3k6	5'-[AminoC6]GGGCGGCTACCTCAAGATCTTCATGGAGGAAGTGCCTGGAGGCAGCCTGT
313121	Map3k7	5'-[AminoC6]CGAACAGCATTGTAAAATGGCACAGGAATATATGAAAGTTCAAACCGAAA
315139	Map3k7ip1	5'-[AminoC6]GAGCGTGGACCATGGCGAGCAGAGTGTGATGACGGCACCTTAGTCTAGCC
308267	Map3k7ip2	5'-[AminoC6]AGGTGTGGGGAGACAGCGGTGTGCTGTGTCGAGTGTCAGCCCACAGAGCT
116596	Map3k8	5'-[AminoC6]CTCTGGCTGGCTACTTCAATATTGTTCGTGGTCCACCAACCCTGGAATAT
500690	Map3k9	5'-[AminoC6]TCTGAATGCAACTCTACTCGCTCCCTACTGCGCTCTGACAGTGATGAGAT
292763	Map4k1	5'-[AminoC6]TCCTTCCACAACTTTGTCAAAGTCACCCTCACTAAGAACTCCAAGAAACG
293694	Map4k2	5'-[AminoC6]CCTCCCAGGCCTGTTTGAGCAGCGGAGACTGCAGCACCAGGCACCCCTCT
170920	Map4k3	5'-[AminoC6]CCGGATCGAATACTGCCCAGGAAATTTGCTGTATCAGCAAAGATTCCTGA
301363	Map4k4	5'-[AminoC6]AAATAAACCAAGGCTGCATTGCAGCTGGTGCTGTTCAGACTCTACCATCG
503027	Map4k5	5'-[AminoC6]TGATACAAAAGGATGCCACAAATGCTGTATAGTTAGAAACCCTTACACGG
116590	Mapk1	5'-[AminoC6]AGATCTGTGACTTTGGCCTTGCCCGTGTTGCAGATCCAGACCATGATCAT
25272	Mapk10	5'-[AminoC6]CTACAAGGAGAACGTGGACATATGGTCTGTGGGCTGCATCATGGGAGAAA
689314	Mapk11	5'-[AminoC6]AGAAGGACCTCAGCAGTGTCTTCCATGGGGCCAACCCTCTGGCTGTAGAC
60352	Mapk12	5'-[AminoC6]GGACATTTGGTCTGTTGGCTGCATCATGGCAGAGATGATTACTGGAAAGA
29513	Mapk13	5'-[AminoC6]GGAGGAGACAGAGGCCCAGCAGCCATTTGATGATGCCTTAGAGCGGGAGA
81649	Mapk14	5'-[AminoC6]GTCCCCAGCTCTGGAATCATGTTCTTCTCACTCATGGTAGCCAGCTAAGA
286997	Mapk15	5'-[AminoC6]GGATATTTACCTGGTGTTTGAGTCCATGGACACCGACCTGAACGCGGTCA
499280	Mapk1ip1	5'-[AminoC6]CTATAGGCTGCGCCTTGGGCTTAGATCCTGCTGGAAAAATACCACGTGAA
361028	Mapk1ip1l	5'-[AminoC6]CACCGTCGCCACTGTGCCGCGCCTAGGACTCGGATCCTGCCGGGAAAATG
50689	Mapk3	5'-[AminoC6]CCCAGAGCTGATCTCTGCTGCTGTGTCTTTATCTATCCCTGCTAGCCCCA
54268	Mapk4	5'-[AminoC6]ACCATCCCTGTAGTGCGGGAGGAAGACAAGGAGGAGCTGCTCAGGGTGAT
58840	Mapk6	5'-[AminoC6]ACCAGCCCTCCTGGGAGAGCCAGTTTGTGAGTGGCGGGGAGGAGTGCTTC
114509	Mapk7	5'-[AminoC6]TGGAGGACCCCCTGCCTCCCGTGTTCTCAGGCACTCCAAAGGGCAGTGGG
116554	Mapk8	5'-[AminoC6]TAAGTAAAATGTCATCAAGGCCTCATTATTTCTGAAATGATGTCTGCAAT
116457	Mapk8ip1	5'-[AminoC6]GGCATGAAGATGAACTTGAGCTGGAAGTGGACGACCCTCTGCTGGTGGAG
315220	Mapk8ip2	5'-[AminoC6]CAGATGAACTAGAGTTAGATGTGGACGACCCGGTGTTGGTGGAAGCCGAA
302983	Mapk8ip3	5'-[AminoC6]TATGTGCACTCAGCGGTAGCCAACTGGAAGAAGTGTCTGCACTCCATCAA
50658	Mapk9	5'-[AminoC6]CCACACTGTTAGAAATTTTGTTCAAGATCATTCAGGTGAGCAATTAGAAT
296648	Mapkap1	5'-[AminoC6]GTCAGTGCCTACTGCCTGCATATTGCTGAGGATGATGGGGAGGTGGACAC
289014	Mapkapk2	5'-[AminoC6]GATCATGCAATCTACGAAGGTCCCTCAGACTCCACTGCACACCAGCCGCG
315994	Mapkapk3	5'-[AminoC6]TGGGATGACGTCAAGGAAGAGATGACCAGTGCCCTGGCCACGATGAGGGT
498183	Mapkapk5	5'-[AminoC6]ATAACTCTTTGGACGCCCCTGTGAAGTTATGTGACTTTGGGTTTGCTAAA
362197	Mapkbp1	5'-[AminoC6]TGGGGCTGCTCCAGGAGGTCCAGCACGGGCTCTAGAGAGGACAGAGTCTC

171347	Mat2a	5'-[AminoC6]AAGATTTGTGACCAAATCAATGATGCTGTCCTTGATGCACACCTTCAGCA
59108	Mb	5'-[AminoC6]GAACCCAGAGGTGCAAAGTGGCCTCTGCTTCCTCAGCTCTGCTGGGTCAT
313241	Mcart1	5'-[AminoC6]TTTCAGGGCAGCTGTCACCGGGATAGATCTCATCCTCCCGGAAGGGTTGC
315173	Mcat	5'-[AminoC6]AAGCTACATCACCTGCAACCGGCGGTCATCGAGAACTGTGTTGCTGCCGC
361884	Mccc2	5'-[AminoC6]TGCCAAAGTGCCTAAGATAACTGTCATAATCGGGGGATCATATGGGGCTG
293829	Mcee	5'-[AminoC6]CTGCCCACTCTCCTAGTTGTCTTTGCCCGGGGTCGCTGTGCAAGCTTGTA
60430	Mcl1	5'-[AminoC6]AGAGGCTGGGATGGGTTTGTGGAGTTCTTCCACGTACAGGACCTAGAAGG
24551	Mdh1	5'-[AminoC6]GAAGATCTTCAAATCCCAGGGCGCAGCCTTGGAGAAGTACGCCAAGAAAT
81829	Mdh2	5'-[AminoC6]CTGTCCTGAAGCCATGATTTGCATCATTTCCAACCCAGTTAACTCCACCA
307270	Me2	5'-[AminoC6]CTTCACCCCGGGCCAAGGGAACAATGCATACATCTTCCCAGGTGTGGCTT
361602	Me3	5'-[AminoC6]CACCGTGGGGAAGGTGTTTAAGTCTAAGAAAGACTTGATGTAATGTTTCA
29386	Mecp2	5'-[AminoC6]AAGCTCCAGGAACTGGCAGGGGTCGGGGACGCCCGAAAGGGAGCGGCACT
29470	Mecr	5'-[AminoC6]AATATGATCCAAGGGAACTATGGCCTCCTTCCCAAGCTGCCTGCTGTTGG
64370	MetAP2	5'-[AminoC6]GACAAGAGTGTGAATACCCACCCACCCAAGATGGGCGGACAGCTGCTTGG
192647	Mfn1	5'-[AminoC6]CTTGCAGAAGGATTTCAGGCAAGATTACAGGAGTTTCAAAATTTTGAACA
64476	Mfn2	5'-[AminoC6]CCCAGAAAAGTTCAGGGTACTGAAGAACTTGTGTCTTGCATTTGGCCCTC
171341	Mgst1	5'-[AminoC6]AGAATGCCAAGAAGTTCCTTCGGACTGACGAGAAGGTGGAACGCGTGCGA
289197	Mgst3	5'-[AminoC6]GCAAGCGGTATCGAGGAGCTGTGAGCTCTCTTGCCCTCTTTGCCCTGATG
81684	Mipep	5'-[AminoC6]GTCCATTCTTATCCCTTGGAGCTTGCATGGAAGGCCTGAATGTCCTATTT
500526	Mknk1	5'-[AminoC6]CTCTTCGCAGCTGAGGCCATTGCCCTCAACCGCCAGCTGTCTCAGCATGA
299618	Mknk2	5'-[AminoC6]GCAGAGCTGGAGGGGGACCCAGCCAGCTCCACCAAGGCAGGAGAGGTGCT
85239	Mlycd	5'-[AminoC6]GACCCCCTGGTTGTTCTGCATGTGGCTCTGACCGGTGACATTTCCAACAA
291939	Mmaa	5'-[AminoC6]TAACAAAACAGCTGGAATGATGTGAATCCAATGTTTAGACTCTACTTGGC
266713	Mnat1	5'-[AminoC6]ATCCAAAAGCTTGAGGAAGCTCTCTATGAATACCAGCCCCTGCAGATAGA
288924	Morg1	5'-[AminoC6]ACGCTGCTGCGGACGTACAGTGGCCACGGCTACGAAGTGCTCGATGCGGC
299173	Mphosph6	5'-[AminoC6]AGAAGATATGAGAGTTTGGTAGGAACAATTGGGAAAATGTTTTCCAAGAA
300741	Mpi	5'-[AminoC6]ACAAGGAGCTGGCAGAGAAGCTGCACCTTCAGGCTCCAGAGCACTACCCC
303413	Mpo	5'-[AminoC6]AAGTACCTACCCCAGTACCGATCCTACAATGACTCAGTAGACCCTCGGAT
192172	Mpst	5'-[AminoC6]TGGCAAAAGCCCCTCGGAACCTGCGGAGTTCTGCGCGCAGCTCGATCCCT
691814	Mrp63	5'-[AminoC6]CCTCCTTCGCGGCCGCATTCCGGGCAGGCAGTGGATCGGGAAGCACCGGC
289491	Mrpl1	5'-[AminoC6]TTAAGGAAGAAACTGAAAAAAAGATTTCCAAAGGCTACTAGAAATTCTAT
691075	Mrpl10	5'-[AminoC6]AAAGCCTTTTCTAGAAGATTCCAAATACCAAAACCTGCTACCCCTTTTTG
293666	Mrpl11	5'-[AminoC6]GAGATTGCCCGTGTCAAAGCTAAGGATGAGGCTTTTGCCATGCAAGATGT
303746	Mrpl12	5'-[AminoC6]GACGGAAGCGAAGCCTGTGGACAAAGTGAAGCTGATCAAGGAGATCAAGA
299938	Mrpl13	5'-[AminoC6]GAATGCTCATGAAGTATTCCTGTGACCTAGGGCAGAGAGAGAACACGGGA
301250	Mrpl14	5'-[AminoC6]TCTACAGGATGGGCTCATGCTAGCAGGTTTGCCGTCTTGGGACCCCATGG
297799	Mrpl15	5'-[AminoC6]CTCATTGATTTAGGTCGAGTTGATCCAACTCAACCTATTGACTTAACGCA
293754	Mrpl16	5'-[AminoC6]GTGGCCATGTGGAGGCTACTGACGCGCGCGCCCGCGCCGCTCTGGCGGAT
171061	Mrpl17	5'-[AminoC6]TTAACTGGAGCTGGAGAGTGCATAGGTGTGGTACCTGTGTTGGTGGGTCT
292244	Mrpl18	5'-[AminoC6]GCTCTTAGGTGTAGCCCGGAAAGAACGGGGCTGGGCTACAGTGTGGCCCA
297372	Mrpl19	5'-[AminoC6]CAAGGTGTGGAGATTTGCTTTGAACTGTATAACCCTCGAATCCATGAGAT
301240	Mrpl2	5'-[AminoC6]GCAGCCGGAAACGCTGGATCATTGCCACAGAAAACATGAAGGCAGGAGAT
309140	Mrpl21	5'-[AminoC6]CTGGGCTTGTGCGTTGACGCACAAAGTTCGCGCCGCTTCCGGTTCCGGTT
287302	Mrpl22	5'-[AminoC6]CTCGAAGATGGGAGAAGAAGAATAAGATTGTTTACCCGCCTCAGCTGCCT
64360	Mrpl23	5'-[AminoC6]GCTCCGTGTGTTTCGAACTAACTTCTTCATTCAGTTGGTGCGGCCTGGTA
295224	mrpl24	5'-[AminoC6]AATCCTCCCTGGAGCAGGCGGCGCCCAGTAGTGGTAGAGCCCATCTCTGA
287635	Mrpl27	5'-[AminoC6]GCAACATCCTTGGCACTCAGCGGCAGTTCAGATGGCACCCAGGCGCCCAT

497876	Mrpl28	5'-[AminoC6]CAGGTATCCTGTGCACCTGTGGCAGAAGCTGCGGCTGCAGCAAGGCATCT
300974	Mrpl3	5'-[AminoC6]AAACTATTGGTAAAGGTTTTCAGGGCGTCATGAAAAGATGGGGATTTAAA
301352	Mrpl30	5'-[AminoC6]AAGAATAAGAAGCACAAAGAGGCGTCCATACTGGGAGAAAGATACGATCA
291206	Mrpl32	5'-[AminoC6]ATTAAGAACAATATAGACATTTGCCCTGAATGTGGTCACCTGAAGCAGAA
290632	Mrpl34	5'-[AminoC6]ATATATTTGAAGGTATCTTTGCAAGACAGGCTCATCCACCCCAACGTTTC
297334	Mrpl35	5'-[AminoC6]AGGAATGCCTGTCTTAGTTCTGCGCTGCGCACCATTCCTTTTAGACATAT
364656	Mrpl36	5'-[AminoC6]ATCAGAGAAAAATAAACGTAAGCATTCTGTAAGATCCGTGGGCCTTAGGG
56281	Mrpl37	5'-[AminoC6]TGTGTAAGTCCCAGATTATCAAGCACCCTTCTCTAGCCAGGCGGACCTCT
303685	Mrpl38	5'-[AminoC6]CCCTACACGTGGCGTATGCCCTGGGAGAAGAGGACCTGATCCCAGTGTAT
363023	Mrpl4	5'-[AminoC6]TCGGGGGCCAGGTCAGCAAGCACACCAGCCATCCCCAAAAAAATCAGTTT
287962	Mrpl40	5'-[AminoC6]GGGTAATCAAAAGTATCTCTGTCATTTATTTTAATCAAAATGAATTTACC
296551	Mrpl41	5'-[AminoC6]TCTGACCTCAAGTCGGAAAGGGAGAAGAGTCTTGAGGGCCGAACTCTAGA
299743	Mrpl42	5'-[AminoC6]GTCCCCTACGAACACACCCAACCTATCCCTCATCCAGATCTTCTGCATAA
309440	Mrpl43	5'-[AminoC6]CTGGCGGCTTCCACTCATTCCCACGTCCCTCTGCCAGTTAACGGGGCTGT
287656	Mrpl45	5'-[AminoC6]GTACGGCCAGGTCACCGTGCGCCTGCACACTCGGCAGACGTTGGCCATTT
293054	Mrpl46	5'-[AminoC6]AGACCATGAGCTCCGTGCTCTGGATGAAGCACAGCGACTGGCAAAGAAGA
293149	Mrpl48	5'-[AminoC6]GAAGATACAGACACTTGGTGAAAGTGCTAGAGCCCAAAAAGAAGAAAGCA
362517	Mrpl50	5'-[AminoC6]AGATCTAAATTTGATGAACTCATTGCTAGTAATTTACCTCCCAATTTGAA
361037	Mrpl52	5'-[AminoC6]GACCGCTTCTTGGTGGGGCCCTATCAGAACACCATCGGGGCTGCTTTTGT
362388	Mrpl53	5'-[AminoC6]TGCCGCAGCAGCATCTGCACCCAGCGCAGACAAGGTCGCCCCAGGTACGG
299628	Mrpl54	5'-[AminoC6]GTGTGGGCACTTCCTCCCAGGAGCCAGCCTGGTGCCAGCCAGAACGGGGA
287356	Mrpl55	5'-[AminoC6]CTGCTTGGCCTGCTGAGGCACTGTGGTGTGAGGGCAGCCTTCCCTGCACC
310653	Mrpl9	5'-[AminoC6]TAGGAAGCTGTTTGAAGAGGAGAAATTGCTGAGACAAGAAGGAAAACTGG
363187	Mrps10	5'-[AminoC6]GCCTGTCCATTTTAGTGAAAGCCCATGACAAGGCTGTATTAGACAGTTAT
499185	Mrps11	5'-[AminoC6]TCGCAGCACAGACGGCAGGCATAGCTGCAGCAGCAAAAGCCACAGGCAAA
292758	Mrps12	5'-[AminoC6]ACACCCTGCAGGAGCACCACGTGGTCCTCGTGGAGGGTGGTCGCACCCAG
289143	Mrps14	5'-[AminoC6]CAGATGAGCGGCTTCGGATCAATTCGCTCAGAAAGAATACCATTTTGCCA
298517	Mrps15	5'-[AminoC6]TACGGGGTATGTTTCCGAGAGGTAATGCTGGCAGCCGTAGGAGCTGTCTA
688912	Mrps16	5'-[AminoC6]AACCGGCCTTTTTACCGCATTGTGGCTGCTCACAACAAGTGTCCCAGGGA
301249	Mrps18a	5'-[AminoC6]CTCATGGAGGCATGCTGCCCCGGAGAATCACAGGCCTGTGCCGGGAAGAA
294230	Mrps18b	5'-[AminoC6]GACTACCGCCGCAACCACAAAGGTGGTGTGCCACCACAGCGGACCCGAAA
362094	Mrps2	5'-[AminoC6]ATGGCCACCCCAAAGTTCAATCATCTTGAGCTAACCCTGGTCTGTCTCTT
689432	Mrps21	5'-[AminoC6]TAGATTGAGTAAAACCACCACCAGTGGTAACGCGTGACTCTGATGGGCTT
360594	Mrps23	5'-[AminoC6]CCTATGGATCTGGTCACAAAGCTATTGATCTGTTCAACCCAAACTTCAAG
498406	Mrps24	5'-[AminoC6]CTGGCTGTCGCAGCACACAGGTAACCTGGATGGAGAAGACCATGCCGCGG
297459	Mrps25	5'-[AminoC6]ATCTTGGGCAAGAAAGAGGAGACCCTCAGGGAGGAGGAGCTGGAGAAGCA
362216	Mrps26	5'-[AminoC6]CGGTCACCAAAGAAGGGCAGGTGGTCAGGAACTGAGAACAGAGGCCTCTC
361883	Mrps27	5'-[AminoC6]CAGCATACGTGGACAGCCACCAGTGGGAAGCAAGAGAGAAGGAGCAATGC
689025	Mrps28	5'-[AminoC6]TTTTGGTTTTGAATTAATTCAGCACAGTGTGAGTGTACAGCAGATTGGTT
290850	Mrps31	5'-[AminoC6]CAGACGACCAAGTCAGAGCTGCTCAAGCAGCTGCAGCAACACGAGGAAGA
296995	Mrps33	5'-[AminoC6]GCCCGTATCTTTGGTGAAGTGGCCAGGCCTACTGACTCAAAGTCCATGAA
287126	Mrps34	5'-[AminoC6]GTACCCAAGCACGAGGAGGAGGCTTTCACTGCGTTCACTGGGAAAGCAGA
297727	Mrps35	5'-[AminoC6]AAAGCTGTTATGGCAAAAACTGCATCCAGATGTGCTGGCCACTTCCTGAT
294696	Mrps36	5'-[AminoC6]TAAACAACCTTAATAAATGTTCTGTAAGCAGAATGAAGTATAGAAACTCC
296134	Mrps5	5'-[AminoC6]GGTAAGAAATGTTTTCAATATGACAGCAAAAGAGGGAAGAAAGAAGTCAG
113958	Mrps7	5'-[AminoC6]AACATGATGATGAAGGGGGGGAACAAAGTTCTGGCCCGATCACTCATGGC
301371	Mrps9	5'-[AminoC6]GGAGGAACTAGAAGAAATGTTAGTGGAAAAACTGTCAGATCAAGATTACA

311903	Mrrf	5'-[AminoC6]AGCGGCTAGGCAGAGAGAAAAGTTGTAGGCTTGATTCCAGAGTCTGTTCT
81521	Msn	5'-[AminoC6]TCTCTTTCAATGATAAGAAATTTGTCATCAAGCCTATTGACAAAAAGGCC
26197	mt-Atp6	5'-[AminoC6]ATAGGTCTACCAATTGTTGTAACCATTATTATGTTCCCATCAATTCTATT
26196	mt-Atp8	5'-[AminoC6]ACAATCATCTCCTCAATAGCCACACTATTTATTTTATTTCAATTAAAAAT
26195	mt-Co1	5'-[AminoC6]GGTATGAGCCATAATATCTATTGGCTTCCTAGGATTTATTGTATGAGCAC
26198	mt-Co2	5'-[AminoC6]AATTCTATACATAATAGACGAGATTAATAACCCAGTTCTAACAGTAAAGA
26204	mt-Co3	5'-[AminoC6]CATCCGGCTTAGTAATATGATTCCATTACAACTCCACAATTCTCCTATCA
26192	mt-Cytb	5'-[AminoC6]CGCCCCATCTAACATCTCATCATGATGAAACTTCGGTTCTCTACTAGGAG
26193	mt-Nd1	5'-[AminoC6]CTAGGCTACATACAACTACGCAAAGGCCCCAACATCGTAGGCCCATATGG
26194	mt-Nd2	5'-[AminoC6]CTGAGGAGGACTTAACCAGACCCAAACACGAAAAATCATAGCATATTCAT
26199	mt-Nd3	5'-[AminoC6]TTCGACCCAACAAGTTCTGCACGCCTTCCTTTTTCAATAAAATTTTTCTT
26201	mt-Nd4	5'-[AminoC6]TGCAGGAATTTATTTCCTATTTTATACACTAATTGGCTCCATCCCACTCT
26200	mt-Nd4l	5'-[AminoC6]AGGAATAATACTATCACTATTTGTCATAACTTCAACATCCACATTAAACT
26202	mt-Nd5	5'-[AminoC6]TTACCGGAATACCTTTCCTCACAGGATTCTATTCAAAAGATCTCATCATC
26203	mt-Nd6	5'-[AminoC6]TAGGGTTTGGGGGTTCGTTTTTAGGTTTAATAGTATTTTTAATTTATTTG
170602	mt-Rnr1	5'-[AminoC6]TAATAATTAAACCTACAAAATTATTTGCCAGAGAACTACTAGCTACAGCT
170603	mt-Rnr2	5'-[AminoC6]AAACTAAAACATTTAACTCAAAAAGTATTGGAGAAAGAAATTTACTTACC
359842	mt-T2	5'-[AminoC6]ACTTTTATAGGATAGAAGTAATCCATTGGTCTTAGGAACCAAAAACCTTG
170609	mt-Ta	5'-[AminoC6]GAGGATTTAGCTTAATTAAAGCAGTTGATTTGCATTTAACAGATGTAAGA
170611	mt-Tc	5'-[AminoC6]AGCCTTAAGGTGATTATCATGTCGAATTGCAAATTCGAAGGTGTAGAGAA
170614	mt-Td	5'-[AminoC6]GAGATATTAGTAAAATAATTACATAACCTTGTCAAGGTTAAGTTATAGAC
170619	mt-Te	5'-[AminoC6]GTTTCTATAGTTGAATTACAACGATGATTTTTCATGTCATTAGTCACAGT
170599	mt-Tf	5'-[AminoC6]GTTAATGTAGCTTATAATAAAGCAAAGCACTGAAAATGCTTAGATGGATT
359816	mt-Tg	5'-[AminoC6]ACTCCCTTAGTATAAACAATACAACTGACTTCCAATCAGTTAATTCTGAA
170618	mt-Th	5'-[AminoC6]GTAGGTATAGTTTACAAAAAACATTAGACTGTGAATCTAACAACAGGAAA
170605	mt-Ti	5'-[AminoC6]AGAAATATGTCTGACAAAAGAGTTACTTTGATAGAGTAAATAATAGAGGT
170615	mt-Tk	5'-[AminoC6]CATTGCGAAGCTTAGAGCGTTAACCTTTTAAGTTAAAGTTAGAGACAACA
170604	mt-Tl1	5'-[AminoC6]ATTAGGGTGGCAGAGCCAGGTAATTGCGTAAGACTTAAAACCTTGTTCCC
170607	mt-Tm	5'-[AminoC6]AGTAAGGTCAGCTAACTAAGCTATCGGGCCCATACCCCGAAAATGTTGGT
170610	mt-Tn	5'-[AminoC6]TAGATTGAAGCCAGTAAGTAGGGTATTTAGCTGTTAACTAAATTTTCGTA
170621	mt-Tp	5'-[AminoC6]CAAGAAGTAGTTTAAATAGAATATCAGCTTTGGGTGTTGATGGTGGGGAG
170606	mt-Tq	5'-[AminoC6]TAGGATAGGGTGTATTGGTAGCACGGAGAATTTTGAATTCTTAGGTGTAG
170616	mt-Tr	5'-[AminoC6]TGGTAATTAGTTTAAATAAAATTAATGATTTCGACTCATTAGATTATGAT
170613	mt-Ts1	5'-[AminoC6]GAGAAAGACATAATGGTTATGAAATTGGCTTGAAACCAGTTGTAGGGGGT
359843	mt-Ts2	5'-[AminoC6]TAAAGTGCGCTACCACATCCTGGGGGGACCTTAGCTGAGTCCCCACCATC
170620	mt-Tt	5'-[AminoC6]GTCCCGATAGTATAAAAATTACTCTGGTCTTGTAAACCAAAAATGAAGAG
170601	mt-Tv	5'-[AminoC6]CACAGTGTAGCTTAATCACAAAGCATCTGGCCTACACCCAGAAGAATTCA
170608	mt-Tw	5'-[AminoC6]AGAAGTTTAGGATATACAGTCCAAGAGCCTTCAAAGCCCTTAGAAAACAA
170612	mt-Ty	5'-[AminoC6]GGTAAAATGGCTGAGTAAGCATTAGACTGTAAATCTAAAGACAGGGGTTG
294313	Mtch1	5'-[AminoC6]CTCCTGGGCGATGTGGTTTTCTTGTGGGGCTGTAACCTGCTGGCCCACTT
295922	Mtch2	5'-[AminoC6]CGTGATTACTCTGAGGTCCATGGTACAGTTTATCGGCAGAGAGTCTAAGT
498814	Mtcp1	5'-[AminoC6]GCGCAGGAGCTGCTCCTACAACTTCTGCCAGAAACCTGACCCGCTACACG
85261	Mterf	5'-[AminoC6]CGGTCTAATAACAACCTAAACTTAGAGAATAACATAAAGTTCCTCTGCTC
315763	Mtfmt	5'-[AminoC6]ACAGTCTCAGCTCCCGGTATATGAGTGGCCCGACATGGGATCCGGAGAAT
64300	Mthfd1	5'-[AminoC6]TGCGACAGCCTTCTCAGGGCCCCACCTTTGGGATAAAAGGTGGCGCTGCA
361472	Mthfd1l	5'-[AminoC6]ACGAGAATTTTCCATGAGAGCACTCAGACAGACAAGGCTCTATACAATCG
680308	Mthfd2	5'-[AminoC6]CCAGTATTCCATGCTGCCAGCAACTCCATGGGGCGTGTGGGAGATACTCA

305606	Mtif2	5'-[AminoC6]AGACAGATGCTGATCCTGAAAAGGTGAAAAAAGAGCTCCTGGCTTATGAT
114211	Mtnr1a	5'-[AminoC6]GGAAATAAGATCGCGGCCGTCGTGGCTGGCCTCTACACTGGCCTTCATCC
300852	Mto1	5'-[AminoC6]AAATAAATGGAACCACAGGCTACGAGGAAGCTGCAGCTCAGGGGGTGATA
289745	Mtp18	5'-[AminoC6]TGGCTGTGGTAGATACCTTCGTGTGGCAGTCTCTGGCCTCTGTGGCCATT
307050	Mtpap	5'-[AminoC6]ATAAGCAAAAATGTGAGTCAGAACCAGCTACAAAAATTTGTGGAATTGGC
361473	Mtrf1l	5'-[AminoC6]AGAGAGTGAGATAGCTTTGTGTCAAAAAGAAATAGCCGAGCTGAAGCATC
290947	Mtrr	5'-[AminoC6]CATAAGGACAGAGACTATTTGTTCAGGGAGGAGCTCAGGCATTTCCTCAA
306487	Mtus1	5'-[AminoC6]TTTTCTAAACACAAATCTGTATAAAGAATAAGAGGGCAGTACCAATGGAT
288150	Mtx2	5'-[AminoC6]ACCAAAGCTGTCAATGTTGTACGCTTTTCTCCAACTGGGGAGATTTTAGC
688517	Mut	5'-[AminoC6]CCAAGGTCATTGCTACAGGCTTTGCTGATCTTGGTTTTGATGTGGACATA
170841	Mutyh	5'-[AminoC6]GTGCTGTGCCGTGTCCGCGCCATTGGTGCTGATCCCACCAGCTCCTTTGT
360961	Mxd4	5'-[AminoC6]CGGCTGCCGCCTTCATCGACTCGGCGCTCCAAGACGACCACAGTAAGATC
60571	Mybbp1a	5'-[AminoC6]CTCTCTGTACCTGCTGCGAGTCCTCAAGGGCAACACCACTAAGAGGTACC
295929	Mybpc3	5'-[AminoC6]GCAACGCTGGTCCTGCAGATCGTGGACAAGCCAAGTCCTCCCCTGGATAT
24577	Myc	5'-[AminoC6]CCTGCGCGACCAGATCCCTGAGTTGGAAAACAACGAAAAGGCCCCCAAGG
301059	Myd88	5'-[AminoC6]AGCGACTGATCCCTATCAAGTACAAAGCAATGAAGAAGGACTTTCCTAGT
24583	Myh3	5'-[AminoC6]GATCGATAGAAAGATCGCAGAGAAGGATGAAGAGATCGAGCAGCTGAAGA
29556	Myh6	5'-[AminoC6]CGGACACTGGAGGACCAGGCCAATGAATACCGGGTGAAGTTGGAAGAAGC
315165	Naga	5'-[AminoC6]GGAGCGTGCAGAGGGGTACCCCAAGATGGCTGCTGCCCTGAATGCCACAG
303563	Nags	5'-[AminoC6]CCAGCTACGGTGGCATCGTCGCGGTGGAGACAGACCTGTTGCAGTGGTGC
116631	Nat1	5'-[AminoC6]CAAATATAGCAGTGAAATGGTCCACCTTCTAGTACAAGTGACCATCAGTG
296372	Ncoa5	5'-[AminoC6]CAATGTCCCTAGTCCCCCCTTCTCTGGCCCCTCCCACTTCATCGTAAGTA
363441	Ndufa1	5'-[AminoC6]ATGGAACGCGATAGACGCATCTCTGGTGTCAATCGCTACTATGTGTCCAA
678759	Ndufa10	5'-[AminoC6]TGCAGTACTCAGATGCCCTGGAGCACCTCTTGAGCACAGGACAAGGTGTG
299739	Ndufa12	5'-[AminoC6]CAGCAGGTCACCGGCCACGGCGGCCTGCGGGGCCTCCTACGGGTTTTCTT
314759	Ndufa13	5'-[AminoC6]GGGACTGTCGGGATACAGCATGTTTGCTTTGGGCATCGGGGCCTTGATCT
691001	Ndufa3	5'-[AminoC6]GTGCTGGTGGTGTCCTTCACTGTCTGGGGCCTCGCTATAATTATGCCCAT
681024	Ndufa4	5'-[AminoC6]TCTCTCTCGGTGTAGGTAGGCCTGTGCCGCAAACATGCTCCGCCAGATCC
25488	Ndufa5	5'-[AminoC6]GAAAGGTTCCCAGAAGGCCGCGCGCTGGAGTCTCTGAGCGCAGTCATGGC
315167	Ndufa6	5'-[AminoC6]GTCCGAGAAATGTTCATGAAGAATGCCCATGTCACCGACCCCAGAGTGGT
299643	Ndufa7	5'-[AminoC6]CCACCTAACCCAGATTCAAGGCTGGTCATAGTGGTACAACCCTTAATCCC
362440	Ndufa9	5'-[AminoC6]CATCTGACATGTTCGGAAGGGAGGACAGGTTCCTCAACCACTTTGCAAAT
293453	Ndufab1	5'-[AminoC6]CCTAGGTTCTATGCACAACAGTGAAAAAATAAGACCTGGAAATAACCCTG
296086	Ndufaf1	5'-[AminoC6]GATACTGACTTCTGATAAGACAATTGGAGGTAGAAGTGAAATATTCTTGA
681418	Ndufb10	5'-[AminoC6]ATGTGTACCCGGAGCCCCCGCGCCGCACGCCTGCTCCCTCGCCGCAGACC
301427	Ndufb3	5'-[AminoC6]GCTTTGCAGACAATATCACCTTCACGAGCGTAATGTTAAAAGGATTCAAA
288088	Ndufb4	5'-[AminoC6]AAGCTACAGTAGGGGAGATCACTCTTGCTAGGTATGGGTCTCCTTATCCT
501886	Ndufb4l1	5'-[AminoC6]TGCAAGATCAGCAAATGTTTATCCTAATTTCAGACCCACTCCCAAGAACT
294964	Ndufb5	5'-[AminoC6]CAAGGTTTTTCTCCAGGGTCCAGAAGTTGGACCCGAGATGTTTTTTGCAC
297990	Ndufb6	5'-[AminoC6]TGATCTTCAAGGCGTACCGCACCAGTCTCTTCACTGTTTCCCATGTGATC
361385	Ndufb7	5'-[AminoC6]CAGGGAGAAGGAGAGGTGGGCCCTGAGATGGCCCTGTAGGGATTGACCGC
293991	Ndufb8	5'-[AminoC6]CGCTCACAGCATGAGAGGGATCCGTGGTATGAATGGGACCACCCAGACCT
299954	Ndufb9	5'-[AminoC6]GACAAATACCGGTACCTTGCTTGCTTGATGAGAGCCCGGTTTGAAGAACA
689938	Ndufc1	5'-[AminoC6]TCTGCGGTACCTGCCGGAGATGCGCGCGCAGGAGGAAGGCGGTGCCCGCT
293130	Ndufc2	5'-[AminoC6]CTTGCCGGATGAGGCCCGGAGACTGCCCCCGCCCAAGCTGAACGACCCGC
301458	Ndufs1	5'-[AminoC6]CCATTGATGTAATGGATGCAGTGGGAAGTAACATTGTGGTTAGCACAAGA
289218	Ndufs2	5'-[AminoC6]ACGATAGGTATCTGTGTCGTGTGGAAGAGATGCGCCAGTCCCTTCGAATC

499529	Ndufs4	5'-[AminoC6]GCAAACTTTTCTTGGAACAAAAGAACAAGAGTGTCTACAAAATAGGTTGG
362588	Ndufs5	5'-[AminoC6]TGCAGAAAAGGCTGGGCATTAGCCTAGATCGACACTTTATATTCCTAAGT
29478	Ndufs6	5'-[AminoC6]CGTCAGAAAGAGGTGAATGAGAACTTTGCCATTGATTTGATAGCACAACA
362837	Ndufs7	5'-[AminoC6]GGTGTTCCGTGCCAGCCCGCGCCAGGCTGACGTGATGATCGTAGCTGGCA
293652	Ndufs8	5'-[AminoC6]GAACTCTTCCGAGGCCTGGGCATGACCCTAAGCTACCTCTTTCGGGAGCC
293655	Ndufv1	5'-[AminoC6]TCTGCCTGGTCTGTGGGGATGTGGCCTCTGGCTACCACTACGGTGTGGCA
81728	Ndufv2	5'-[AminoC6]GAGACTACGCCTGACAAGCTTTTCACTCTTATAGAAGTAGAATGTTTAGG
64539	Ndufv3	5'-[AminoC6]GGGCCAAGCTCCTAGACACTCACACAGCAGCGGCACTGTCCAAAAGCTCC
24588	Nefm	5'-[AminoC6]CCAGGAGGTGGAGCTGGACAAACAGGTGCACTTGAGTAAACAGACCATTG
29458	Neurod1	5'-[AminoC6]CCTTCCTTTGACGGACCCCTCAGCCCGCCGCTCAGCATCAATGGCAACTT
81736	Nfkb1	5'-[AminoC6]TGTGGAGACATCCTTCCGCAAACTCAGCTTCTCGGAGTCCCTCACTGGAG
25493	Nfkbia	5'-[AminoC6]CCTTGCAGTGGACCTGCAGAATCCTGACCTGGTCTCGCTCCTGTTGAAGT
81525	Nfkbib	5'-[AminoC6]AACAGCAGCAGTGACAGCGACAGTGACAACAGAGATGAAGGCGATGAATA
308496	Nfkbid	5'-[AminoC6]CCGTGAACACAAAGGCAAGACGCCTCTCCTAGTGGCAGCTGCTGCCAACC
316241	Nfkbie	5'-[AminoC6]TTTGTTGCTATCTTCCTGGGTAGGGCTGCACATATCTACCCACTCTCCTT
304005	Nfkbiz	5'-[AminoC6]GACTCCCCTCCACTGTGCGGTCCTGGCTCACAATTCGGTGGTGCACGACC
84594	Nfs1	5'-[AminoC6]GAAAGCCTGCTGATGGCACTCAAGGACGTTGCCTTGTCCTCGGGGAGTGC
310738	Ngf	5'-[AminoC6]AAGAAACGGAGACTCCGTTCACCCCGCGTGCTGTTTAGCACCCAGCCTCC
24596	Ngfr	5'-[AminoC6]AGGGACTGACCTAGGCCACCCAACCACAGGAAGAACAAATGAAGGCTGAT
619581	Nicn1	5'-[AminoC6]GCTCCCCGCCTTGAGGGTCTCCCAGACCCCAGCAGAGTCTCCTCTGAGGT
360971	Nipsnap1	5'-[AminoC6]CACGAATCATGATCCCCCTGAAGATTTCTCCTCTCCAGTGAGGCTGGCAC
305751	Nkiras1	5'-[AminoC6]TAGGTTAGCATGAGTAGCTTCTGTATTCAGAGCCCTGTCTTTATAAGCTA
298316	Nkrf	5'-[AminoC6]TTGCTAAGAGGGATATAGAACAGATCATCAGAAACTATGCCCGCTCTGAA
117041	Nln	5'-[AminoC6]GATTCAGTGGAACAAACGTGGAAACTGACTTTGTAGAGGTGCCATCACAA
315599	Nlrx1	5'-[AminoC6]CTCAGCTTGGCTGTCCCATTAAGAACCTGGATGCCCTGGAGAATGCCCAG
685679	Nme4	5'-[AminoC6]GTTGCAGGCACCAGAGAGCATCCTTGCTGAGCACTACCGGGACCTACAGA
497196	Nms	5'-[AminoC6]TCTGTATGCTACAGATCCCCTCCTCAGGAGCTTCTCCACCTTTAGCTGGT
63887	Nmu	5'-[AminoC6]GCCTCAGGCATCTGTTGCATTGAGGAAGCTTTGCCGTGTCCTGATGGAGA
310378	Nnt	5'-[AminoC6]CATTGTTATTACTCCAGGATATGGGCTCTGTGCAGCTAAAGCTCAGTACC
24598	Nos1	5'-[AminoC6]AGCCAGGGGACCACCTGGGTGTCTTCCCCGGCAACCACGAGGACCTCGTG
24599	Nos2	5'-[AminoC6]TTCGCCAGACCAAACTGTGTGCCTGGAGGTTCTAGATGAGAGTGGCAGCT
292894	Nosip	5'-[AminoC6]AGCGGCCTCAGGCTATGGGACCCAGAACATTCGACTGAGCCGGGATGCTG
290029	Np	5'-[AminoC6]GTTCCGGCTTAGGAGGGCTGACCGCTAAATTAACTCAGCCTCAGGCCTTT
308387	Npas1	5'-[AminoC6]GGATGTGACCAGGATCCGCCAAAGCCATCTGGACCTGCTGGACAAAGGGC
316351	Npas2	5'-[AminoC6]ACTGGAGTCCAGAAGCAAACAGCTTTAACCAATGGAAAACGGGGTTGGCC
299016	Npas3	5'-[AminoC6]CGCCTGGGCGGGGCCTCCTCTCGCAGGGCACCACAGAGGACGCGGCCAGT
266734	Npas4	5'-[AminoC6]GGCTGTCCTACCTGCACATCATGAGTCTTGCCTGCATCTACACTCGCAAG
24603	Npr1	5'-[AminoC6]GAACTGGGGCAGCTGATGCAGCGGTGCTGGGCAGAGGACCCACAGGAGCG
116564	Npr2	5'-[AminoC6]TCAGAGGCCGTATTTCCGGCCAAGCATTGACCGGACACAACTGAACGAAG
25339	Npr3	5'-[AminoC6]TGCGGGAAGATTCCATCAGATCACATTTTTCGGTGGCTTAAAAGAAATGC
24604	Npy	5'-[AminoC6]GACAATCCGGGCGAGGACGCGCCAGCAGAGGACATGGCCAGATACTACTC
66024	Npy2r	5'-[AminoC6]CTATGCCCAGGGTCTGGCAGTACAAGTGTCCACAATAACTTTGACAGTCA
252917	Nr1d1	5'-[AminoC6]CGCACCCCACCTCAGGCTCCGTGGGCCCCTCACCACCTCCTGCACCAGCC
245980	Nr2f6	5'-[AminoC6]CATGCGCCTGGTGGGCAAGACACCCATCGAGACGCTCATCCGGGACATGC
24413	Nr3c1	5'-[AminoC6]GACTTGGTGACATGCCTGTATGACTCATGACCGATCTTGAAAGATATCTT
79240	Nr4a1	5'-[AminoC6]AGGGGAGGGGGAGAGCTATTCCGTGCCAGCCGCTTTCCCGGGCTTGGCAC
246143	Nradd	5'-[AminoC6]CATAACGTCAGCAAAGGTGTGGTGTATTCAGATACAGCCCTGAAGGGGCA

312195	Nrf1	5'-[AminoC6]CATGGACCCAAGCATTACGGACCATAGTTAAAAATTGTTATAAGCAGCAT
112400	Nrg1	5'-[AminoC6]TAGCCGGCGGGCCAAAAGAACCAAGCCCAATGGCCACATTGCCAATAGGT
64356	Nrgn	5'-[AminoC6]GATGATCCCGGAGCCAACGCCGCTGCAGCCAAAATCCAGGCGAGTTTTCG
361791	Nrm	5'-[AminoC6]TCAAGAGCCTCCTTTTCTCTTCAGAGCATGACCTCCACACACACACAGGG
293528	Nsmce4a	5'-[AminoC6]ACGCAACTCAGGTACCAAACTGTTCAACATCTCTGGCCATGTCAACCACC
287368	Nt5m	5'-[AminoC6]TGTGGAAGCTGTGAAGCATATGGCCAGTCTGCAGAACACCGATGTTTTCA
81737	Ntf3	5'-[AminoC6]GGGGTGGGCGAGACTGAATGACCGAACTCGAGTCCACCTTTCTCTTCATG
25730	Ntf4	5'-[AminoC6]CCCCAGAGTGAGGAGGTGGAGGTGCTGTTGACAGGTGTGCAAAGCCATGC
59109	Ntrk1	5'-[AminoC6]CAGGACAAGATGCTGGTGGCTGTCAAGGCACTGAAGGAGACATCTGAGAA
25054	Ntrk2	5'-[AminoC6]AAAGGGAAAAAAAATAATCAAACATCTGACTTAAACCGTCACTTCCGATG
29613	Ntrk3	5'-[AminoC6]GTGTTGAAGAGAGAACTGGGTGAGGGAGCCTTTGGAAAGGTCTTCCTGGC
64709	Nucks1	5'-[AminoC6]TAAGAAGTCCAAACCTGAGAGGAAAGAAAAGAAAATGCCCAAACCCAGAC
291877	Nudt21	5'-[AminoC6]CTGATCGTACACGAGCACCGCCTGCCCCACGTGCTACTGCTACAGCTGGG
305149	Nudt9	5'-[AminoC6]AGAAGATCAGTGCCACACTGAAAAGGGAGTTTGGTGAGGAAGCCCTGAAC
311336	Nusap1	5'-[AminoC6]AAAAGCTTTTGGAAGCTCGAAGAAACTTGGGTGTGACTAAAGCCCAGTGA
363938	Oas2	5'-[AminoC6]GTTCTGGCAGCTACTGGCAGAAGAGGCTCAGGAGTGGCTGAACTCTCTCA
64313	Oat	5'-[AminoC6]AAGGAGCTCATGAAGCTGCCATCTGATGTTGTGACTGCTGTGAGAGGGAA
24609	Odc1	5'-[AminoC6]CACTGTTGCTGCTGCTTCTACTTTCAATGGGTTCCAGAGGCCAAACATCT
360975	Ogdh	5'-[AminoC6]ACTGAGGAACCCACTTCCAAATCAATAAAAAGCTCCTGTCCCACTTTCCC
81528	Ogg1	5'-[AminoC6]TTGATGATGTCACTTATCATGGCTTCCCAAACCTTCATGCCCTGGCTGGT
171116	Opa1	5'-[AminoC6]GAGGGTCATCCAGCACAACGCTCTGGAGGACCGGTCCATATCAGATAAGC
308409	Opa3	5'-[AminoC6]AGAGTCCCTGGGCCTTGTTTCAGGTGGCACCTATTTCCTCCTGTCCTTCA
192223	Opn4	5'-[AminoC6]AGGCCGGGCCTGTGAGGGCTGTGGTGAGTCCCCTCTGCGGCGGCGGCAGT
25601	Oprm1	5'-[AminoC6]ATTTTCAACCTTGCTCTGGCAGACGCCTTAGCGACCAGTACACTGCCCTT
25611	Otc	5'-[AminoC6]CTGATTACCTTACACTCCAGGAACACTATGGCTCTCTCAAAGGTCTCACC
691393	Oxa1l	5'-[AminoC6]AGAAAAAGCATGACATTAAATTCTTCAGGCCGCTCATCCTACCTCTCACT
690163	Oxct1	5'-[AminoC6]ACACTTCTTATAGATACCTGAGACGGCAAACAGGAGCATCCCTGAGAAAA
117520	Oxr1	5'-[AminoC6]TTCCTGTAAAACGTTTGGGAATCATACACTGTCTAAGAAGGAAGACTTCT
25506	P4hb	5'-[AminoC6]AACGTGTTTGTTGAATTCTATGCTCCCTGGTGTGGTCACTGCAAGCAGCT
29704	Pacsin1	5'-[AminoC6]GATGCCTACCACAAGCAGATCATGGGCGGCTTCAAGGAGACGAAGGAGGC
124461	Pacsin2	5'-[AminoC6]CCAACAGCGAGCCAGGTCCCTCCCACCCTCCAGCTCTCTATCATGGATCT
311187	Pacsin3	5'-[AminoC6]GCTACATGGAGGACATGGAGCAGGCCTTCGAGAGCTGTCAGGCTGCTGAG
314417	Papola	5'-[AminoC6]ATTAAGAAGTATATATTCCTTTTATTTATAGAGTTGTTTTATAGTGCATA
25104	PC	5'-[AminoC6]GGAGGTGACCCCAGAGGACGTTCTCTCTGCAGCCATGTACCCTGATGTCT
687008	Pcca	5'-[AminoC6]CTGTCTCAGTACCAAGAGCCTATACATCTACCTGGTGTCCGAGTTGACAG
24624	Pccb	5'-[AminoC6]ACATTAATTCATCTGTGAAGGGGGCTCGCTTTGTCAGATTCTGTGATGCT
361042	Pck2	5'-[AminoC6]CAACTCCGGGCCATCAACCCTGAGAATGGCTTCTTCGGGGTGGCCCCTGG
292814	Pdcd5	5'-[AminoC6]CCAACAGGAAGCAAAACAAAGGGAAGCAGAAATGAGAAACAGTATCTTAG
81529	Pde1a	5'-[AminoC6]GCGACATTCAGACCGACTCGGTTCCTTCGGAAGTCCGGGACTGGTTGGCT
29554	Pdha1	5'-[AminoC6]CCAGTGGATCAAGTTTAAGTCAGTCAGTTAATGGGAGAGTATTAGATGGA
311254	Pdhx	5'-[AminoC6]TTCACTAAAGAGTATGAACTTAGCCCAATAAAGGTACAACAGAGACTGGT
287164	Pdia2	5'-[AminoC6]CAAGACAGCTGAGGGCATTGCTGAGTGGCTGAGGCGGCGAGTGGGGCCCA
29468	Pdia3	5'-[AminoC6]CTTTAGCCATGAATTGTCTGACTTTGGCTTAGAAAGCACTACTGGAGAGA
116551	Pdk1	5'-[AminoC6]CACATTGGAAGCATAAATCCAAACTGTGATGTAGTCGAGGTTATTAAAGA
81530	Pdk2	5'-[AminoC6]CCACCATGGCACAGGGAGTGTTGGAGTACAAGGACACCTATGGTGATGAC
296849	Pdk3	5'-[AminoC6]GATGCATCAAAATACAAGGCTAAACAGGACAAGATCAAGAGTAATAAAAC
89813	Pdk4	5'-[AminoC6]TCTTTTTCTTTTCTTCGGCAAGAATTGCCCGTCAGACTTGCCAACATCCT

54705	Pdp1	5'-[AminoC6]ACTGCTGAGCCAGAGGTAACTTATCACCGATTAAGGCCACAGGATAAATT
246311	Pdp2	5'-[AminoC6]AATGGAGTAAAGAGTTGCAGCGGAACGTCCTAGAGAGGGGATTTGATACC
307852	Pdpr	5'-[AminoC6]GCAGGGATGAACTCTGCTGGCCTGTCGCTGGGCGGAGGAGCTGGAAAGCT
291075	Peci	5'-[AminoC6]GGAAAGGGTGGAGCTGATGGGAAAGCCCAGGAGTCCAAGGGCATCCTGGT
25511	Pemt	5'-[AminoC6]GCAAGCTGAGCAGAGCCTTCGGGTCCCCTTACCTAGCCTGCTATTCCCTG
29237	Penk	5'-[AminoC6]CCCTGGGACAGCGGGAAACACTAGGGACCAAGCTATCCCTGGTTCACTCG
287422	Per1	5'-[AminoC6]TGCTGTGCACTCCTGGGTCCGGAAGGGCCAGCTGCCTCAGGCCCTCGATG
63840	Per2	5'-[AminoC6]TCCTGTGGTGGCCAGCATTCCAGTCGGACCTGGCTTCAGTTCATCAACAG
78962	Per3	5'-[AminoC6]ACCCCTTCAGACCACGGCCCAAGGAGAGTGGAGGAGAACTGGGAGACACA
361974	Pet112l	5'-[AminoC6]AACTGGGCTAGGAGACAGAGTTCAGTGGCTCAGCCTTCCCTCCACACGGC
361310	Pfdn1	5'-[AminoC6]CTTGACAGGTGACACATGGGCCTCCCTGTAGAGCATAGAAGAAGGAAGAC
25741	Pfkl	5'-[AminoC6]CAACGCTGCAATGGAGAGTTGTGACCGCATCAAACAATCGGCCTCGGGGA
65152	Pfkm	5'-[AminoC6]TGGAACAGATCAGTGCCAACATAACCAAGTATAACATCCAGGGCCTGGTT
64303	Pfn1	5'-[AminoC6]CGTTCCCAGTACTGACCTCATCTGTCCCTTCCCCCACCGCTCCCTTTGGC
316265	Pgk2	5'-[AminoC6]CTTCACTGTCCAAACTCGGTGATGTCTACGTCAACGATGCTTTTGGCACT
84387	Pglyrp1	5'-[AminoC6]TATCGGCATCACCTTCATGGGTGACTACTCACACCGGGTACCTGCAAAGC
24645	Pgm1	5'-[AminoC6]GGGTTCTTTGTGAACCCTTCTGACTCTGTGGCTGTCATCGCCGCCAACAT
25344	Phb	5'-[AminoC6]ACAGAGGCGGTGGAAGCCAAACAGGTGGCTCAGCAGGAAGCAGAGAGAGC
114766	Phb2	5'-[AminoC6]CCAATGCCCAGGAGCTCCCCAGCATGTACCAGCGCCTAGGCCTAGACTAT
59265	Phlpp1	5'-[AminoC6]GTTCAGCAACGGCAGCCGGGTGGAGGTGGAAGTGGACATCCATTGCAGCC
84591	Pick1	5'-[AminoC6]GAATCTCCTACGGGCCTTTTATGAGCTGTCACAGACTCACCGGGCTTTTG
294048	Pik3ap1	5'-[AminoC6]CCAACAGGCCCCCTGTCCCCGTGCCCAGGCCAGAGACCAGCACTCCTGGC
361632	Pik3c2a	5'-[AminoC6]ACTACTAAGTAGTCTACAGAAGTAGGAAAAAATACTATTTTTATTCATTG
289021	Pik3c2b	5'-[AminoC6]ATGTCTTTCTCTGCCGACATGAGAAGGTCTTCCACCCTAGCAAGGGCTAT
116720	Pik3c2g	5'-[AminoC6]TGGCCAAAAAGTCCTTCGAGCAGTTTTACAGACTTCACAGCCAGATTCAG
65052	Pik3c3	5'-[AminoC6]TTAGCCACGAGTACAAAACATGGCTTCATGCAGTTCATCCAGTCAGTTCC
85243	Pik3cb	5'-[AminoC6]AGTGATGAAGAACTCTCTCAGTATCTTTTACAGTTGGTGCAAGTTTTGAA
298947	Pik3cg	5'-[AminoC6]GATCAGATTGAAGTCTGCAGGGACAAAGGATGGACTGTGCAGTTTAACTG
305472	Pik3ip1	5'-[AminoC6]AGGGCGAGGCTGGGGAGGGTCCTATCAATGCTCCTTTTCTATCCCTTAGA
25513	Pik3r1	5'-[AminoC6]GAATATAATACTCAATTTCAAGAAAAAAGTCGGGAATATGATAGATTATA
29741	Pik3r2	5'-[AminoC6]CGGGAGAGCAGCCAGCGGGGCTGTTACGCATGCTCTGTGGTGGTGGATGG
60664	Pik3r3	5'-[AminoC6]AAGGAGATTGAGCGGATTATGATGAATTACGATAAATTGAAATCCCGTCT
363131	Pik3r4	5'-[AminoC6]TGCTGTCCAGCTTCTTGGAATTGAGGCTTCTAAGTTACCCAAGTCTCCTA
497931	Pik3r5	5'-[AminoC6]TGCAGACCTTGGCAAGGCCCCATGGGAGGACAGTACCAATGACATCTCTC
497932	Pik3r6	5'-[AminoC6]TGACCCTTGGTATGAAAGCACTGTCAACACCCTGTGTCCTGCCATCCTCA
298575	Pink1	5'-[AminoC6]ACTGCCCCAGCACCTGGAGAAGGCCAAACACCTTGGCCTTCTAGGAAAAG
307081	Pitrm1	5'-[AminoC6]AGCAGATGCCTCAGGCAGAGAAAGAGGTGGAAAACTTCCTTAGAAACGTC
29355	Pkn1	5'-[AminoC6]GTGCTGCTGTCTGAATTCCACTCCAGTGGGGAGCTCTTTGCCATTAAAGC
207122	Pkn2	5'-[AminoC6]TCCCTCAGTTCAGTAATATCATTGATAACACTGTGCTTAGCATGTTAGGG
29526	Pla2g1b	5'-[AminoC6]GGTCCCCTACAACAAGGAATACAAAGACCTTGACACCAAGAAACACTGTT
29692	Pla2g2a	5'-[AminoC6]AAACGTGGATGTGGCACAAAGTTTGTGACCTACAAGTTCTCCTACCGAGG
24653	Pla2g4a	5'-[AminoC6]GAGAGGTGTGGATCTCATCATTTCCTTTGACTTTTCTGCAAGGCCAAGTG
292645	Pla2g4c	5'-[AminoC6]TACTGTGGAGGAGGAACGGACTCTGAACCCACGGCTCACTCTCAGCTGTG
691810	Pla2g4c	5'-[AminoC6]TCAAAATTCCTGGTTTGAATTCACTCCTCATCATGCTGGATATCCTGCAC
24654	Plcb1	5'-[AminoC6]TAAAGACAAAGATCACTGCCCGGGCCATCTTCCTGAGAAACATCCCTTAG
85240	Plcb2	5'-[AminoC6]TTCATTTTTGAGAAGATCTTGGTGCCTGAGCTGGCCTCCCTCAGGATAGC
29322	Plcb3	5'-[AminoC6]CTGGCCTCACTTCGCATTGCAGCCTTTGAGGAGGGTGGCAGATTTGTTGG

25031	Plcb4	5'-[AminoC6]AGGAAAATTAGTGCATTAGTACTTTAATGGCAAGCGCATGCACTAGACGA
24655	Plcd1	5'-[AminoC6]ACAGATTCCTCCAACTACAGTCCTGTGGAGATGTGGAACGGGGGCTGCCA
287745	Plcd3	5'-[AminoC6]CTGGTGGCTCTGAACTTTCAGACTCCTGGCTATGAGATGGACCTCAACAC
140693	Plcd4	5'-[AminoC6]GATGGCTTCCTCAGCTACCTCTGCTCAGCGGATGGAAACATCTTCAACCC
114633	Plce1	5'-[AminoC6]ATTCAGCAGACCTTGTGCAAAGCCAAATATTCCTACAGCATCCTGAACAA
25738	Plcg1	5'-[AminoC6]TAGACAAAACCAAGCCATTAATGAGATGTACTGTTTTGGGCCTCCATGCC
29337	Plcg2	5'-[AminoC6]AGCAAAACCAAGGACCATTTGGAAAATCCTGACTTCCGGGAAATTCGCTC
310463	Plch1	5'-[AminoC6]CAGAGGAGGAGTGGTCCTTAGAAGTAAACCGCCAGCTCCTACTCTGGCTG
313756	Plch2	5'-[AminoC6]CCCCTGCCCCGGCCCTCCGTTAGCCAGAGGCTCCTGCGGCGCACAGCCAG
304575	Plcxd1	5'-[AminoC6]ACACGCTGTGTCCCAGCGGGGAAGTCCCCACCCTGGGGCAGCTGTGGGCG
363781	Plcxd2	5'-[AminoC6]TGTGGGCCCCTGGGTGGGCTTTCTCTAGAGTGAACAGTAGACATTGAAAG
497197	Plcz1	5'-[AminoC6]GAAGAAATCTATGAAAATGAAGACGAAGACTCAGGAAAGGAGCCAGAAAC
64672	Pln	5'-[AminoC6]TCTCTTGACTACTTAAAAAAGACTTGTCTTCCTACTTTTGTCTTCCTGGC
302562	Plp2	5'-[AminoC6]TGTTGTCCTTGTAGAAGGACGAGGCAGCTCCAAAATCGTCGCTGGGGTAC
24659	Pmch	5'-[AminoC6]GCTTCATGAAGGATGACGATGACAAGACCACAAAGAACACAGGCTCCAAG
688790	Pmp2	5'-[AminoC6]CACCTGGAAACTTGTCTCCAGCGAGCACTTCGATGACTACATGAAGGCTC
296588	Pmpca	5'-[AminoC6]CTGAACATGAGACCTGACCCAGAGCCACTGCTCACCGAGATGATTCATGA
64198	Pmpcb	5'-[AminoC6]AGATTTGCCAAGAGCTGTAGAAATTCTTGCTGACATAATTCAGAACAGTA
360992	Pnpt1	5'-[AminoC6]AGGCAAGAGACTTCATTACAGAAATTTGCAGAGATGATCAAGAGCAACAA
303612	Polg2	5'-[AminoC6]CTGCCTGGATCTGGTAAACAGAAAGCTACCTTACGGCCTTGCTCAGATTG
300088	Polr3h	5'-[AminoC6]ATGGGTCCCAGGGCTTGTGTACACCATGCAAGTATTCTACCAACCATGCT
299604	Polrmt	5'-[AminoC6]AATGGCTTCCCACCCAACTTCATCCACTCCCTGGATTCCTCCCACATGAT
24664	Pomc	5'-[AminoC6]CGGGCCTGCAGACTCGACCTCTCGGCGGAGACGCCCGTGTTTCCAGGCAA
310856	Ppa2	5'-[AminoC6]CCTTTCCATGACATTCCTCTGAAGGCAGACTGTGAAGAGGAACATGGCAT
25747	Ppara	5'-[AminoC6]CAATGCAATCCGTTTTGGAAGAATGCCAAGATCTGAGAAAGCAAAACTGA
25682	Ppard	5'-[AminoC6]GCCAACGGCAGTGGCTTCGTCACCCATGAGTTCTTGCGCAGTATCCGCAA
25664	Pparg	5'-[AminoC6]AAAAAGAGTAGAAATAAATGTCAGTACTGTCGGTTTCAGAAGTGCCTTGC
83516	Ppargc1a	5'-[AminoC6]AGCACTTCGGTCATCCCAGTCAAGCTGTTTTTGACGACAAAGTAGACAAG
64367	Ppib	5'-[AminoC6]GATAAGAAGAAGGGACCTAAAGTCACAGTCAAGGTATACTTTGATTTCCA
291463	Ppic	5'-[AminoC6]CTGGAGGTATGAGCATTTATGGTGAGACATTTCCTGATGAGAACTTCAAA
361967	Ppid	5'-[AminoC6]GCGCCTGCAGTGAAGATGTCCCACCCATCCCCAGCAGGCAAGCCCTCCAA
282819	Ppif	5'-[AminoC6]GCTCCACCTTCCACAGGGTCATCCCAGCCTTCATGTGCCAGGCTGGCGAC
83624	Ppig	5'-[AminoC6]GCTGTTTTCAGTTCGTGTGGTGATTGAGCTTGAGTTGCTGTTATACAGCA
289219	Ppox	5'-[AminoC6]TATGTAGGCGGTGCCCTGCACCCCCTACCCTCTGGCCTCAGGGGGCTACT
24672	Ppp2ca	5'-[AminoC6]ACATTCAAACTTGTTTCCACACGGACCAAAAGATGTGCCATATAAAATAC
117281	Ppp2r1a	5'-[AminoC6]CATGCCACTATCATCCCCAAGGTCTTAGCCATGTCTGGAGACCCTAACTA
315648	Ppp2r1b	5'-[AminoC6]GTGACTTGACTCTTTCTAAACATGAACTCAGACTGGTTTTACCTCTCTGG
294007	Pprc1	5'-[AminoC6]AGAGATGGGCTCTCGATGGAATGTCAAGCGCCATCAGGACATCACTATCA
117254	Prdx1	5'-[AminoC6]TCAGCCTAAGTGATTACAAAGGAAAATATGTTGTATTCTTTTTTTACCCT
29338	Prdx2	5'-[AminoC6]CCACTGAATATCCCTCTGCTTGCTGATGTGACTAAAAGCTTGTCCCAGAA
64371	Prdx3	5'-[AminoC6]GTTCTTCATTCCACACCCCTGCTGTCACCCAGCATGCGCCCCATTTTAAA
113898	Prdx5	5'-[AminoC6]GCTGTTCAAGGACAAGAAAGGTGTTTTGTTTGGAGTCCCTGGGGCATTTA
50669	Prf1	5'-[AminoC6]TCGGTGCCCAAGCCAGTGTCTCAAGCGAATACAAAGCTTGCGAGGAGAAG
83803	Prkab1	5'-[AminoC6]TCCGGAGCCCAACCACGTCATGCTGAACCACCTCTATGCACTCTCTATCA
25636	Prkaca	5'-[AminoC6]GCGTGTGAAAGGCCGAACTTGGACCTTGTGTGGGACCCCCGAGTACTTGG
293508	Prkacb	5'-[AminoC6]TTAAGCTAAAGCAAATAGAGCACACTCTGAATGAGAAGAGAATCCTGCAG
29699	Prkar2a	5'-[AminoC6]TGGGCCCCTGCATGGACATCATGAAGAGGAACATCTCACATTACGAAGAA

24679	Prkar2b	5'-[AminoC6]TCTGTGGTCCCCTGCCCTTCCCTGTCCTGAGCACCAGCCAGCGAGCACAT
24680	Prkca	5'-[AminoC6]ACACGAGGGCAGCCTGTCTTAACACCACCAGATCAGCTGGTCATCGCTAA
25023	Prkcb	5'-[AminoC6]GCATGTGTAAAGAGAATATCTGGGATGGGGTGACAACCAAGACATTCTGT
170538	Prkcd	5'-[AminoC6]TGCTGACTTCGGGATGTGCAAAGAGAATATATTTGGGGAGAACCGGGCCA
85332	Prkcdbp	5'-[AminoC6]GCTTCAAATAGAGAGCGCAGCCTGATCCCTGGGGCTGCCTGCCCCATTCA
29340	Prkce	5'-[AminoC6]TCTATGCTGTGAAGGTCTTAAAGAAGGACGTCATCCTGCAGGATGACGAC
24681	Prkcg	5'-[AminoC6]TGCACCCTTGTGGAGAAGCGTGTGCTGGCATTGGGAGGCCGAGGTCCTGG
81749	Prkch	5'-[AminoC6]AAACAGGCTTCTTGTTTTTAACTTCAAGAGACAAATCTAGACTTTCCGTG
84006	Prkci	5'-[AminoC6]AGGACAGACCAGCTCCCACAGGCTGGCACCCGTGGCACGCACGAGGCCCT
85420	Prkcq	5'-[AminoC6]CGCCAGCATCCTTTGTTTCGAGAGATCAACTGGGAAGAGCTTGAGAGAAA
300445	Prkcsh	5'-[AminoC6]ACTGTCGGAGGAGGAGGCCCAGGCTCTTCTCAGTGGAGACACACAGACTG
25522	Prkcz	5'-[AminoC6]TGACATGAATACTGAAGACTACCTTTTCCAAGTTATCCTGGAAAAGCCAA
85421	Prkd1	5'-[AminoC6]GAGGTTCTGAGGAACAAGGGCTATAACCGCTCGCTAGACATGTGGTCTGT
313834	Prkd3	5'-[AminoC6]ACACTTCAGCTCCAGAGCCAGCCGTTTTGTAGTAGTTATTAATACAGGTT
54286	Prkg1	5'-[AminoC6]TTGTATGTACCCCGTGGAATATGGGAAGGACAGCTGCATCATCAAGGAAG
25523	Prkg2	5'-[AminoC6]CTGTGAAAGCTATTACCAATGTTAAAACTTGGGCTCTCGATAGAGAGGTT
24283	Prl3b1	5'-[AminoC6]AACCTTATGTTAAGTCCTTGCCACACAGCTGCTATCCCTACTCCAGAAAA
499420	Prmt2	5'-[AminoC6]GGAGGGCCAGCCTCAGCAGGTTCTCAGCACAGGACCGCTGCACCCCACCA
680409	Prodh	5'-[AminoC6]AGCAGAGCTACTTCCAGCCGGCCATCAACCGCCTGACCCTGGAGATGCAG
192206	Prok2	5'-[AminoC6]CTCACACCGCCCGCCGGGGATGCCGCGGTCATCACCGGGGCTTGCGACAA
192649	Prokr2	5'-[AminoC6]AAATCGTCATTGGCGTAGCCCTGGCAGGCATCATGCTAGTCTGCGGCGTT
366276	Prpf6	5'-[AminoC6]CTGACAGTTGTGTGGCCCACAATGCCCTGGAGTGTGCACGAGCCATATAT
25052	Prss2	5'-[AminoC6]GATCGTTGGAGGATACACCTGCCAAGAGAATTCTGTTCCCTACCAAGTGT
25524	Psap	5'-[AminoC6]GGACGTCCTCATGCATGAGGTGAACCCGAACTTTCTGTGCGGTGTGATCA
29192	Psen1	5'-[AminoC6]CCATCAAGTCAGTCAGCTTCTACACCCGGAAGGATGGGCAGCTAATCTAT
29674	Psma7	5'-[AminoC6]GTGCTCTGGACGATAATGTCTGCATGGCCTTTGCAGGTCTCACTGCCGAT
287984	Psmd2	5'-[AminoC6]AGATGTCACTTCGACCATTCTTCAGACCATCATGGAGAAATCTGAGACTG
29630	Psme1	5'-[AminoC6]TGCCCACCCCAGGCTCCGCGTGCGGCGTTCAGCCCCCGGCTCTGGCCATG
691380	Psrc1	5'-[AminoC6]CACCCACTTGCAATCTGTTCTCTGCATCCAAAAACCCAGGGCGTTCTCCT
25526	Ptgds	5'-[AminoC6]AGAGCTACTGTTTATGTGCCAGACAGTGGTAGCTCCCTCCACAGAAGGCG
311865	Ptges2	5'-[AminoC6]TCATCAGCAAGCGCCTCAAAAGCAGGCACCACCTGCAGGATGATGTCCGG
29527	Ptgs2	5'-[AminoC6]AGACATGATCTACCCTCCCCACGTCCCTGAGCACCTGCGGTTCGCTGTGG
50646	Ptk2b	5'-[AminoC6]GCTACACGGAGTTCACAGGGCCCCCCCAGAAGCCACCACGGCTCGGTGCA
29390	Ptpmt1	5'-[AminoC6]ACGGCCCCTCCCTGAGGTCAGGGGTTGGAGAGCAGGCCCTGCTCCTTAGG
287710	Ptrf	5'-[AminoC6]CCGCAACTTCAAAGTCATGATCTACCAGGATGAAGTCAAGCTGCCGGCCA
304567	Pus1	5'-[AminoC6]ATTGATGACATCCTGGACAAGATCAACAGCCACCTTCCATCCCATATTCG
287877	Pycr1	5'-[AminoC6]TGTGCGGCAGGTGTCACCATCAACTCCATTGAAAAGAAACTGACAGCGTT
364064	Pycr2	5'-[AminoC6]AGAGAGCTGCAGTCCATGGCTGACCAAGAAAAGGTGTCCCCTGCCGCCCT
290868	Qars	5'-[AminoC6]GTGATGGAAGATGGAAAGATGGACCCTGTGGCCTATCGAGTCAAGTATAC
81754	Rab1	5'-[AminoC6]TCATGACCATGGCAGCGGAGATTAAAAAGCGGATGGGTCCTGGAGCAACA
50993	Rab10	5'-[AminoC6]AACAGTGAAAACGTAGATATCAGCAGTGGAGGAGGTGTGACGGGCTGGAA
81830	Rab11a	5'-[AminoC6]TGCCTGGTAGTCTAGTAGACTTCTGTCTGAGGTGTCTCTGTTGCAGTGAT
79434	Rab11b	5'-[AminoC6]GGTGTAGGTAAGAGCAACCTGCTGTCACGCTTCACCAGAAACGAGTTCAA
25530	Rab12	5'-[AminoC6]TCTCTACAACCAGAGCCTGAGATCCCACCAGAGCTGCCTCCACCCAGACC
81756	Rab13	5'-[AminoC6]AGAGGACAACTTCAACAGCACTTACATCTCCACCATCGGAATTGATTTCA
94197	Rab14	5'-[AminoC6]TTCAGAGCTGTTACACGGAGCTACTATAGAGGAGCTGCAGGTGCGCTCAT
299156	Rab15	5'-[AminoC6]CCTGCTGTGACCCCAGAATGTGCTTCGACCATCTCACCACCCCAGGCTCC

503269	Rab17	5'-[AminoC6]ACCTGAATGCTCTGAGCCAAGTGTGCCTGCCCCGCCTGGGCTGTCCCTTT
307039	Rab18	5'-[AminoC6]TTGAAATTTGCACGCAAGCATTCTATGTTGTTCATAGAGGCAAGTGCAAA
500088	Rab19	5'-[AminoC6]ACAGTGAGTCACAGCAGAACACCATTGGGGTGGACTTCACAGTGCGCTCC
100126191	Rab1b	5'-[AminoC6]ACTATCGGGGTGCTCATGGCATCATTGTGGTGTATGACGTCACTGACCAG
689377	Rab20	5'-[AminoC6]GCTGTGCCTAATGGCAGGAGGTCTGTCTTGTCATGTGCTATGTGTGGGAG
299799	Rab21	5'-[AminoC6]GTGCTGCTCGGAGAAGGCTGCGTGGGGAAGACGTCGCTGGTGCTGCGCTA
366265	Rab22a	5'-[AminoC6]TGCCGAGACAAGGTTCCTTAGATGTGCTGCAAAGGGCGGGTGGATAGAGC
367242	Rab23	5'-[AminoC6]ATTCAAGTTAATGATGAAGACGTGAGGCTAATGCTGTGGGACACTGCAGG
361208	Rab24	5'-[AminoC6]CTTCAAGAGTGCTGAGATGCCCCAGGCGCATAGCCTAATAAACGTGTGGA
310632	Rab25	5'-[AminoC6]GGTGCAGGTCTTTCAAGAGCTGAGAGTGGAGGCCATTTAACCTATAAACA
171111	Rab26	5'-[AminoC6]AAATTAGCCAAGGAGTATGGGCTGCCATTCATGGAGACCAGCGCCAAGAG
50645	Rab27a	5'-[AminoC6]ACTGACTCAACATCCAATTGTAACTCATTGCAACTTCATATGATTTAGTC
84590	Rab27b	5'-[AminoC6]GGCTTCTTACTAATGTTTGACCTCACCAGTCAACAGAGTTTCTTGAATGT
117049	Rab28	5'-[AminoC6]GGTATATGATATTACAAACTACCAAAGCTTTGAGAATTTGGAAGATTGGT
65158	Rab2a	5'-[AminoC6]TGGTAAATCGTGCTTATTGCTACAGTTTACAGACAAGAGGTTTCAGCCGG
305853	Rab2b	5'-[AminoC6]TGGTCAACATCGATGGAAAGCAAATCAAACTGCAAATCTGGGATACGGCT
308821	Rab30	5'-[AminoC6]TACCGAAGCGCCAATGCCTTGATCCTTACCTATGACATCACCTGTGAGGA
246324	Rab31	5'-[AminoC6]AGTCGGTGCCAAGTCCCAGTCACAGACGGTGCTTGTCAACTTCGGGATGC
365042	Rab32	5'-[AminoC6]TTGGTGATCCTGACATCTTGAGTGTCTTTTTTCCTGTATACATCCTCACC
317580	Rab33a	5'-[AminoC6]GTGGATCAAGGAGATTGATGAGCATGCACCTGGTGTTCCCCGGATCCTGG
365793	Rab33b	5'-[AminoC6]GGCTGGGCATGAGAGCCCCTGTCACCAGGACTGGTCCAATACATTTTCCT
360571	Rab34	5'-[AminoC6]ATTTGAAGTCTTGGGTGTCCCCTTCAGTCTCCAACTTTGGGACACTGCTG
288700	Rab35	5'-[AminoC6]ATGTGGAAGAGATGTTCAACTGCATCACAGAGCTGGTTCTACGGGCAAAG
690407	Rab36	5'-[AminoC6]GCAGACTCTGGAGCATACCAAGCAGTGGCTGCAGGATGTGCTGAGGGAGA
252916	Rab38	5'-[AminoC6]GGCCACCATTGGTGTGGACTTCGCGCTGAAGGTGCTCCACTGGGACCCAG
315668	Rab39	5'-[AminoC6]TCCCCCGCGGGGGTGCTGAGCCCTCAGCAACTCGAAGCGCTCACGTACAT
25531	Rab3a	5'-[AminoC6]CAAAACCATCTACCGCAATGACAAGAGGATCAAGCTGCAGATCTGGGACA
81755	Rab3b	5'-[AminoC6]CTGACCAGAACTTTGACTACATGTTCAAACTGCTCATCATTGGCAACAGC
171058	Rab3c	5'-[AminoC6]GAAAGACTCTTCTGACCAGAACTTCGACTACATGTTCAAGTTGCTGATCA
140665	Rab3d	5'-[AminoC6]AGGTGTGTGATCTACTCCTCTGTTGTTGGCTGAAGATGTCACCTGGTGTG
303754	Rab40b	5'-[AminoC6]GGCCGAAGGGTGAAACTGCAGCTTTGGGACACCTCCGGGCAAGGGAGATT
359728	Rab40c	5'-[AminoC6]ACAATGTTAGAAGGAGATATTCTGGATGCCCAGTACCTGAGGAGAGCGTG
500249	Rab43	5'-[AminoC6]AGGGCAAGCGGGTCAAGCTCCAGATTTGGGACACAGCCGGCCAGGAGCGG
25532	Rab4a	5'-[AminoC6]AGCCGAGAAACCTACAATGCGCTTACTAATTGGTTAACAGATGCCAGAAT
50866	Rab4b	5'-[AminoC6]TTGGCAGTGCCGGAACTGGCAAATCATGTCTCCTCCATCAGTTTATTGAG
64633	Rab5a	5'-[AminoC6]AAGTCTGGTGCTTCGCTTTGTGAAAGGCCAATTTCATGAGTTTCAAGAGA
288779	Rab5b	5'-[AminoC6]AGGTAGGAGTGAGATCGGGGAGGTGAGCTCGCAGGCACTGAATGGAGTTT
287709	Rab5c	5'-[AminoC6]TTACAGAGGCAGGCCAGCCCCAACATCGTCATTGCACTAGCGGGTAACAA
84379	Rab6a	5'-[AminoC6]GAGCAGTGTGTTCACAGCAGCATTTGCCTACCTTCTTGCTGTCTCCCAGC
363123	Rab6b	5'-[AminoC6]TTTCCTTCCCTAAAGGCAGTTAAAGCAGCCAGGCCTTAACACAGAACAGT
29448	Rab7a	5'-[AminoC6]CCATGCAGATCTGGGACACAGCTGGTCAAGAACGGTTCCAGTCTCTTGGT
117103	Rab8a	5'-[AminoC6]CTATGGGATCAAGTTCATGGAGACCAGCGCGAAGGCCAACATCAATGTGG
266688	Rab8b	5'-[AminoC6]CGACTCCGGCGTTGGCAAGACCTGCCTCCTGTTCCGCTTCTCAGAGGACG
84589	Rab9a	5'-[AminoC6]ACCATGCAGATTTGGGACACAGCTGGTCAAGAACGATTCCGAAGCCTGAG
367915	RAB9B	5'-[AminoC6]AAAGGTCATCCTCTTGGGTGATGGCGGAGTTGGGAAAAGCTCACTTATGA
366957	Rac2	5'-[AminoC6]TGCAGGCCAGGAGGACTATGACCGCCTCCGGCCACTCTCCTACCCACAGA
310034	Rad17	5'-[AminoC6]CCTTACATAAGCCCCAATGGTTTCTAATACAGAAAAAGTATCGGGAAAAT

24703	Raf1	5'-[AminoC6]CTGGAGTGGTTCTCAGCAGGTTGAACAGCCCACTGGCTCTGTGCTGTGGA
84509	Ran	5'-[AminoC6]ACTTGACGGGCGAGTTTGAGAAGAAGTATGTAGCCACCCTGGGCGTGGAG
295347	Rap1a	5'-[AminoC6]GCAAGTTAGAACACAAAAGTGATGCGTGACTTGACTATGAGCAGTATATA
171337	Rap1b	5'-[AminoC6]TACTGCAGGAACGGAGCAGTTTACAGCCATGAGAGATCTGTACATGAAGA
170923	Rap2b	5'-[AminoC6]TGGGCAAGTCCGCGCTCACCGTGCAGTTCGTAACAGGTTCCTTCATCGAG
303569	Rap2ip	5'-[AminoC6]GCTGAAGGACCTGGAGGCGGAGAACCGGCGGCTGCAGCTGCAGCTGGAGG
29372	RASA3	5'-[AminoC6]TTTCCAGCTGACGCCCCACCATACGGATCCACAGACTTCTAGAACCCTGA
64455	Rasd1	5'-[AminoC6]AGAGCGCCAGCTGGCCTCCTCCCTCCCTCCCTGAGACCCAGCCCTGTGCA
171099	Rasd2	5'-[AminoC6]GGTTCCTTTGTGGGAGGACAGAGATGTGTCTGGGGGTATGTCAGCACTCA
360519	Rasgef1c	5'-[AminoC6]GTTCAACAGACTATGCTACCTGGTAGCCACAGAAATCTGCATGCCAGCCA
192213	Rasgrf1	5'-[AminoC6]TCGTGTCCCTGGGACTGCTGGCCCAGAGAGACGGCACGCGCAAAGGCTAC
114513	Rasgrf2	5'-[AminoC6]CCCAGTGAGGGCCAGAAAGCTGTCTTTGACATCTTCCTTGAACTCAAGGA
29434	Rasgrp1	5'-[AminoC6]AACAGTGCAAAGACCTGGTAGTGTTTGAGTGCAAGAAACGATCCAAGAGC
361714	Rasgrp2	5'-[AminoC6]ACGTTGATGGGGACGGTCACATCTCCCAGGAGGAGTTCCAGATCATCCGG
313874	Rasgrp3	5'-[AminoC6]AAGGAATGTTTGTAGTGTCCTACCACACAGTGGCTGTGCTGGGCAATGTC
170668	Rasgrp4	5'-[AminoC6]CCTACTACCGCCGCACCTGGGCCAGCTGCACTGACTTCCGGCTGCCAGTA
363140	Rassf1	5'-[AminoC6]TCGGTCCAGGCCGTACCCGGCTGGAGCGTGCCAACGCTCTGCGCATCGCG
362423	Rassf4	5'-[AminoC6]GCCACAAGTCCCTGCCCTTATCATCCATGTGAACCATGAACCCCTGGTCT
54355	Rassf5	5'-[AminoC6]CTAATTCAAACTTAAAACAAATTAGCCAGACTATACCACCCAGTAGCCAG
60383	Rbck1	5'-[AminoC6]GAGAGGGAGATCCGGGCGCTCCTGTCCCCTGAGGACTACCAGCGTTTCCT
361504	Rdh13	5'-[AminoC6]ATCAACTTGGGGAGGAAAAGGGCTTATTTAACTTACAGGTTATAGTTTAC
290227	Rec8	5'-[AminoC6]TGCTTCGCCACTATCTGGCTGGCCGCTACCCGGGGCAGCCGTTTGGTGAA
300689	Rexo2	5'-[AminoC6]AGAGCCTGGCTCTCAGAAGCCACTTTAGCGTCTCTCTCTCTCTCCCGC
289080	Rgl1	5'-[AminoC6]CACGCATGCACACACGCACACGCACGCACGCACACACACGCACATACGTG
117273	Rhoa	5'-[AminoC6]TGTGCCCACGGTGTTTGAAAACTATGTGGCAGATATTGAAGTGGACGGGA
295342	Rhoc	5'-[AminoC6]AAGCACTTCTGTCCCAATGTGCCCATCATCCTAGTGGGGAATAAGAAGGA
303351	Rhot1	5'-[AminoC6]TACGCTGTATGTGCACCTGCAACAGGTGTACATTTTGCATCTGTCAGAAC
287156	Rhot2	5'-[AminoC6]AGTCCCCACTGAGGCTGGCTGTCTGTCCTTGCGTGGATATCTCTGCCAGT
306886	Ripk1	5'-[AminoC6]CTGCTTCTTGTGCCTTTGGGAAGCCCATATGCAACCTAAAAGTGAGTGAA
359726	Rnasel	5'-[AminoC6]TGATGGACCTGCTTGGCCATCCTTTCTTTTGGACTTGGGAGAACCGCTAT
295588	Rnd3	5'-[AminoC6]GCCAAAGTCACATGGACACAAGGCGTAGGAGTCCCTTGAAAAAAAAAGTG
362550	Ror1	5'-[AminoC6]TGCCCCCTGAGGCGATCATGTACGGCAAATTCTCCTCAGATTCTGATATC
25596	Rpn1	5'-[AminoC6]ATTTTGGATGACTCCGTGGAAATGGAAATCCGGCCTCGATTTGGTCTCTT
64701	Rpn2	5'-[AminoC6]ATCTCCACTGAAGTTGGCATCACCAATGCTGATCTTTCCACTGTGGACAA
289342	Rps6kc1	5'-[AminoC6]GCCTGGGTGCTGTCCTCTTCGAACTTCTCACTGGCAAGACATTGGTGGAA
83521	Rrad	5'-[AminoC6]GTGCATGCTGCTGGGGCGCCTGGTGTGGGCAAGAGTGCTCTGGCGCGCAT
117043	RragB	5'-[AminoC6]TGTTTGAGAGAGCTACCTTTCTGGTGATTTCTCACTATCAGTGTAAAGAA
365355	Rras2	5'-[AminoC6]AAGGTCACGTATATGGAGGCGTCGGCAAAGATCAGGATGAATGTAGATCA
304714	Rrn3	5'-[AminoC6]TTATTCGAAGTACAGCTGGTGGAGACTCTGTGCAGACCTGCACCAACCCA
25271	Rxra	5'-[AminoC6]AATATGTCATCCTTCACCAAGCACATCTGCGCTATCTGTGGGGACCGCTC
445415	S100a11	5'-[AminoC6]AGCTGTCATCTCTCCAAAACTGAGTTCCTTTCCTTCATGAACACGGAGCT
300111	Samm50	5'-[AminoC6]TCATCTATCTTGCCAAGAAGAGGGGCCTTGCTCAAAGTCAACCAGGAGCT
114123	Sardh	5'-[AminoC6]GGATTGTTCTGAAGATCTGGGCATGCTCAGTATCCAGGGCCCAGCCAGCC
292759	Sars2	5'-[AminoC6]TTTCTCCAAGCTGCGAAGGATCCGTCTGCAGTTGCAAAGCACTTTGTTGC
302642	Sat1	5'-[AminoC6]TGTACTATTTTACCTATGACCCATGGATTGGCAAGTTACTGTATCTTGAA
497930	Sco1	5'-[AminoC6]AAGGAAGAGATTGATGGAGTGGCCAGAGCATACAGGGTGTATTACAGTCC
25541	Scp2	5'-[AminoC6]AGCTCTGCAGGGGATGGATTCAAGGCAAATCTCATTTTTAAGGAAATCGA

157074	Sdha	5'-[AminoC6]TGGTCTGTACGCCTGTGGGGAGGCTGCCTGCGCCTCAGTGCATGGTGCCA
298596	Sdhb	5'-[AminoC6]CTGGAGATAAACCTCGAATGCAGACATACAAGGTGGATCTGAATAAGTGT
289217	Sdhc	5'-[AminoC6]ATATGAAGAGCTGGGATTCCCACATCCGTCCTGTGCATCATCACACTGAT
363061	Sdhd	5'-[AminoC6]CCTCTGCTTTATCAATGCTGTTCACCTCACAATGAGGAGGGATGAAGAAT
287606	Sept4	5'-[AminoC6]CCGTGGCTGAGTACATTGACCAGCAGTTTGAACAGTATTTCCGAGATGAG
83788	Sept9	5'-[AminoC6]TGCCCCACCCTACACACCCCACCCTCAAGCCTTGATCCAGTGACTGTACT
24795	Serpina3n	5'-[AminoC6]CACTTGCTGGTCCCTATCTTTCTGCAGTATGTGGGAATCACTTGGTGCCC
305479	Sf3a1	5'-[AminoC6]CCTCACATCTAGTTCACTACTTCTATATTGTGCTTGGTTTTGTTTTTGCC
364678	Sfxn1	5'-[AminoC6]CTCTGTTTCCTCAGAAGAGTTCCATGTCTGTGACAAGCTTGGAGGATGAG
294011	Sfxn2	5'-[AminoC6]CCAAGATTACTTTTGTTTGTGTGTGTGTTTTGTTACTGATCACCACATGT
261737	Sfxn5	5'-[AminoC6]GGGACTTCTCTTGCCTAACCAGACCCTGGCATCCACTGTCTTCTGGCAGT
299857	Shmt2	5'-[AminoC6]CACCTGCTGGCAGACATGGCCCATATCAGTGGCCTGGTGGCTGCCAAGGT
25528	Sirpa	5'-[AminoC6]TATTGTCCCGGAAGGATTTTCTTATAGCAGAAACAGATTTTTTTTCCAAT
309757	Sirt1	5'-[AminoC6]ACTCCAAGGCCACGGATAGGTCCATATACTTTTGTTCAGCAACACCTCAT
293615	Sirt3	5'-[AminoC6]GGCTGCTTCACGACAAGGAGCTGCTTCTGCGGCTCTACACACAGAACATC
306840	Sirt5	5'-[AminoC6]CCTTATTTAAAACTCGGTGTACCTCGTGTGGCAATGTTGCTGAGAACTAC
294260	Skiv2l	5'-[AminoC6]ACAGAGACCCGGAACATGATCCAGCGACGCATCATGGAGTCTGTGAACGG
65202	Slc13a2	5'-[AminoC6]TCATCCTCTGCCTTTTGATCGCCATCTTCACTGAGTGTACCAGTAACGTG
117261	Slc15a1	5'-[AminoC6]TTCTGTTCGCCTCCTTGCTCCTGGTCGTCTGCATCATATTTGCCATTATG
29483	Slc1a3	5'-[AminoC6]AGTTGGTTTTCTTTAAAGACTAAAAGAGAGCTGAACCTTGGCCTTCTTCT
84012	Slc1a6	5'-[AminoC6]CAGCTGGGCATGTACACGCTGACTGTCATTGTCGGCTTATTTCTTCATGC
29743	Slc25a1	5'-[AminoC6]AGTCTGCCTGGACGTGGCCATCGTATTCGTCATCTATGATGAAGTGGTGA
362145	Slc25a12	5'-[AminoC6]ATATTCCTACAGTATGCCAGCACCGAGGTGGACGGAGAGCATTACATGAC
362322	Slc25a13	5'-[AminoC6]ACCGCTGTGGGCTCATAGGGGGACTGACCCGGATGTGGCTGGAAAATTGA
85263	Slc25a14	5'-[AminoC6]GGTGAATGGGTATCTTTCCTGGAATAATCCTAATTTTTCTAAGGGTGAAG
361836	Slc25a16	5'-[AminoC6]TGGACACCATGGGATTCGGAGAGGATTGTACCGTGGCTTATCTCTGAACT
300083	Slc25a17	5'-[AminoC6]GTGGGTCAAAGGTCAACGTTCTTCCACAGGAAAAGATCTGGCGATTGGAT
681896	Slc25a18	5'-[AminoC6]ATGAAGGGAGCAGGCTGCCGTGCCCTGGTCATAGCCCCCCTCTTCGGGAT
303676	Slc25a19	5'-[AminoC6]AGCCCTTTGGATGTCATCAAGATCCGATTCCAGCTCCAGCTTGAACGCGT
117035	Slc25a20	5'-[AminoC6]GAGACTACAGCAGAAATCTCCAGAGGATGAACTTACCTACCCGCAGCTGT
171151	Slc25a21	5'-[AminoC6]CCCAAGGTGATGCGACTTGGACCAGGTGGTGGGGTGATGCTGCTGGTATA
309111	Slc25a22	5'-[AminoC6]CTGCTGACCCCATCCGATAATTTAGTTCTCCAGCCTGGTAACTCTTCTGA
362403	Slc25a26	5'-[AminoC6]ATACAAACTGTAGACATTAGGGCTGTCAGCTTGGGCCCAGCCCTCCAGTC
85262	Slc25a27	5'-[AminoC6]AGTGGTGTTGGATGGCAGGGCGAGAGGCTCCTCGCTGCTGGGTCTGCTTT
314441	Slc25a29	5'-[AminoC6]TGGCCAGTGATGCCAGCCAGTCTACACCCCACTGGCCTCCTATTTTCTTA
245959	Slc25a3	5'-[AminoC6]TACAAGGGCATATTTAATGGTTTCTCCATTACATTGAAAGAAGATGGCGT
361074	Slc25a30	5'-[AminoC6]ACGCCTTTCGTCTGTGCTCAGAGATTAGAGCGCAATAGCACCCACTCGCT
315023	Slc25a32	5'-[AminoC6]TCTTCAGGACCAGCATGTGTCTTATGGCGGTGTAACCGATGTGATCACAA
501039	Slc25a36	5'-[AminoC6]GCTTTAGTAGGTACCATACAGTGCTTTTAAGTTACCAGGGAGCGGCCTCC
306000	Slc25a37	5'-[AminoC6]CACCAGTCAGCCCTCAGTTGTATCCGGACAGTGTGGAGGACCGAGGGGTT
301067	Slc25a38	5'-[AminoC6]TGGCGCAGACGAGCTGGATGCTGCTCTGATGCCCCTTGTTAATTTCAGCT
360636	Slc25a39	5'-[AminoC6]CCCTTCGATGTCGTGAAGACACAGCGACAAATGTCACTGGGAGCAGTGGA
85333	Slc25a4	5'-[AminoC6]TTCAAGTCTGATGGCCTGAAGGGTCTCTACCAGGGTTTCAGTGTCTCTGT
365841	Slc25a44	5'-[AminoC6]AGGGCTTTAGGTGTGTGTAGTTGAACATCTGTGAATGAGCCGACTCATCC
291709	Slc25a46	5'-[AminoC6]TAAGGAGCCTAGCTTGTCCTTCATTTCTAAAAGAACTTATCCTAGAGGGA
25176	Slc25a5	5'-[AminoC6]TCGTATCCCCAAGGAACAGGGAGTCCTGTCCTTCTGGCGTGGCAACCTGG
65192	Slc27a2	5'-[AminoC6]AAATACAACGCCACTGTCATTCAGTACATCGGTGAACTGCTTCGGTACCT

498358	Slc30a9	5'-[AminoC6]ATTTGCATTAATGGCTTAAACTGCTTCTTTAAATTTCTTGCCTGGATTTA
29642	Slc38a2	5'-[AminoC6]AGTCCAGAACCTCACCTTTAGTCAAAAGACTTGGCACTTCTGCTCGAAGT
252919	Slc38a3	5'-[AminoC6]GCGGTCACACTTACGGTTCCGATCGTTCTGTTCCCGGTACGACGGGCCAT
24779	Slc4a1	5'-[AminoC6]CTAGAACTCCAGTGTCTGGATGGTGATGATGCCAAAGTGACCTTTGACGA
84484	Slc4a4	5'-[AminoC6]TTCCTGGGCACTTACACCTCTTCTATGGCCATGAAGAAATTCAAAACCAG
24782	Slc9a1	5'-[AminoC6]CAGGCACCGATGATGTCTTCACCCCCGGACCAAGTGACAGCCCCGGCTCC
24784	Slc9a3	5'-[AminoC6]TTTGCCTGCACCACAGGGAGATCGAGATGGGGCTAAAGGTGGACTTAATG
302863	Slc9a6	5'-[AminoC6]TTTGATGCTGATTCTGACCTGTTCCTGATTCAGGAGAAAAAAGTACAAAT
317170	Slc9a7	5'-[AminoC6]ATTTTCAAAATCATCGTGATTGGGGACTCCAACGTGGGCAAGACCTGCCT
290533	Slmap	5'-[AminoC6]GTCCAGGGGCATCTAACCAAAGTGGTGGAGGAATCCAAGCTTTCCAAAGA
59328	Smad5	5'-[AminoC6]GGTTCAGTTCAGGAACCTGAGCCACAATGAGCCGCACATGCCCCAGAATG
24899	Smcp	5'-[AminoC6]ACTCCATGCTGCCCACCAAAACCATGTTGCCCACCCAAACCGTGCTGTCT
362392	Snrnp27	5'-[AminoC6]TGAGGAAGATCTGGAGGGTAAAACGGAGGAGGAAATAGAAATGATGAAAT
292729	Snrpa	5'-[AminoC6]TCAACCAGTTCCCTGGCTTCAAGGAGGTGCGTCTGGTCCCTGGGCGCCAT
171365	Snrpb	5'-[AminoC6]ATTCCCCAGGGTCAGGTTACCACAGACCTGTTTGTTTGTTATGCTGTTTA
362242	Snta1	5'-[AminoC6]GGAGGCCCCTAAGCCACCCTGAGATCTCTGCAGATGGAGTCTTCTGGGTC
310815	Snx7	5'-[AminoC6]TGGAGGCAGAACATGCAGAATGACCTCAGGTCAGCATTTACAGACACGGC
24786	Sod1	5'-[AminoC6]CTTGGGCAAAGGTGGAAATGAAGAAAGTACAAAGACTGGAAATGCTGGAA
24787	Sod2	5'-[AminoC6]ATCTCTGTGTTGGGGCCTGTGGGGAGGCTGTAATCCTGTTCTACTGCAGT
313845	Sos1	5'-[AminoC6]CTCCATTCCATTGCTGGGCCTCCCGTTCCTCCACGGCAAAGCACTTCTCA
85384	Sos2	5'-[AminoC6]GTGGAAGTCTACACAAACTGAGTGAAGAGCCACTAGTTCCTCCTCCGCTT
353231	Spg7	5'-[AminoC6]CACTCTCCAGGAGAGGCGGGAGATTTTCGAGCAGCACCTGAAAGGCCTCA
691966	Sqrdl	5'-[AminoC6]GGGCACTCAGCAGGCTGGACCCCTCCAATTGCATACGGGAGCCTGCTGCA
83805	Src	5'-[AminoC6]AGAGTACATGAACAAGGGGAGTCTGCTGGACTTTCTCAAGGGGGAAACGG
501099	Srf	5'-[AminoC6]CACTAACCCCTTGCTACTGCCTTCAGTAGGAACAAGCCTGCCTCTGTGGT
291469	Srfbp1	5'-[AminoC6]GTGGTTCAAAAGAAAAACTGGCCAAGGGGAAGCAGGGACCCAAAGCAGTG
54304	Ssbp1	5'-[AminoC6]CCCTGTCATGAGACAGGTGGAGGGAAAAAACCCAGTCACGATATTTTCTC
25557	Star	5'-[AminoC6]CGGTGTCATCAGAGCTGAACACGGTCCCACCTGCATGGTGCTTCATCCAC
25125	Stat3	5'-[AminoC6]TTGCTCTCCCTTCCCTGGCCAGGTTCTTTAGTTACACAATAAGCTGAACT
81801	Stc1	5'-[AminoC6]CCTCCGAGGTGAGGGGGATTCTCCCTCACACATCAAACGCACCTCCCAAG
192277	Stip1	5'-[AminoC6]CCAAGATCCCCGGGTCATGACTACTCTCAGTGTCCTCCTTGGAGTTGATC
29332	Stmn1	5'-[AminoC6]AGTGCTCCAGAAAGCCATTGAGGAGAACAACAACTTCAGCAAAATGGCAG
84510	Stmn2	5'-[AminoC6]TCCCACTCAAATGAATTTGCTAGCTCTATTCTTTTGGAAGCTCCCCCATG
29246	Stmn3	5'-[AminoC6]ATGGCCAGCACCGTATCTGCCTACAAGGAGAAGATGAAGGAGCTATCTGT
79423	Stmn4	5'-[AminoC6]TGGTGTGTCATCTCTGATATGGAAGTCATCGAGCTGAATAAGTGTACCTC
298203	Stoml2	5'-[AminoC6]CTATGAGATCAGAGCTTGGCAAACTCTCTCTGGACAAAGTTTTTCGGGAA
361071	Sucla2	5'-[AminoC6]CTCTCTCTAAGCAAGGCAGACTGGCAGAAGAAACTGACCCCTGAGCAATT
114597	Suclg1	5'-[AminoC6]TCGCTGCTGCCGCCATCAATGAAGCAATTGACGCAGAGATTCCCTTGGTT
81805	Suox	5'-[AminoC6]GAGGTGATTATCAAGGGCTATGCATGGAGTGGTGGTGGTAGGGCTGTGAT
294385	Supv3l1	5'-[AminoC6]TCCCAGAACACTGGGAGTATTACAAGCATCCAATATCACGATGGATTGCC
64463	Surf1	5'-[AminoC6]ACAGGTGTTGCAGTTCTACTGCTGAAACAGCCGCCGCTAAAGCAGAGGAC
25155	Syk	5'-[AminoC6]AGTCTTGTTTGCTTTCTGGCCTCTCTAGTAGTGCCTCTCCTTTCCAGGGG
64531	Synj2bp	5'-[AminoC6]GATACAAGCTGTTTGTAGTATTTTGGGTTTTATTGTGCAAATAAACAATA
24804	Syp	5'-[AminoC6]GAGGTAAGGGGCTCTAGAAAGGGGACAGGAAGGGAACCAGACCTTGGCTG
304983	Tagln2	5'-[AminoC6]AGGCTGGCATGACTGGCTATGGGATGCCCAGGCAGATCCTCTGATCAGAC
83474	Tfam	5'-[AminoC6]CACTGGGGCGCACGGGGGTCGAGATGTGCGCGGGCTGCGGGGGCCGCATA
308140	Tfb1m	5'-[AminoC6]TACAGGAAGCAAACAGCGCAGTCGTCTTTCCATTATGGCCCAGTACCTCT

289307	Tfb2m	5'-[AminoC6]GCACATGGAGCCTTGGTCGTCATTTAGTGTGCATGCCGAAAATGGGCACT
83508	Timeless	5'-[AminoC6]CGAGTAGTGGACAAACTGTTGGCCCTGGGACTCGTGTCCGAGCGCAGGCA
64464	Timm10	5'-[AminoC6]CTCTGGCTAGGAGTGATTTCGAGATACTGAGAGCTCTCGGTTTCCAGCTC
54311	Timm17a	5'-[AminoC6]GGTAGCCATGGTTGGGTCAGCTGCGATGGGCGGCATTCTCCTAGCTTTAA
317374	Timm17b	5'-[AminoC6]GGATCCGAGCACCCCAGATTGGAGGTAGCTTTGCAGTATGGGGTGGCCTG
79463	Timm22	5'-[AminoC6]AGCGGCTGCATCACTGGTGGAGCCATCGGCTTCAGAGCTGGAGTAAAGGC
54312	Timm23	5'-[AminoC6]GGGTTAGCGGGCTTCTTCGGAGCGGGAGGAGCGGGTTACTCGAACGCTGA
29635	Timm44	5'-[AminoC6]AGAAGCTGGGCAAGACGGCGGCCTTCAAAGCCATCTCCCAGGGTGTAGAG
84383	Timm8a1	5'-[AminoC6]TATACTGTGACTTACTTAAATGTCAAATTGAAAATACGGTCTCAAGGTAG
64372	Timm8b	5'-[AminoC6]TCGGCTAGACTCCCGAACTGAAAACTGCCTCTCTAGCTGTGTGGATCGAT
171139	Timm9	5'-[AminoC6]GCCAAAGCAGGCCTCTTAGGCCAACCACGGTAGAGGCCGGAGGCACGGAC
292994	Tjp1	5'-[AminoC6]ATTACTATTTCTAAGCCTGTCTTTAGAAAAATGTTATTTCCTACTTTACT
115769	Tjp2	5'-[AminoC6]TTCTACTCCAGTCCCCATGCCTGAGAGTGAGGAGGTTGGGGAGAGCACCG
314640	Tjp3	5'-[AminoC6]GAGGAGGCTGTGCAGTTTCTGTTAGGGCTGCCTGCAGGGGAAGACGTGGA
24834	TK1	5'-[AminoC6]TTCAGCCAATGGTGAGAACAGAGCCACCCAGCATTGTGACATTGGTGGTG
291824	Tk2	5'-[AminoC6]CTTTGTCATCTGGCCCTCAGTGTCCACTGGGGAATCCTGGACCAGTCTTT
291661	Tmco6	5'-[AminoC6]AGAGGGAGAAGGCTCTGGTCAGCCTTCGTCGAGGCTTGCAGCACCCTGAC
84599	Tmed10	5'-[AminoC6]CTAAAGGGAAGTTTGCCTTTACCACAGAAGACTATGACATGTTTGAAGTA
293113	Tmem126a	5'-[AminoC6]TTCGCCGCTGGGAAGTTGCTGCCCTTCGGTCTCAGCTAAAGATTGACAAA
308593	Tmem143	5'-[AminoC6]GCACTGGGTAGTAGCTACCCTTCACCCTGACCACTTACTACCAGGCCGCC
170898	Tmlhe	5'-[AminoC6]TTCGTCTGGATGAAAGTACACTCTTTTTCACTTGGCCAGATGGTCATGTG
24835	Tnf	5'-[AminoC6]CCGTTCTCTACCCAGCCCCTGTCCCCGACTCTGACCCCCATTACTCTGAC
364420	Tnfrsf10b	5'-[AminoC6]ACCAAACGGGGCTAGGCGCCTCTATCAACCACCTGCTAGGTGCCTTGGAA
25625	Tnfrsf1a	5'-[AminoC6]ATCCCAGCCTTCAGCCCCAACCCCGGCTTCAACCCCACTCTGGGCTTCAG
246775	Tnfsf10	5'-[AminoC6]AGTACGGACTGTACTCCATCTATCAGGGGGGGCTGTTCGAGCTCAAAGAA
295531	Tnni3k	5'-[AminoC6]GACGTGGATATGTTTTGCCGAGAGGTGTCCATTCTCTGCCAGCTCAACCA
24837	Tnnt2	5'-[AminoC6]CTCTTCATGCCCAACTTGGTGCCACCCAAGATCCCTGACGGAGAGAGAGT
311621	Tomm34	5'-[AminoC6]GCTCTCATGGACTCCCTTGGACCTGAGTGGCGCCTCAAGCTGCCCCCTAT
308416	Tomm40	5'-[AminoC6]GATGGAAGGTGTCAAACTTACAGTCAACAAAGGGTTAAGCAATCGTTTCC
304017	Tomm70a	5'-[AminoC6]TTTATCACCACCGAGGACAGCTGAAAATCCTGCTGGATCTAGTTGAAGAA
64550	Top1	5'-[AminoC6]CTGGACAGAGAATATCCAAGGTTCTATCAAATATATCATGCTGAATCCCA
300029	Top1mt	5'-[AminoC6]GGCAATTTCAAGACGGAACCACCCGGCTTGTTCCGCGGCCGAGGCGACCA
303194	Top3a	5'-[AminoC6]AGCCTGTCTCAACCTCTGGTTAACAGACATACTGGACCTTCGAAGGCAGT
315969	Topbp1	5'-[AminoC6]CCAGAACATGGTCTGCTTGAAAACAGAATATATTGCTGATTACCTCATGA
24842	Tp53	5'-[AminoC6]CCACTACAAGTACATGTGCAACAGCTCCTGCATGGGGGGCATGAACCGCC
317675	Tph2	5'-[AminoC6]CTCTTTCTGACAAGGCGTGTGTAAAAGCCTTTGACCCGAAGACAACCTGC
24849	Tpi1	5'-[AminoC6]TATCAATGCCAAACAATGAGCACTGCTCATCCCCCTACCTTCCTGCGTAG
83534	Tpp1	5'-[AminoC6]GCCTGTGCCCAGTTCCTGGAACAGTACTTCCATAACTCGGATCTGACTGA
246756	Tradd	5'-[AminoC6]GGACAGCCCCGACGTACTGCAGATACTCAAGATCCACTGCAGCGACCCTC
311786	Traf2	5'-[AminoC6]CCCAATGATGCTCTCTTACAATGGCCTTTTAATCAGAAGGTGACTTTGAT
287069	Trap1	5'-[AminoC6]GATAAGCCTCGCTTCATTTTGCACTACAAGACGGACGCCCCACTCAATAT
291324	Trdmt1	5'-[AminoC6]CTGCGGCTTTCAGTATCAAGAGTTTCTGTTGTCTCCGTCCTCTCTAGGCA
313236	Trim14	5'-[AminoC6]GCCAGGCACCTCTTACCAGGCATTGGAGTCATGCACTTCACACAGTTGAT
362586	Trit1	5'-[AminoC6]CATGATCTGCACAGGAAACAGCAGGCCTTTCAGCTCCTCGTGTGCCTGTT
362976	Trmu	5'-[AminoC6]AAAAGCACACTAAGAGACCAGATGGACTGTTCAGGAATCGATTTGAAGTC
23437	Trnas2	5'-[AminoC6]AAGAAAGTATGCAAGAACTGCTAATTCATGCACCCATACCTAAAACATAT
312616	Trnt1	5'-[AminoC6]GGTACACTGTTTGATTACTTTAATGGTTATGCAGATTTAAAGAATAAAAA

679068	Tsfm	5'-[AminoC6]AGACTTGTGGCGGGGATCTCAAGCAGGCAGAGGCCTGGCTGCACAAACAG
24230	Tspo	5'-[AminoC6]TGGTATGCTAGCTTGCAGAAACCCTCCTGGCATCCGCCTCGCTGGACACT
25274	Tst	5'-[AminoC6]ACACACGTCGTGGTATACGATGGAGACGACCTGGGCAGCTTCTATGCACC
84015	Ttn	5'-[AminoC6]GAGATGGCTCAGTGGTTAAGAGCACTGACTGCTCTTCCAGAGGTCCTGAG
64158	Tuba1a	5'-[AminoC6]GATCATTGACCTTGTCTTGGACAGAATTCGCAAGCTGGCTGACCAGTGCA
500929	Tuba1b	5'-[AminoC6]TGGTGAAATGTGACCCTCGCCATGGTAAATACATGGCTTGCTGCCTGCTG
300218	Tuba1c	5'-[AminoC6]TATGACATCTGTCGTAGAAACCTCGACATTGAGCGCCCAACCTACACTAA
246118	Tubb3	5'-[AminoC6]GGCAACAACTGGGCCAAAGGGCACTATACAGAGGGCGCCGAGCTGGTGGA
29213	Tubb4	5'-[AminoC6]CGCCATGTTTAGGCGCAAGGCCTTCCTGCATTGGTACACGGGTGAAGGCA
29214	Tubb5	5'-[AminoC6]CCCAACAACGTCAAGACGGCTGTCTGTGACATCCCACCGCGAGGCCTCAA
307351	Tubb6	5'-[AminoC6]GGTAGCCGTGTGTGACATCCCACCACGGGGCCTGAAGATGGCCTCCACCT
293481	Tufm	5'-[AminoC6]GAATGCTGGTGACAAACTAACAGAGGTCCTCGAAGAAGCCAACACTCTGT
499016	Tulp4	5'-[AminoC6]ACTGTCCCCTCTCATGATAGGGCAGGGCCAGCACCTGGATGTGGCTCGAG
116484	Txn1	5'-[AminoC6]ATGTTGCTGCAGACTGTGAAGTCAAATGCATGCCGACCTTCCAGTTCTAT
79462	Txn2	5'-[AminoC6]CGGACATTTCACACCACCAGAGTCTGTTCAACAACCTTTAACGTCCAGGA
50551	Txnrd2	5'-[AminoC6]CACATGGAGTCTCATGGCACCCGGTTCCTGAAAGGCTGTGTCCCCTCCCT
315219	Tymp	5'-[AminoC6]CTGGATGGTGCGGGGCCGCCGGATCTGCGGGACCTGGTCATTAGGCTAGG
314432	Uba1	5'-[AminoC6]TATGGGTTGACTGGCTCCCAAGACCGAGCTGCTGTGGCCTCACTCCTACA
192255	Ubb	5'-[AminoC6]CCTGGTCCTCCGCCTGAGGGGTGGCTATTAATTCTTCAGTCTGCATTCCC
289623	Ube2k	5'-[AminoC6]CCAGTTAGGATTCCTTGGTACTCGCTGGTCCTCTGACATGCTTTTACATA
116725	Ube2n	5'-[AminoC6]TGTTAAGTGCTCCTAATCCAGATGATCCATTAGCAAATGATGTAGCTGAG
54315	Ucp2	5'-[AminoC6]CTGGCAGGTAGCACCACAGGTGCCCTGGCTGTGGCTGTGGCCCAACCTAC
25708	Ucp3	5'-[AminoC6]TTCCTAGTCACCAGATGACTCCGCCCTGTAATGTGTCTGCCAAGTGGACT
288702	Unc119b	5'-[AminoC6]GGATTTGGACCCTTATTCTATGTCTGGCCAGCACCTGATGGCCACGTGTG
304577	Ung	5'-[AminoC6]AACGCCGTCCTCACTGTCCGCGCACACCAAGCCAATTCCCATAAGGAGCG
690848	Uqcr	5'-[AminoC6]TAGGCAGCCCCCTCCCCCACCACAGGCCTCGATGGTAGCATGCGCTGAGG
362897	Uqcrb	5'-[AminoC6]CAGCACTGAACAGTTGGGCCATCAGCTTTCAGAGTGACTGATGGAAGGAA
301011	Uqcrc1	5'-[AminoC6]AGAGAAGGAGGTAGAGAGTATTGGCGCCCATCTTAATGCCTACAGCACTC
293448	Uqcrc2	5'-[AminoC6]TGGAGCTGGTAGAGCTGGAGATCCGGGAGCTGCTCACTGAGTTTGGCTAT
291103	Uqcrfs1	5'-[AminoC6]TGTACCCATTGCAAACGCAGGAGATTTTGGTGGCTACTATTGCCCCTGCC
366448	Uqcrh	5'-[AminoC6]AAGAGGAAGAAGAGGAAGAATTAGTGGACCCCCTGACAACAGTGAGAGAG
497902	Uqcrq	5'-[AminoC6]ATGACACTAATTAGTGTGTCAGGTGTACTTTATAGACACTAATGAACTCT
309070	Uros	5'-[AminoC6]AATTCCACACCCTGGAATCCAAGGGAGCCTGGAGAGCTACTATGAAAATC
303394	Usp32	5'-[AminoC6]GTCGGCGAGCACAAGCTGAGCCCATCAACCTGGACAGCTGTCTCCGTGCC
25624	Vamp1	5'-[AminoC6]TGAGACTCCCAGGGTCCCACAGAACACTTCCCCCTGCACTACCCACTTAC
60431	Vapb	5'-[AminoC6]CACAAGTTTATGGTTCAGTCTATGTTTGCTCCGCCCGACACTTCCGATAT
83529	Vdac1	5'-[AminoC6]TCATACTAATGTGAATGATGGGACGGAGTTTGGTGGCTCCATTTACCAGA
83531	Vdac2	5'-[AminoC6]TGTATAAACCTTGGCTGTGATGTTGATTTTGATTTTGCTGGACCTGCCAT
83532	Vdac3	5'-[AminoC6]ATACAGACAATACTCTTGGGACAGAAATCTCTTGGGAGAATAAGTTGGCT
24874	Vhl	5'-[AminoC6]CACTCTGCTTTGGCAGGCGCTAGTTATGCTTCGATGGGAGAGGGGAGTGA
81818	Vim	5'-[AminoC6]AAGAAATTGCCTTTTTGAAGAAGCTGCACGATGAAGAGATCCAGGAGCTG
314442	Wars	5'-[AminoC6]TTTTCTGCTAAGGGTGATCAGGTGATGCTAATGTCGTGTGGTCAGATGGA
690654	Wars2	5'-[AminoC6]GATTTTAGCCTGTCCATATTTAGTTCAGTTTGATGATCAGTTGCATTTGA
29753	Ywhae	5'-[AminoC6]CAGCCTTGTGGCTTACAAAGCTGCTAGTGACATTGCGATGACAGAACTTC
25578	Ywhaz	5'-[AminoC6]ACTGCTTCCATGTCTAAGCAAAGAAAACTGCCTACATATTGGTGTGTGCT
296374	Zmynd8	5'-[AminoC6]AATCTACAACGACCTCTCCAAGAACACCACTGGGAGCACAATTGCTGAGA

Supplementary Table 2. 356 Differentially Expressed Genes between Frontal Cortex (FC) and Hippocampus (HC)

Gene	Frontal Cortex		Hippocampus		FC vs HC			Gene	Frontal Cortex		Hippocampus		FC vs HC		
	Mean	SD	Mean	SD	Log2	*p*	FDR (%)		Mean	SD	Mean	SD	Log2	*p*	FDR (%)
Wars	1690.3	247.7	4499.2	432.5	-1.41	0.00	3.57	Rab4a	21350.0	3964.7	15432.3	1910.7	0.47	0.01	5.11
Slc25a29	1533.6	153.0	4003.5	711.2	-1.38	0.01	5.14	Cap2	1539.7	249.1	1110.1	130.1	0.47	0.01	4.32
Slc25a26	2089.3	76.9	4946.7	219.6	-1.24	0.00	3.57	Hnrnpa1	9331.2	2427.8	6725.2	600.6	0.47	0.05	11.80
Drd4	2779.2	602.0	6402.2	804.8	-1.20	0.01	4.57	Prkcdbp	12024.2	1331.8	8660.0	823.8	0.47	0.01	5.05
Pkn1	3369.0	976.2	7412.7	738.3	-1.14	0.01	5.05	Crem	12364.1	783.5	8900.0	851.1	0.47	0.01	4.21
Elk1	1995.5	45.4	4360.2	649.0	-1.13	0.01	5.05	Dnm1	13416.1	883.4	9640.1	443.2	0.48	0.00	3.73
Card6	1912.5	120.8	4175.5	546.6	-1.13	0.02	6.67	Rab8a	17330.1	1093.4	12441.8	1623.6	0.48	0.01	4.62
Prkar2b	7807.4	1441.5	16075.9	1605.6	-1.04	0.03	8.22	Mxd4	12114.7	1318.0	8691.5	398.0	0.48	0.01	4.57
Pik3c2g	3260.8	707.3	6371.5	492.4	-0.97	0.01	4.84	Rec8	14444.8	1393.0	10348.2	830.2	0.48	0.01	4.62
Sucla2	12541.8	1413.7	24149.8	5244.6	-0.95	0.05	10.35	Oxr1	7948.1	1588.6	5689.9	386.1	0.48	0.03	8.07
RASA3	9010.0	2901.2	17337.0	744.1	-0.94	0.04	9.02	Slc25a3	14794.2	336.1	10565.4	761.4	0.49	0.00	3.57
Gng7	4441.1	816.5	8518.0	1073.9	-0.94	0.02	5.62	Apex2	9893.5	1531.5	7060.8	445.9	0.49	0.02	5.91
Snrnp27	3829.9	468.4	7006.5	565.7	-0.87	0.01	4.22	Nucks1	2968.5	912.8	2118.5	340.5	0.49	0.05	11.60
Glrx3	7334.1	1773.5	13273.3	1448.9	-0.86	0.04	8.96	Timeless	2855.6	667.9	2037.5	85.2	0.49	0.03	7.22
Card10	4856.4	576.7	8748.2	698.4	-0.85	0.00	3.96	Drd2	5064.8	960.0	3611.9	163.7	0.49	0.02	6.80
Apcs	4637.3	531.4	8289.0	1000.2	-0.84	0.02	5.53	Ptges2	8668.6	371.2	6180.6	730.6	0.49	0.00	4.00
Ezr	6883.6	331.1	12149.6	1528.9	-0.82	0.02	6.71	Nudt21	10719.0	889.8	7621.7	473.9	0.49	0.01	4.23
Pdp1	5500.6	748.4	9690.2	984.2	-0.82	0.02	5.62	Rrad	4169.5	792.4	2960.0	170.5	0.49	0.02	5.62
Ppid	10218.2	1724.5	17994.7	1615.2	-0.82	0.01	4.81	Egr1	11478.9	2440.4	8147.9	1675.4	0.49	0.05	10.69
Anxa2	5033.7	752.5	8826.5	1158.2	-0.81	0.03	8.19	Cybb	990.1	242.9	702.4	235.3	0.50	0.03	8.55
Clcn3	3564.9	488.3	6036.0	83.2	-0.76	0.00	3.57	Bnip1	13281.9	591.1	9422.6	300.2	0.50	0.00	3.66
Mrps27	9424.9	1701.0	15723.9	944.0	-0.74	0.01	4.89	Mnat1	13038.8	1426.3	9242.1	332.6	0.50	0.01	4.69
Mrpl53	3228.4	148.8	5273.1	349.6	-0.71	0.04	9.59	Gucy1b2	8535.6	509.2	6047.0	385.0	0.50	0.00	3.57
Ddx10	7727.3	1197.3	12513.6	827.1	-0.70	0.01	4.29	Txn1	5370.0	81.3	3796.6	134.8	0.50	0.00	3.57
Impdh1	6116.3	818.5	9810.1	708.5	-0.68	0.01	4.29	Guca2a	14081.9	224.6	9954.5	1007.9	0.50	0.00	3.73
Sdhb	8054.1	985.8	12713.4	129.3	-0.66	0.00	3.57	Uqcrfs1	7232.1	898.3	5096.3	531.2	0.50	0.01	5.05
Mrps34	6385.6	1211.9	10040.3	59.2	-0.65	0.03	8.19	Map4k5	5213.9	1265.0	3673.6	409.1	0.51	0.04	9.59
Mccc2	9920.7	1747.0	15550.0	688.3	-0.65	0.02	6.80	Csnk1a1	14867.6	1060.8	10453.6	192.3	0.51	0.00	3.57

Mrps36	5255.3	753.4	8220.0	201.9	-0.65	0.01	5.14
Cox6c	6971.0	679.4	10885.6	385.7	-0.64	0.00	3.57
Rassf5	7166.7	877.9	11176.3	425.2	-0.64	0.00	3.68
Rab23	5073.0	563.8	7725.1	270.1	-0.61	0.02	6.37
Afg3l1	12956.2	1900.5	19678.8	1029.8	-0.60	0.02	5.70
Ucp2	6379.0	600.6	9674.7	371.7	-0.60	0.05	10.32
mt-Co2	8369.4	1111.5	12674.9	527.3	-0.60	0.00	4.08
Phb	10429.7	1598.7	15559.5	368.9	-0.58	0.01	5.21
Mrpl23	7942.4	534.0	11848.4	94.3	-0.58	0.02	6.33
Slc25a17	10192.0	1691.6	14917.7	417.5	-0.55	0.04	10.13
Mrpl45	1857.4	67.3	2373.7	212.9	-0.35	0.02	6.62
Cryz	9101.4	990.2	11585.2	340.7	-0.35	0.01	5.05
Atad3a	11029.0	1310.5	13778.8	773.4	-0.32	0.04	9.02
IDH3G	594.4	93.3	742.2	187.8	-0.32	0.02	5.62
Chd1	6546.8	909.5	8159.8	449.8	-0.32	0.05	11.78
mt-Co1	2675.8	352.8	3243.8	248.6	-0.28	0.03	6.95
Npy	3181.7	318.9	3823.9	139.5	-0.27	0.05	10.56
mt-Atp8	8861.8	726.1	10482.3	422.5	-0.24	0.01	5.21
Esr2	10584.1	1267.5	8496.2	566.9	0.32	0.02	6.68
Slc25a27	20147.8	1643.8	16171.6	984.8	0.32	0.02	5.62
Chd3	5840.5	376.5	4686.1	640.5	0.32	0.00	4.02
Ogdh	12292.0	1338.9	9856.6	281.4	0.32	0.00	3.57
Atpaf2	9145.2	974.0	7333.1	626.3	0.32	0.01	4.22
Hmgcs2	11763.8	1112.3	9423.0	1281.5	0.32	0.02	6.09
Mknk1	2463.4	437.7	1972.6	553.5	0.32	0.03	8.04
Ucp3	7961.4	1078.9	6367.2	542.2	0.32	0.02	6.80
Rab3a	21095.0	3147.7	16836.5	1555.4	0.33	0.02	5.91
Gprasp1	6339.0	1140.6	5058.0	208.6	0.33	0.00	3.57
Gnat1	4749.5	718.0	3781.9	91.2	0.33	0.02	6.80
Arntl	11768.4	816.8	9364.7	487.9	0.33	0.01	4.62
Pla2g4c	5605.6	1260.9	4446.5	253.6	0.33	0.03	6.87
Anxa11	8839.2	2050.4	6211.2	554.0	0.51	0.04	9.64
Gnb2l1	3196.4	388.2	2245.9	347.8	0.51	0.01	4.54
Mrpl43	4726.2	1172.3	3311.3	324.4	0.51	0.04	9.02
Dmgdh	8532.3	1649.4	5966.1	101.7	0.52	0.03	6.87
mt-Tk	8683.4	294.4	6056.5	382.1	0.52	0.00	3.57
Chd5	6700.6	1127.3	4671.7	25.3	0.52	0.01	5.14
Itpka	5862.3	712.7	4074.4	468.8	0.52	0.01	4.69
Cpt1a	8086.3	274.5	5619.4	190.0	0.53	0.00	3.57
Traf2	9006.2	965.5	6252.3	184.1	0.53	0.01	4.32
Cox15	5540.7	774.3	3822.5	305.4	0.54	0.01	5.14
Gpd1	10029.8	2795.5	6911.2	486.8	0.54	0.05	11.38
Kif5b	14576.0	287.1	10032.0	735.8	0.54	0.00	3.57
Pik3cb	13488.2	733.5	9273.4	1047.0	0.54	0.01	4.22
Map3k10	11134.5	1764.3	7638.5	703.6	0.54	0.02	6.03
Usp32	8058.1	1102.5	5522.3	697.7	0.55	0.01	5.13
Ddr1	14977.4	1533.1	10262.1	1527.8	0.55	0.00	4.00
Tspo	9364.0	2043.6	6416.0	1133.2	0.55	0.04	9.31
Cyp19a1	10729.2	1830.9	7347.6	555.0	0.55	0.02	6.03
Pdhx	3345.0	519.5	2287.7	382.6	0.55	0.02	5.53
Ppard	10671.6	377.6	7296.7	1699.5	0.55	0.01	4.62
Clic4	4754.6	1231.4	3242.8	601.1	0.55	0.01	4.89
Abat	2311.0	175.1	1575.4	183.6	0.55	0.00	3.57
Ccrn4l	9542.4	1200.6	6497.6	964.8	0.55	0.01	5.11
Dhx15	10003.4	1059.3	6797.6	405.2	0.56	0.01	4.57
Ak1	10419.9	1905.9	7066.1	232.7	0.56	0.02	6.37
mt-Tl1	6163.3	500.8	4174.8	772.7	0.56	0.00	3.79
Ptgs2	8617.9	1034.9	5823.2	194.2	0.57	0.01	4.57
Scp2	9176.3	1844.9	6200.5	661.6	0.57	0.03	6.87
Dnah9	7374.5	1162.2	4980.1	321.6	0.57	0.01	5.11
Glud1	9863.2	1120.1	6651.8	1069.8	0.57	0.01	4.89
Rras2	3183.3	144.0	2145.6	302.6	0.57	0.00	3.57

Decr1	16903.1	473.1	13398.1	953.5	0.34	0.00	4.00
Fabp4	28057.7	1819.0	22236.3	2603.4	0.34	0.01	4.20
Mtp18	9856.1	1677.2	7808.2	136.1	0.34	0.04	9.12
Map3k7ip1	5449.0	597.7	4311.3	279.4	0.34	0.00	3.57
Slmap	14908.4	371.3	11791.4	1166.9	0.34	0.01	4.22
Mthfd1	12842.5	673.6	10149.6	900.0	0.34	0.00	3.57
Ndufa4	2924.4	67.9	2306.9	234.9	0.34	0.00	3.57
Gnaq	16334.8	477.6	12873.9	113.2	0.34	0.00	3.57
Mlycd	15307.0	979.1	12056.7	744.4	0.34	0.01	4.23
Bcl6b	15648.7	2890.6	12316.0	1765.8	0.35	0.02	6.09
Bdnf	8745.9	1118.2	6864.3	980.3	0.35	0.03	7.32
Igf1r	12387.1	71.2	9721.4	537.3	0.35	0.00	3.57
Dusp11	10177.7	1623.2	7981.1	711.9	0.35	0.02	6.09
mt-Rnr1	10166.7	892.6	7963.3	1614.0	0.35	0.01	5.05
Fabp3	15223.9	1441.5	11922.0	588.3	0.35	0.01	4.29
Nmu	12286.6	1638.1	9602.0	515.0	0.36	0.01	4.57
Ndufa1	1792.5	504.0	1400.7	47.0	0.36	0.04	9.59
mt-Tf	13387.8	2206.1	10460.3	1536.7	0.36	0.01	5.35
Abcb6	14966.5	1104.7	11691.5	1136.2	0.36	0.01	5.21
Crat	2250.5	252.2	1757.4	199.7	0.36	0.01	4.81
Slc1a3	7893.5	1242.5	6161.1	125.9	0.36	0.03	7.30
Kars	8379.7	451.8	6539.4	273.0	0.36	0.00	3.57
Smad5	5737.5	1205.8	4473.4	177.4	0.36	0.04	10.09
Mipep	2086.8	158.0	1626.8	420.0	0.36	0.01	5.35
Ppif	3727.4	601.5	2904.8	115.9	0.36	0.02	5.84
Gna12	8812.1	737.8	6861.4	580.1	0.36	0.01	4.69
Dhx36	6456.8	558.8	5022.8	540.3	0.36	0.01	5.21
Plch1	8821.4	750.7	6861.3	834.1	0.36	0.01	4.23
Mpst	11354.4	1801.3	8831.4	422.7	0.36	0.03	8.19
Dguok	11174.3	1997.0	8689.2	903.1	0.36	0.02	6.58
Grpel1	15538.9	829.6	12083.1	1860.9	0.36	0.02	5.62
Htra2	16639.9	4099.9	11205.6	476.6	0.57	0.04	9.59
Cox7a2	8883.3	1880.7	5972.9	736.8	0.57	0.03	7.30
Camk4	14732.9	312.0	9894.9	518.8	0.57	0.00	3.57
Aldoa	12808.1	2286.6	8599.5	266.2	0.57	0.02	5.96
Gnai1	8898.3	197.2	5973.1	1214.2	0.58	0.01	4.29
Mmaa	5581.7	991.0	3730.3	483.9	0.58	0.02	6.21
Dusp2	4975.3	137.5	3323.9	425.7	0.58	0.00	3.57
Sdhc	6823.4	1650.4	4558.5	52.2	0.58	0.03	8.19
Fbn1	7106.0	182.6	4746.9	396.3	0.58	0.00	3.57
Cyba	5656.0	1553.5	3758.9	323.6	0.59	0.04	10.09
Mapk8ip3	5590.3	1143.5	3703.6	63.6	0.59	0.02	6.32
Prkcd	10309.2	996.5	6825.8	1002.3	0.59	0.00	4.00
Acsl4	11868.4	461.5	7858.0	1380.3	0.59	0.00	4.00
mt-Tr	8623.9	571.4	5700.5	188.5	0.60	0.00	3.71
Tomm34	4925.4	1209.1	3252.4	416.4	0.60	0.03	8.15
Bhlhe40	14496.0	361.1	9540.4	945.3	0.60	0.00	3.57
Ndufb10	3149.0	180.6	2071.8	220.6	0.60	0.00	3.57
Idh3a	2801.3	845.9	1839.8	273.8	0.61	0.04	9.59
Frk	9798.2	1423.4	6433.5	172.1	0.61	0.01	4.57
Mrps25	12383.9	1192.7	8126.2	167.0	0.61	0.00	4.02
Egfr	2505.6	187.3	1637.6	245.6	0.61	0.00	3.57
Vamp1	9221.2	2048.2	6016.8	587.5	0.62	0.03	6.95
Rap2ip	5882.1	470.8	3833.5	456.3	0.62	0.00	3.57
Dusp12	7658.0	323.5	4973.6	473.9	0.62	0.00	3.57
Kif1b	12207.0	1499.3	7917.5	454.9	0.62	0.01	4.57
Grin2d	3950.0	226.0	2558.8	304.1	0.63	0.00	3.57
Adh6	1330.2	271.4	861.5	119.6	0.63	0.01	4.62
Gpam	7728.4	799.2	4990.1	350.9	0.63	0.01	4.23
Nr3c1	3867.9	308.6	2496.7	167.2	0.63	0.00	3.57
Mapk12	7635.2	1065.3	4927.8	277.5	0.63	0.01	4.61
Ercc5	9011.1	1925.0	5808.9	623.0	0.63	0.02	6.72

Nusap1	6307.9	615.0	4899.6	264.9	0.36	0.01	4.86
mt-Tn	11988.8	659.9	9309.8	671.4	0.36	0.01	4.57
Rhot1	10483.8	1942.0	8134.3	539.2	0.37	0.02	6.83
Phlpp1	9692.4	2107.5	7515.8	395.3	0.37	0.05	11.60
Ppp2r1a	11404.4	1685.0	8840.4	227.8	0.37	0.02	6.83
Rap2b	3938.3	1046.9	3050.0	123.8	0.37	0.02	5.70
Plcg1	10657.7	770.6	8252.8	524.4	0.37	0.01	4.62
Prdx1	15565.1	2617.3	12051.6	442.8	0.37	0.03	8.33
Map2k5	20540.8	3125.2	15900.0	2269.6	0.37	0.03	8.13
Rab39	10921.0	1053.6	8441.9	459.2	0.37	0.01	4.22
Slc25a22	11375.5	726.5	8792.7	472.5	0.37	0.01	4.46
Pick1	19076.7	2716.4	14713.7	1184.1	0.37	0.03	6.87
HK2	17709.1	1014.0	13627.4	2533.2	0.38	0.01	5.35
Nfkbib	15378.5	574.1	11819.6	765.1	0.38	0.00	3.58
Snx7	3438.2	462.8	2640.1	104.8	0.38	0.01	4.69
Nnt	9431.7	1312.6	7241.5	1221.1	0.38	0.03	6.87
Mapk9	3202.8	359.2	2451.1	98.6	0.39	0.01	4.23
Aven	6045.5	268.9	4621.3	164.5	0.39	0.00	3.92
Rxra	5405.2	937.0	4131.7	74.9	0.39	0.00	3.57
Cyb5a	3758.3	150.8	2872.2	654.6	0.39	0.01	5.14
Acsl6	11766.9	1460.0	8989.6	666.8	0.39	0.01	5.05
Acaa2	1946.2	316.8	1486.7	356.8	0.39	0.02	5.62
Lrch4	2873.1	329.7	2192.4	137.0	0.39	0.01	4.57
Gng11	14711.6	1121.7	11223.7	639.1	0.39	0.00	3.57
Rassf1	5995.1	639.7	4571.4	228.7	0.39	0.01	5.05
mt-Tq	8817.7	871.8	6720.0	167.3	0.39	0.01	4.57
Ehd3	13240.4	2335.0	10085.1	609.0	0.39	0.03	8.46
Tph2	12301.0	852.7	9368.4	763.3	0.39	0.01	4.23
Dhx8	5027.6	763.3	3827.3	489.3	0.39	0.01	5.16
Gnai3	13178.8	1958.8	10031.3	670.3	0.39	0.03	6.87
Dcxr	4066.5	320.9	3093.8	116.3	0.39	0.00	3.57
Rab11a	1856.1	620.9	1196.1	127.2	0.63	0.04	8.67
Mrpl52	3299.0	481.6	2125.7	46.7	0.63	0.01	4.29
Plcb4	12184.2	1632.4	7848.8	2238.2	0.63	0.02	6.78
Ndufs2	5077.6	1507.4	3269.6	131.2	0.64	0.04	9.59
Mtch2	996.3	373.0	641.3	62.7	0.64	0.03	6.87
Cyp2e1	10394.6	1471.6	6686.0	548.5	0.64	0.01	4.57
Ddx31	3724.8	451.1	2385.8	112.3	0.64	0.01	4.21
Nrg1	11932.3	1342.1	7619.1	333.6	0.65	0.01	4.23
Gstz1	4893.6	1103.0	3122.4	242.4	0.65	0.02	6.37
Aga	2620.7	311.8	1668.6	140.6	0.65	0.00	3.57
Msn	14265.3	1021.8	9057.3	959.7	0.66	0.00	4.20
Apoa1	8216.9	1516.2	5211.9	382.3	0.66	0.02	5.66
Slc25a18	5421.5	1182.9	3423.7	149.4	0.66	0.02	6.09
Dctn6	9096.9	1253.9	5728.9	448.4	0.67	0.01	4.62
Cad	9806.3	1755.7	6141.8	549.8	0.68	0.02	5.36
Mrpl34	8363.6	1167.6	5234.5	261.8	0.68	0.01	4.46
Ak2	9520.7	1772.7	5947.7	743.1	0.68	0.02	5.91
Cyp24a1	4343.4	598.3	2701.5	62.5	0.69	0.00	3.57
Gpt	11471.1	1607.8	7130.9	385.8	0.69	0.01	4.54
Lep	15751.8	2787.1	9769.0	976.0	0.69	0.02	5.53
Htr2b	9979.3	1509.1	6185.7	327.9	0.69	0.01	4.69
mt-Tw	4701.4	204.8	2911.2	204.5	0.69	0.00	3.57
Apex1	7741.7	2486.2	4792.9	240.3	0.69	0.01	4.23
Lyz2	7822.9	1117.7	4835.2	383.7	0.69	0.01	4.57
Atp5o	6116.7	1507.4	3765.6	255.7	0.70	0.03	6.87
Glrx1	12804.8	1833.4	7875.1	825.7	0.70	0.01	4.23
Lcn2	7689.2	235.9	4707.2	900.2	0.71	0.00	3.66
Casp7	4278.2	209.8	2617.7	493.0	0.71	0.00	3.57
Gucy2c	7639.3	1377.9	4662.9	482.6	0.71	0.01	4.62
Shmt2	2924.7	796.6	1777.5	270.7	0.72	0.01	4.22
Plcd4	5376.0	1467.1	3255.9	43.2	0.72	0.03	7.30

Prl3b1	5295.7	837.4	4028.9	118.0	0.39	0.02	6.51
Bcs1l	10566.8	942.8	8031.5	100.9	0.40	0.01	4.23
Dbt	8760.4	1738.6	6652.2	342.3	0.40	0.04	9.24
Mrpl2	26107.5	4004.3	19798.7	1950.8	0.40	0.03	7.97
Atp5i	16306.6	1012.6	12355.4	1312.5	0.40	0.01	4.57
Mterf	14319.6	287.1	10848.8	410.1	0.40	0.00	3.57
Acsl3	12657.9	305.5	9567.1	415.8	0.40	0.00	3.57
Ran	8700.9	1662.7	6538.9	468.1	0.41	0.04	9.13
Vdac1	3985.2	545.4	2994.4	98.5	0.41	0.01	4.83
Clcf1	5340.3	210.4	4011.2	437.9	0.41	0.00	4.00
Ndufa10	3485.1	484.3	2616.6	435.5	0.41	0.01	4.23
GPX1	8106.0	1747.7	6081.3	764.8	0.41	0.05	10.69
Map3k3	4696.4	306.4	3522.1	495.8	0.42	0.00	4.00
Gng5	3288.5	217.9	2465.5	28.6	0.42	0.00	3.57
mt-Ti	9661.5	577.2	7240.2	294.6	0.42	0.00	4.08
Ntf4	15352.0	712.1	11501.5	739.3	0.42	0.00	3.57
Slc25a14	15207.0	1635.5	11387.7	1341.6	0.42	0.01	5.35
Peci	8658.5	1491.3	6481.7	238.7	0.42	0.02	6.03
Hsd11b1	5338.4	664.6	3995.3	311.3	0.42	0.01	5.14
Slc27a2	4770.1	1324.4	3569.8	786.9	0.42	0.03	7.30
Nfkb1	8048.4	113.7	6020.4	413.0	0.42	0.00	3.57
Gpd2	6158.5	218.8	4604.2	270.6	0.42	0.00	3.57
Aifm1	3826.4	657.5	2857.9	255.2	0.42	0.02	5.53
Cyp17a1	10265.2	1440.3	7658.7	326.5	0.42	0.02	6.03
Agxt	12290.1	1604.5	9167.5	861.9	0.42	0.02	6.32
mt-Rnr2	8898.0	344.6	6636.9	1153.1	0.42	0.01	4.23
Mcl1	9708.2	2104.1	7240.9	303.4	0.42	0.05	10.55
Gucy1b3	12526.8	560.2	9329.3	663.1	0.43	0.00	3.57
Ddx19a	7302.1	801.9	5436.8	356.6	0.43	0.01	4.69
Acat1	12446.4	1472.3	9256.0	1493.3	0.43	0.01	4.23
Ntrk1	5493.3	1443.5	4084.6	122.2	0.43	0.05	11.65
Gnb3	11803.8	2140.2	7129.6	540.2	0.73	0.01	5.14
Fdft1	10056.6	1863.8	6049.8	387.6	0.73	0.01	5.21
Csnk1g1	4281.0	887.8	2572.5	206.3	0.73	0.01	4.69
Stmn4	12009.1	2224.0	7169.6	512.1	0.74	0.01	5.05
Hibadh	9392.6	1939.0	5602.9	443.9	0.75	0.01	4.57
Sdha	5088.5	275.2	3031.9	635.2	0.75	0.00	3.92
Cs	8871.3	800.6	5278.2	620.1	0.75	0.00	3.57
Gad1	12837.5	928.7	7609.2	397.8	0.75	0.00	3.57
Vhl	15300.7	2291.9	9027.3	527.0	0.76	0.00	3.57
Otc	7904.4	2204.3	4652.3	125.7	0.76	0.03	7.39
Grm8	8415.5	2979.1	4933.1	436.9	0.77	0.05	11.58
Mrpl1	6352.4	1555.8	3705.7	157.2	0.78	0.02	6.37
Abca4	8195.4	1615.7	4772.0	521.9	0.78	0.01	4.74
Card9	5980.2	1216.9	3480.3	525.7	0.78	0.01	5.21
Gucy2d	5433.7	971.5	3151.9	271.5	0.79	0.01	4.62
mt-Tc	7070.7	772.4	4094.7	176.9	0.79	0.00	3.69
Htr6	2049.5	631.0	1184.4	185.8	0.79	0.02	6.72
Ntrk2	6620.3	351.7	3805.2	255.8	0.80	0.00	3.57
Rab11b	6199.4	1771.2	3535.4	243.8	0.81	0.03	7.23
Sfxn5	5378.4	2066.3	3042.5	121.4	0.82	0.05	11.14
Itpr2	7050.8	1106.1	3986.3	145.5	0.82	0.01	4.29
Cyp11b2	6837.9	1253.0	3864.2	144.5	0.82	0.01	4.57
Gna11	5417.3	933.0	3035.4	369.2	0.84	0.01	4.57
Gna15	6119.3	609.8	3425.8	615.0	0.84	0.00	3.73
Casp8	5791.1	1369.6	3235.7	148.9	0.84	0.02	5.69
Atf4	9593.0	3361.3	5291.8	176.7	0.86	0.04	9.38
Gatm	3964.8	893.1	2175.7	485.0	0.87	0.02	5.62
Plcg2	3048.3	246.1	1660.6	511.0	0.88	0.01	4.23
Rab8b	3310.6	220.7	1795.2	295.2	0.88	0.00	3.57
Macrod1	3249.3	914.5	1761.0	71.0	0.88	0.02	6.09
Oat	6674.9	1117.2	3617.1	257.8	0.88	0.01	4.29

Mybpc3	17513.0	2608.1	13017.6	1315.0	0.43	0.03	6.95	Pmpcb	4073.7	1029.2	2200.4	525.7	0.89	0.02	6.38
Arf4d	5934.0	386.4	4410.4	446.2	0.43	0.00	3.57	Hcrt	7963.8	2105.7	4231.2	223.3	0.91	0.02	6.11
Atp5e	10723.2	1815.8	7963.4	395.7	0.43	0.03	6.87	Pde1a	2785.6	32.5	1478.6	183.4	0.91	0.00	3.57
Aanat	9001.0	222.3	6678.6	225.6	0.43	0.00	3.57	Gapdh	8344.7	1705.1	4422.8	677.9	0.92	0.01	5.05
Atp6v1e1	13206.1	551.7	9792.7	942.8	0.43	0.00	4.15	Bnip3l	4544.3	1671.2	2362.1	168.7	0.94	0.04	8.82
Fh1	16306.0	849.6	12050.0	1735.1	0.44	0.00	3.57	Itpr3	9785.5	568.2	5055.0	2290.9	0.95	0.01	5.35
Gnb1	10079.2	1377.5	7446.7	1184.4	0.44	0.02	6.74	Dusp4	6431.2	2225.0	3321.2	465.3	0.95	0.04	8.59
Ndufaf1	15008.7	1265.9	11078.8	441.0	0.44	0.01	4.57	Edn1	7230.9	1104.8	3725.7	278.3	0.96	0.01	4.21
Txn2	17057.8	1948.9	12585.4	1277.0	0.44	0.01	5.35	Ppa2	3790.4	575.1	1952.6	410.9	0.96	0.01	4.57
Timm22	16151.7	1618.4	11904.4	1372.9	0.44	0.01	5.05	Casp2	6496.3	1459.4	3264.7	93.9	0.99	0.01	4.83
Duox1	3175.1	896.3	2339.8	341.3	0.44	0.05	11.07	Guca2b	3972.0	943.8	1991.0	361.1	1.00	0.01	5.35
Mapk7	5538.5	989.3	4070.2	373.9	0.44	0.02	6.51	Mybbp1a	4825.2	1625.5	2405.2	104.6	1.00	0.03	6.99
Jak1	11049.7	1921.2	8119.4	544.6	0.44	0.03	6.87	Gnb2	6758.5	1576.9	3333.0	89.8	1.02	0.01	4.94
Chd4	7446.9	1055.0	5468.4	389.0	0.45	0.02	5.69	Ogg1	2805.6	662.0	1380.0	351.5	1.02	0.01	4.57
Vdac3	3956.5	470.4	2895.3	311.2	0.45	0.01	4.23	Cyp1a2	1648.6	238.0	797.9	219.9	1.05	0.00	4.08
Qars	6232.4	173.1	4556.0	736.5	0.45	0.00	4.08	Grb2	5344.0	2334.9	2560.7	180.3	1.06	0.05	10.40
Nr4a1	10171.9	1732.1	7430.6	408.9	0.45	0.03	6.91	Csnk1g3	2587.2	788.1	1223.8	72.6	1.08	0.02	5.62
Dusp14	6322.2	686.8	4613.6	548.7	0.45	0.00	3.57	Prkd1	4192.8	1278.4	1974.0	169.1	1.09	0.02	6.08
Htr7	5604.5	756.8	4088.7	411.6	0.45	0.00	3.57	Mrps31	3426.5	338.3	1600.0	240.0	1.10	0.00	3.57
Dusp10	10662.9	1534.3	7774.7	1053.6	0.46	0.01	4.57	Nradd	3835.0	608.2	1747.2	290.6	1.13	0.00	4.15
Pacsin2	13451.5	567.7	9795.3	338.8	0.46	0.00	3.92	Prss2	3023.0	302.1	1376.7	248.8	1.13	0.00	3.57
Esr1	11627.4	1690.5	8437.0	509.4	0.46	0.02	6.09	Dbp	4948.3	400.6	2238.7	295.4	1.14	0.00	3.57
Rab3d	14123.2	1648.4	10242.6	184.7	0.46	0.01	5.05	Mapk8ip1	3576.1	696.8	1604.2	262.1	1.16	0.00	3.57
Avpr1a	7921.2	677.3	5731.5	847.2	0.47	0.01	4.57	Pfn1	3580.6	365.2	1548.3	206.9	1.21	0.00	3.57
Rab4a	21350.0	3964.7	15432.3	1910.7	0.47	0.01	5.11	Ddc	11750.5	707.1	4718.7	865.8	1.32	0.00	3.57
Cap2	1539.7	249.1	1110.1	130.1	0.47	0.01	4.32	Cyp3a62	3002.7	828.8	1174.1	59.0	1.35	0.01	4.62
Hnrnpa1	9331.2	2427.8	6725.2	600.6	0.47	0.05	11.80	Drd1a	4058.5	1093.3	1540.0	122.2	1.40	0.01	4.57
Prkcdbp	12024.2	1331.8	8660.0	823.8	0.47	0.01	5.05	Cyp1a1	4487.8	1134.7	931.6	97.7	2.27	0.00	3.57

Supplementary Table 3. 343 Differentially Expressed Genes between Frontal Cortex (FC) and Hypothalamus (HT)

Gene	Frontal Cortex		Hypothalamus		FC vs HT			Gene	Frontal Cortex		Hypothalamus		FC vs HT		
	Mean	SD	Mean	SD	Log2	*p*	FDR (%)		Mean	SD	Mean	SD	Log2	*p*	FDR (%)
Wars	1690.3	247.7	4349.6	746.9	-1.36	0.02	6.24	Mapkapk3	13362.2	462.6	9425.5	670.5	0.50	0.00	0.47
Npas2	1826.6	461.0	4626.1	620.9	-1.34	0.03	7.90	Fabp4	28057.7	1819.0	19776.9	2852.8	0.50	0.00	2.41
Drd4	2779.2	602.0	6892.0	119.7	-1.31	0.01	2.53	Cox7a2	8883.3	1880.7	6260.2	841.1	0.50	0.02	6.39
Trit1	2978.2	453.1	6916.9	1156.2	-1.22	0.05	10.04	Vdac2	5941.0	1060.9	4176.7	770.2	0.51	0.02	5.87
mt-Nd1	12603.1	986.4	29018.2	7312.2	-1.20	0.02	6.24	Rab8b	3310.6	220.7	2326.8	446.5	0.51	0.01	2.65
Slc25a26	2089.3	76.9	4637.4	319.2	-1.15	0.00	0.55	Nmu	12286.6	1638.1	8626.4	539.2	0.51	0.00	1.86
Card6	1912.5	120.8	4223.0	363.4	-1.14	0.01	4.95	Gpd2	6158.5	218.8	4321.2	430.9	0.51	0.00	0.37
Mut	1018.6	123.4	2203.6	248.9	-1.11	0.04	8.73	Sat1	6513.9	1945.5	4562.5	691.6	0.51	0.04	9.57
Map3k1	1840.9	249.6	3910.3	102.8	-1.09	0.01	2.70	Nfkb1	8048.4	113.7	5635.8	458.1	0.51	0.00	0.48
Timm17b	3420.1	547.9	7031.5	781.7	-1.04	0.05	10.88	Arf4d	5934.0	386.4	4151.9	626.2	0.52	0.00	1.09
Rasgrp3	1461.0	74.3	2989.2	213.0	-1.03	0.03	6.62	Cox15	5540.7	774.3	3874.0	687.4	0.52	0.02	5.05
Gng7	4441.1	816.5	8804.1	540.8	-0.99	0.01	4.42	Gna11	5417.3	933.0	3786.2	1116.7	0.52	0.04	8.62
Echdc2	4787.5	427.9	8920.5	64.9	-0.90	0.05	10.15	Mrpl34	8363.6	1167.6	5837.5	1188.7	0.52	0.02	5.47
Card10	4856.4	576.7	8789.0	567.9	-0.86	0.00	2.48	Nr4a1	10171.9	1732.1	7099.4	937.4	0.52	0.02	5.28
Mrpl48	6044.5	463.0	10924.1	493.5	-0.85	0.01	3.18	Grpel1	15538.9	829.6	10830.3	2345.2	0.52	0.01	4.62
Bsg	5870.4	312.3	10532.8	1752.3	-0.84	0.03	7.85	Rab4a	21350.0	3964.7	14877.2	663.6	0.52	0.00	2.53
Azin1	5783.5	852.3	10195.8	822.3	-0.82	0.05	10.57	Oxr1	7948.1	1588.6	5534.6	333.7	0.52	0.02	5.20
Map2k2	5743.5	956.9	9700.1	850.1	-0.76	0.05	10.94	Anxa11	8839.2	2050.4	6137.7	1233.9	0.53	0.04	8.44
Dlat	4708.1	380.7	7831.9	206.8	-0.73	0.02	5.42	Ak1	10419.9	1905.9	7234.3	1165.1	0.53	0.02	6.25
Pink1	11313.3	944.0	15040.6	1423.1	-0.41	0.02	6.49	Acat1	12446.4	1472.3	8640.1	1229.6	0.53	0.00	2.41
Rab13	11218.2	719.9	14585.1	1333.5	-0.38	0.01	4.25	Prdx1	15565.1	2617.3	10790.6	226.6	0.53	0.01	3.64
Ppib	2760.1	101.0	3548.5	407.4	-0.36	0.04	8.99	Sirt1	12327.0	3310.5	8511.6	852.4	0.53	0.03	7.85
mt-Atp8	8861.8	726.1	11318.0	1023.9	-0.35	0.01	3.64	Ccrn4l	9542.4	1200.6	6541.4	207.8	0.54	0.00	2.41
Rab3b	6591.2	490.0	8407.5	809.2	-0.35	0.02	5.36	Ak2	9520.7	1772.7	6516.1	1335.1	0.55	0.02	6.61
Map3k14	2040.4	220.4	2589.2	420.6	-0.34	0.05	11.08	Mrpl21	1562.3	411.7	1068.0	274.3	0.55	0.02	5.30
Tnfsf10	10195.2	982.5	12860.1	1144.0	-0.34	0.03	8.26	Sdhc	6823.4	1650.4	4657.6	600.7	0.55	0.02	6.24
Prkar2a	13243.8	945.3	16689.2	1303.8	-0.33	0.02	5.42	Pmpcb	4073.7	1029.2	2774.8	738.6	0.55	0.04	9.57
Mapkbp1	4758.4	562.2	5945.5	597.7	-0.32	0.02	5.88	Mybpc3	17513.0	2608.1	11916.0	1389.5	0.56	0.01	3.91

Slc9a6	7898.6	1450.1	6342.2	997.7	0.32	0.04	9.56
mt-Tq	8817.7	871.8	7069.3	712.0	0.32	0.01	4.27
Rras2	3183.3	144.0	2550.8	383.4	0.32	0.01	2.62
Phlpp1	9692.4	2107.5	7762.3	618.0	0.32	0.04	9.05
Cyp2c26l	9489.4	2005.0	7591.6	438.9	0.32	0.00	1.81
Mrpl30	14968.6	991.7	11959.0	399.6	0.32	0.00	0.65
Rad17	7273.4	1419.8	5809.6	1013.3	0.32	0.04	9.57
Hrk	14680.5	416.2	11699.2	681.5	0.33	0.00	0.79
Coq7	4618.8	457.3	3677.5	727.2	0.33	0.01	2.56
Gjb6	3888.5	872.1	3092.5	531.7	0.33	0.03	6.94
Mrpl4	12774.6	406.9	10147.1	1310.2	0.33	0.01	3.64
Ddx1	2803.2	791.6	2225.9	312.8	0.33	0.05	11.37
Ndufs1	9309.7	836.4	7390.4	862.2	0.33	0.01	4.76
Gnai3	13178.8	1958.8	10458.3	1687.0	0.33	0.03	7.90
Mxd4	12114.7	1318.0	9607.0	1514.7	0.33	0.02	6.24
Mnat1	13038.8	1426.3	10324.4	2459.4	0.34	0.04	9.70
Mrpl14	14875.3	926.6	11771.7	160.5	0.34	0.00	2.15
Nudt21	10719.0	889.8	8476.6	1235.7	0.34	0.02	5.05
Mterf	14319.6	287.1	11321.4	1957.2	0.34	0.01	4.47
Gng11	14711.6	1121.7	11624.9	1655.2	0.34	0.01	3.98
Ddx31	3724.8	451.1	2937.0	452.9	0.34	0.02	5.23
Aldh2	19382.4	2060.9	15274.9	1536.1	0.34	0.01	4.70
Nags	6851.3	391.1	5395.2	405.7	0.34	0.00	0.48
Dusp11	10177.7	1623.2	8012.3	315.7	0.35	0.01	3.77
Dhx36	6456.8	558.8	5081.3	200.2	0.35	0.01	2.53
Guca1b	9598.2	611.9	7549.5	919.9	0.35	0.00	1.86
Smad5	5737.5	1205.8	4511.4	277.7	0.35	0.03	7.28
Il1r1	14110.8	1916.4	11080.5	813.3	0.35	0.01	3.71
Rap1b	4895.2	740.4	3840.6	210.6	0.35	0.00	1.09
Atp5e	10723.2	1815.8	8401.0	1572.5	0.35	0.04	8.77
Tph2	12301.0	852.7	9586.0	1293.2	0.36	0.01	3.90
mt-Tr	8623.9	571.4	5855.2	258.9	0.56	0.00	1.61
Uqcrfs1	7232.1	898.3	4905.2	147.5	0.56	0.00	2.18
Itpr2	7050.8	1106.1	4761.1	1124.8	0.57	0.02	6.25
Peci	8658.5	1491.3	5846.4	557.6	0.57	0.01	2.67
Grid1	14412.5	4168.3	9712.4	837.7	0.57	0.03	8.06
Timm22	16151.7	1618.4	10880.9	1521.2	0.57	0.01	3.09
Acot9	6962.5	2257.8	4676.4	738.0	0.57	0.05	10.94
Jak1	11049.7	1921.2	7421.0	1084.5	0.57	0.01	4.76
Kif5b	14576.0	287.1	9772.5	1567.7	0.58	0.00	2.53
Slc25a18	5421.5	1182.9	3632.3	313.6	0.58	0.02	5.42
Ntrk1	5493.3	1443.5	3678.0	634.8	0.58	0.02	6.25
Chd4	7446.9	1055.0	4969.4	326.0	0.58	0.01	2.53
Bhlhe40	14496.0	361.1	9594.2	2461.7	0.60	0.01	4.70
Cox17	13916.4	2316.6	9178.8	226.1	0.60	0.00	1.86
Msn	14265.3	1021.8	9400.0	2533.0	0.60	0.02	5.42
mt-Tc	7070.7	772.4	4658.6	1173.2	0.60	0.02	5.29
Acaa2	1946.2	316.8	1280.1	196.0	0.60	0.00	1.51
Htr2b	9979.3	1509.1	6554.3	2167.2	0.61	0.04	8.50
Ndufaf1	15008.7	1265.9	9840.9	1553.8	0.61	0.01	3.09
Mcl1	9708.2	2104.1	6345.7	438.5	0.61	0.02	5.20
Pitrm1	6642.4	1077.3	4341.2	852.2	0.61	0.00	2.11
Snx7	3438.2	462.8	2243.9	468.7	0.62	0.00	2.53
Ehd3	13240.4	2335.0	8608.0	831.0	0.62	0.01	3.37
Cap2	1539.7	249.1	997.4	222.3	0.63	0.00	2.41
Ptges2	8668.6	371.2	5605.2	963.8	0.63	0.00	1.09
mt-Rnr1	10166.7	892.6	6544.7	552.5	0.64	0.00	0.37
HK2	17709.1	1014.0	11359.6	1609.3	0.64	0.00	2.11
Qars	6232.4	173.1	3993.9	584.1	0.64	0.00	0.48
Map3k3	4696.4	306.4	3000.1	565.6	0.65	0.00	0.86
Nnt	9431.7	1312.6	6022.7	499.9	0.65	0.00	2.10
Guca2a	14081.9	224.6	8989.5	721.9	0.65	0.00	0.59

Atpaf2	9145.2	974.0	7126.5	979.0	0.36	0.00	1.57
Agxt	12290.1	1604.5	9575.6	1370.5	0.36	0.02	6.25
Abcb6	14966.5	1104.7	11656.2	1374.9	0.36	0.01	3.77
Gprasp1	6339.0	1140.6	4928.0	337.4	0.36	0.00	1.69
Ddx18	14852.8	789.3	11545.0	462.1	0.36	0.00	1.21
Tmed10	15391.7	1722.0	11955.1	2063.0	0.36	0.02	6.24
Aanat	9001.0	222.3	6986.5	745.0	0.37	0.00	1.05
Gucy2e	11182.0	2357.2	8678.3	807.2	0.37	0.04	8.51
Crem	12364.1	783.5	9595.2	2674.7	0.37	0.04	8.59
Uros	7131.4	1356.6	5529.3	577.1	0.37	0.02	5.42
Dusp2	4975.3	137.5	3856.6	211.0	0.37	0.00	1.09
Dusp26	8195.2	1037.7	6341.6	543.1	0.37	0.00	0.47
Vdac1	3985.2	545.4	3081.1	606.3	0.37	0.02	6.20
Pdp2	11120.1	1898.8	8575.5	509.6	0.37	0.01	3.38
Cyb5b	19156.4	984.6	14759.1	2021.1	0.38	0.01	3.09
Ppig	3475.4	468.2	2677.3	489.2	0.38	0.00	2.43
Txn2	17057.8	1948.9	13134.5	2548.7	0.38	0.02	6.48
Slc25a38	12606.3	1601.9	9690.3	700.4	0.38	0.01	2.97
Dcxr	4066.5	320.9	3124.6	237.8	0.38	0.00	0.89
Htr5a	11914.9	1175.1	9149.7	834.3	0.38	0.00	0.31
Bnip1	13281.9	591.1	10185.9	2502.4	0.38	0.03	6.85
Cyp2c7	9696.5	1806.1	7427.7	623.6	0.38	0.00	1.09
Apex2	9893.5	1531.5	7578.1	1603.3	0.38	0.04	8.50
Map4k4	13631.1	2047.2	10422.4	683.1	0.39	0.00	2.41
Gpd1l	8944.6	2295.6	6832.7	971.1	0.39	0.05	10.57
Acsl4	11868.4	461.5	9048.9	55.0	0.39	0.00	0.54
Mapk12	7635.2	1065.3	5814.9	556.8	0.39	0.01	3.97
Gpt	11471.1	1607.8	8734.2	2135.1	0.39	0.04	9.18
Rab39	10921.0	1053.6	8314.6	976.0	0.39	0.00	1.87
Actg1	8374.9	1348.4	6370.5	244.4	0.39	0.01	4.95
Fdxr	2757.1	207.8	2097.2	151.7	0.39	0.00	0.47
Mrpl2	26107.5	4004.3	16598.2	694.4	0.65	0.01	2.61
Mpst	11354.4	1801.3	7190.6	861.3	0.66	0.01	2.65
Gapdh	8344.7	1705.1	5275.3	1587.6	0.66	0.03	7.98
Mrps25	12383.9	1192.7	7824.8	2396.4	0.66	0.02	6.24
Plcb4	12184.2	1632.4	7692.9	2392.7	0.66	0.02	6.48
Kif1b	12207.0	1499.3	7681.6	1613.9	0.67	0.01	4.51
Stmn2	7966.5	3018.5	5009.0	732.2	0.67	0.04	9.69
mt-Tw	4701.4	204.8	2934.1	42.9	0.68	0.00	0.72
Slc27a2	4770.1	1324.4	2976.9	280.3	0.68	0.00	2.53
Htra2	16639.9	4099.9	10377.9	802.0	0.68	0.02	5.23
Atp5d	7991.2	3069.0	4966.6	352.4	0.69	0.04	9.77
Scp2	9176.3	1844.9	5701.5	1003.0	0.69	0.02	5.17
Prok2	8391.5	2461.5	5213.5	291.4	0.69	0.02	6.42
Ppard	10671.6	377.6	6629.1	887.7	0.69	0.00	1.23
Cyp2e1	10394.6	1471.6	6453.7	510.5	0.69	0.00	2.46
Htr7	5604.5	756.8	3466.5	248.1	0.69	0.00	0.31
Gad1	12837.5	928.7	7903.9	2328.5	0.70	0.01	4.87
Vhl	15300.7	2291.9	9357.0	662.8	0.71	0.00	1.09
Gpd1	10029.8	2795.5	6131.0	1812.1	0.71	0.04	9.05
Gnb3	11803.8	2140.2	7201.9	1194.7	0.71	0.01	4.36
Dnah9	7374.5	1162.2	4491.5	307.2	0.72	0.00	2.33
Dusp10	10662.9	1534.3	6489.9	570.5	0.72	0.00	1.13
Ercc5	9011.1	1925.0	5470.8	762.7	0.72	0.01	4.29
Plp2	7653.0	2349.7	4640.7	530.0	0.72	0.02	6.55
Nicn1	10339.1	3935.6	6221.8	873.0	0.73	0.04	9.66
Cs	8871.3	800.6	5338.4	434.0	0.73	0.00	1.08
Frk	9798.2	1423.4	5886.4	820.4	0.74	0.00	2.48
Uba1	9659.7	2868.3	5778.7	478.2	0.74	0.03	7.02
Aldoa	12808.1	2286.6	7661.3	897.7	0.74	0.01	3.45
Ehd4	2905.9	892.4	1735.7	171.5	0.74	0.02	5.47
Clic4	4754.6	1231.4	2839.7	243.5	0.74	0.00	1.94

Htr6	2049.5	631.0	1557.4	173.7	0.40	0.04	9.81
Ndufa1	1792.5	504.0	1361.7	307.6	0.40	0.03	7.78
Cpt1a	8086.3	274.5	6140.1	855.3	0.40	0.00	0.75
Mapk7	5538.5	989.3	4195.8	943.0	0.40	0.03	8.22
Echs1	19017.5	2283.9	14391.6	2056.0	0.40	0.01	5.05
Map4k2	3996.5	845.1	3023.4	76.4	0.40	0.00	2.35
Ndufb4l1	7993.8	1158.7	6039.0	387.4	0.40	0.00	1.09
Dguok	11174.3	1997.0	8414.8	562.7	0.41	0.01	3.37
Mrpl40	3370.7	264.1	2537.6	172.5	0.41	0.00	1.13
Lrch4	2873.1	329.7	2162.7	251.4	0.41	0.00	2.41
Itpka	5862.3	712.7	4408.9	932.2	0.41	0.02	6.25
Ehhadh	6387.1	505.8	4802.1	832.6	0.41	0.00	1.13
Gucy2d	5433.7	971.5	4081.5	624.5	0.41	0.02	6.55
Dusp6	5017.8	757.3	3766.9	475.4	0.41	0.00	0.82
Fabp3	15223.9	1441.5	11405.1	781.3	0.42	0.00	2.15
Slc25a22	11375.5	726.5	8509.6	874.4	0.42	0.01	2.53
Pacsin2	13451.5	567.7	10048.3	2185.0	0.42	0.02	5.49
Map3k7ip1	5449.0	597.7	4069.7	380.2	0.42	0.00	0.39
Dctn6	9096.9	1253.9	6777.2	1606.2	0.42	0.03	8.06
Traf2	9006.2	965.5	6699.7	760.9	0.43	0.01	3.98
Adh6	1330.2	271.4	988.6	183.8	0.43	0.02	5.42
mt-Tk	8683.4	294.4	6452.8	672.8	0.43	0.00	2.09
Dhx15	10003.4	1059.3	7433.1	1249.5	0.43	0.02	5.29
Mtrr	6676.8	480.0	4960.2	962.6	0.43	0.00	1.86
Rab3a	21095.0	3147.7	15639.7	1572.9	0.43	0.01	3.87
Chd5	6700.6	1127.3	4965.2	1110.6	0.43	0.03	7.78
Avpr1a	7921.2	677.3	5864.6	799.4	0.43	0.00	1.60
Nsmce4a	5506.5	779.3	4075.4	277.7	0.43	0.00	2.09
Rab8a	17330.1	1093.4	12823.4	500.7	0.43	0.00	1.33
Slc25a14	15207.0	1635.5	11240.7	1899.4	0.44	0.01	5.05
Cyp2b1	4228.8	107.6	3124.3	429.8	0.44	0.00	1.77
Stmn4	12009.1	2224.0	7172.5	2455.9	0.74	0.03	6.95
Abat	2311.0	175.1	1380.1	158.3	0.74	0.00	0.47
Ndufs2	5077.6	1507.4	3031.1	472.0	0.74	0.02	6.25
Fdft1	10056.6	1863.8	5927.6	1431.1	0.76	0.02	5.42
Mtch2	996.3	373.0	587.0	188.9	0.76	0.03	6.91
Apoa1	8216.9	1516.2	4834.2	803.1	0.77	0.01	4.36
Card9	5980.2	1216.9	3499.9	1511.6	0.77	0.04	9.48
Bckdk	5437.5	1015.4	3179.3	400.2	0.77	0.00	2.15
Txn1	5370.0	81.3	3139.1	443.4	0.77	0.00	0.47
Prkcd	10309.2	996.5	6009.9	109.9	0.78	0.00	0.57
Plcg2	3048.3	246.1	1770.1	126.4	0.78	0.00	0.34
mt-Rnr2	8898.0	344.6	5153.8	292.1	0.79	0.00	0.24
Otc	7904.4	2204.3	4560.5	905.1	0.79	0.02	6.49
mt-Tv	3508.4	288.7	2023.4	311.6	0.79	0.00	0.57
Sdha	5088.5	275.2	2934.5	489.7	0.79	0.00	0.79
Mrpl1	6352.4	1555.8	3663.3	497.0	0.79	0.01	4.76
Rab12	6186.9	2510.7	3566.6	732.4	0.79	0.05	10.94
Ddx20	6738.7	2832.1	3865.4	990.8	0.80	0.05	10.68
Apex1	7741.7	2486.2	4423.7	37.6	0.81	0.00	2.53
Gng5	3288.5	217.9	1871.1	362.9	0.81	0.00	1.86
Casp2	6496.3	1459.4	3677.5	1305.8	0.82	0.03	7.75
Oat	6674.9	1117.2	3747.1	1557.6	0.83	0.03	6.95
Macrod1	3249.3	914.5	1818.8	132.4	0.84	0.01	4.95
Gatm	3964.8	893.1	2212.0	493.0	0.84	0.01	4.76
Map3k10	11134.5	1764.3	6205.0	765.3	0.84	0.00	2.11
Cyba	5656.0	1553.5	3145.6	551.8	0.85	0.02	5.47
Gnb2	6758.5	1576.9	3732.4	1150.3	0.86	0.02	6.49
Atp5o	6116.7	1507.4	3372.5	311.9	0.86	0.01	3.92
Dusp4	6431.2	2225.0	3542.5	1102.7	0.86	0.04	9.69
Ntrk2	6620.3	351.7	3587.2	503.9	0.88	0.00	1.05
Cyp11b2	6837.9	1253.0	3690.5	306.2	0.89	0.00	2.53

Slc25a27	20147.8	1643.8	14875.5	1613.0	0.44	0.01	3.44
Timeless	2855.6	667.9	2107.8	541.7	0.44	0.04	9.30
Slc25a3	14794.2	336.1	10915.5	2075.3	0.44	0.01	4.14
Rec8	14444.8	1393.0	10653.3	872.5	0.44	0.01	3.18
Mmaa	5581.7	991.0	4112.7	1270.0	0.44	0.05	10.94
Kcnma1	5033.1	206.0	3703.8	394.0	0.44	0.00	0.47
Ndufv1	3065.4	559.7	2255.0	605.3	0.44	0.01	4.91
Plcd4	5376.0	1467.1	3952.9	892.3	0.44	0.05	11.36
Nr2f6	13506.2	2987.4	9921.1	1840.8	0.45	0.04	9.51
Ndufb10	3149.0	180.6	2301.9	347.8	0.45	0.00	1.09
Mrps18a	22527.1	1655.4	16464.1	956.6	0.45	0.00	1.51
Timm10	1470.5	71.3	1074.1	421.7	0.45	0.00	2.53
Cyp2j4	3228.0	92.1	2355.6	169.4	0.45	0.00	0.47
Plch1	8821.4	750.7	6436.1	616.5	0.45	0.00	0.79
Dusp14	6322.2	686.8	4611.9	614.2	0.46	0.00	0.95
Pdk2	1463.9	226.0	1067.1	165.8	0.46	0.00	2.48
Trmu	9943.3	2149.5	7247.5	290.5	0.46	0.02	6.57
Guca1a	5673.2	1078.0	4133.8	687.6	0.46	0.02	5.66
Prkcdbp	12024.2	1331.8	8755.6	1551.2	0.46	0.02	5.17
Adh1	16767.4	877.3	12204.6	1927.4	0.46	0.01	3.91
Ddx5	6718.2	595.7	4885.5	689.3	0.46	0.00	0.79
Dnm1	13416.1	883.4	9740.3	1828.1	0.46	0.01	4.36
Ran	8700.9	1662.7	6314.1	337.3	0.46	0.02	5.37
Rhoa	14979.8	548.4	10869.7	725.5	0.46	0.00	1.09
Rhot1	10483.8	1942.0	7605.6	715.6	0.46	0.01	3.52
Rab3d	14123.2	1648.4	10245.3	1723.8	0.46	0.02	5.36
Cyp24a1	4343.4	598.3	3148.4	1305.7	0.46	0.05	10.94
Gpam	7728.4	799.2	5593.8	349.7	0.47	0.01	2.65
Pick1	19076.7	2716.4	13805.3	1673.8	0.47	0.01	4.47
Ppa2	3790.4	575.1	2742.4	452.7	0.47	0.01	4.23
Tomm34	4925.4	1209.1	3561.4	710.4	0.47	0.04	9.56
mt-Tl1	6163.3	500.8	3312.6	836.3	0.90	0.00	0.86
Gnai1	8898.3	197.2	4754.0	448.2	0.90	0.00	0.48
Abca4	8195.4	1615.7	4374.1	398.4	0.91	0.00	2.23
Fbn1	7106.0	182.6	3781.3	272.0	0.91	0.00	0.24
Hnrnpc	5169.3	1661.3	2742.5	134.5	0.91	0.02	5.23
Csnk1g3	2587.2	788.1	1370.2	526.6	0.92	0.03	7.02
Nfs1	5686.2	1997.1	3008.2	484.1	0.92	0.02	6.53
Grb2	5344.0	2334.9	2790.8	982.3	0.94	0.05	11.52
Drd2	5064.8	960.0	2603.6	608.5	0.96	0.01	3.73
Gna15	6119.3	609.8	3137.6	321.5	0.96	0.00	0.79
Glrx1	12804.8	1833.4	6536.7	799.6	0.97	0.00	1.81
Gucy2c	7639.3	1377.9	3888.8	766.3	0.97	0.00	2.41
Dusp12	7658.0	323.5	3887.0	196.8	0.98	0.00	0.31
Hibadh	9392.6	1939.0	4748.4	625.5	0.98	0.00	2.16
Edn1	7230.9	1104.8	3652.3	416.5	0.99	0.00	2.09
Lep	15751.8	2787.1	7938.9	2551.8	0.99	0.01	4.87
Rap2ip	5882.1	470.8	2958.5	61.5	0.99	0.00	0.24
Nr3c1	3867.9	308.6	1941.3	290.2	0.99	0.00	0.79
Grm8	8415.5	2979.1	4126.3	433.6	1.03	0.02	6.05
Bnip3l	4544.3	1671.2	2214.1	504.3	1.04	0.02	6.49
Shmt2	2924.7	796.6	1423.5	68.1	1.04	0.00	1.86
Cyb5a	3758.3	150.8	1823.1	189.7	1.04	0.00	0.55
Csnk1g1	4281.0	887.8	2069.9	411.2	1.05	0.00	2.53
Aga	2620.7	311.8	1260.6	172.2	1.06	0.00	0.34
Prkd1	4192.8	1278.4	1976.4	288.0	1.09	0.01	4.51
Clock	4684.2	2030.3	2167.7	394.0	1.11	0.03	7.33
Mybbp1a	4825.2	1625.5	2225.4	463.0	1.12	0.02	5.42
Cyp1a2	1648.6	238.0	758.7	262.6	1.12	0.00	2.43
Pfn1	3580.6	365.2	1645.9	494.9	1.12	0.00	2.21
Ddr1	14977.4	1533.1	6816.8	1297.9	1.14	0.00	1.13
Lcn2	7689.2	235.9	3363.5	630.0	1.19	0.00	0.47

Ppp2r1a	11404.4	1685.0	8214.6	228.6	0.47	0.01	3.37
Ndufa10	3485.1	484.3	2510.2	365.9	0.47	0.00	1.32
Mrpl16	2596.4	305.9	1869.6	310.6	0.47	0.00	1.86
Cox18	3235.1	1036.2	2326.6	256.3	0.48	0.04	9.27
Gstz1	4893.6	1103.0	3516.4	634.7	0.48	0.03	7.75
Mapk8ip3	5590.3	1143.5	4015.3	916.4	0.48	0.04	8.40
Atp5i	16306.6	1012.6	11712.0	1819.5	0.48	0.01	3.47
Pik3cb	13488.2	733.5	9685.5	1829.7	0.48	0.01	4.36
Lyz2	7822.9	1117.7	5613.1	738.5	0.48	0.01	4.95
Gls2	8919.7	2207.4	6388.2	438.3	0.48	0.03	7.00
Camk4	14732.9	312.0	10528.8	2830.0	0.48	0.02	6.25
Nrg1	11932.3	1342.1	8510.7	1678.7	0.49	0.02	5.42
Chd3	5840.5	376.5	4159.2	631.6	0.49	0.00	0.54
Kcnn4	3387.9	414.6	2408.2	362.1	0.49	0.01	2.61
Map4k5	5213.9	1265.0	3704.6	553.4	0.49	0.03	7.52
Gnb2l1	3196.4	388.2	2270.4	114.0	0.49	0.00	1.84
Abcb7	20493.2	2308.1	14540.5	907.6	0.50	0.00	2.53
Usp32	8058.1	1102.5	5715.7	150.4	0.50	0.00	2.53
mt-Tf	13387.8	2206.1	9484.8	1165.8	0.50	0.00	1.81
Acsl6	11766.9	1460.0	8315.8	736.2	0.50	0.00	1.87
Nradd	3835.0	608.2	1671.4	197.3	1.20	0.00	1.78
Grin2d	3950.0	226.0	1719.6	484.0	1.20	0.00	1.60
Prss2	3023.0	302.1	1312.5	358.2	1.20	0.00	1.78
Casp7	4278.2	209.8	1825.9	277.5	1.23	0.00	0.24
Pde1a	2785.6	32.5	1165.7	157.3	1.26	0.00	0.50
Pik3r3	6739.6	3047.3	2817.4	391.0	1.26	0.03	6.86
Mrps31	3426.5	338.3	1400.9	296.5	1.29	0.00	0.48
Crx	7392.7	3453.3	3019.3	234.2	1.29	0.03	7.01
Casp8	5791.1	1369.6	2363.7	152.1	1.29	0.00	2.43
Guca2b	3972.0	943.8	1600.2	52.2	1.31	0.00	2.41
Itpr3	9785.5	568.2	3741.0	632.2	1.39	0.00	0.39
Mapk8ip1	3576.1	696.8	1340.1	101.6	1.42	0.00	0.48
Ogg1	2805.6	662.0	994.1	23.1	1.50	0.00	1.33
Dbp	4948.3	400.6	1734.4	280.6	1.51	0.00	0.79
Cyp3a62	3002.7	828.8	1002.6	222.3	1.58	0.00	2.41
Sirpa	5124.9	1778.0	1633.3	376.1	1.65	0.01	3.28
Drd1a	4058.5	1093.3	1274.5	140.5	1.67	0.00	2.41
Ddc	11750.5	707.1	3468.5	306.5	1.76	0.00	0.24
Cyp1a1	4487.8	1134.7	930.1	505.6	2.27	0.00	2.24

Supplementary Table 4. 68 Differentially Expressed Genes between Hippocampus (HC) and Hypothalamus (HT)

Gene	Hippocampus		Hypothalamus		HC vs HT			Gene	Hippocampus		Hypothalamus		HC vs HT		
	Mean	SD	Mean	SD	Log2	*p*	FDR (%)		Mean	SD	Mean	SD	Log2	*p*	FDR (%)
Mipep	1626.8	420.0	2892.6	643.7	-0.83	0.04	11.77	Hccs	7146.4	863.8	9269.8	1502.3	-0.38	0.03	10.58
Mapk9	2451.1	98.6	4128.9	570.0	-0.75	0.00	2.65	Gucy2d	3151.9	271.5	4081.5	624.5	-0.37	0.03	10.58
Car5a	3915.4	460.6	6323.3	72.9	-0.69	0.00	1.28	Ndufs6	9832.7	294.2	12728.3	1381.9	-0.37	0.00	2.26
Ghrh	3310.2	590.6	5200.2	358.6	-0.65	0.01	4.04	mt-Nd3	8995.0	195.4	11632.2	2299.3	-0.37	0.00	3.06
Gnb1	7446.7	1184.4	11365.8	3386.7	-0.61	0.05	14.30	Chd2	11603.3	733.2	14930.2	1602.5	-0.36	0.00	3.92
Capn3	6042.6	532.9	9191.6	1431.7	-0.61	0.00	2.65	Psma7	10869.1	612.7	13953.7	1430.7	-0.36	0.00	4.04
Top1	2429.4	507.8	3663.0	768.9	-0.59	0.05	14.15	Cox5a	10715.1	1196.7	13718.9	1977.2	-0.36	0.02	9.63
Cpox	2159.3	394.0	3188.1	519.6	-0.56	0.04	11.76	Tomm70a	7140.8	946.6	9122.1	1453.9	-0.35	0.00	3.21
Bsg	7273.6	1153.3	10532.8	1752.3	-0.53	0.00	3.95	Tubb4	4562.3	376.7	5818.6	307.8	-0.35	0.00	3.06
Echdc2	6232.1	422.8	8920.5	64.9	-0.52	0.00	1.28	Mrpl12	10703.0	178.3	13641.7	577.3	-0.35	0.00	2.26
Hspa8	2505.2	532.2	3539.0	512.7	-0.50	0.03	11.75	mt-Atp6	3940.6	201.4	5019.4	266.8	-0.35	0.00	1.28
Creb1	2608.8	290.1	3664.8	458.4	-0.49	0.01	5.01	Mrps15	10616.6	427.4	13500.7	870.7	-0.35	0.00	0.93
Mut	1575.5	171.4	2203.6	248.9	-0.48	0.03	11.46	Ndufv3	3757.4	401.6	4769.8	745.1	-0.34	0.03	11.76
Cyp11a1	6893.1	1941.3	9622.5	2189.4	-0.48	0.05	14.81	Hsd17b10	6648.6	513.2	8431.7	465.1	-0.34	0.00	1.28
Gpx7	11193.4	924.0	15604.2	118.3	-0.48	0.00	2.18	Sf3a1	3781.9	290.8	4794.6	781.5	-0.34	0.02	8.84
Fdx1	5997.3	656.6	8317.3	953.0	-0.47	0.01	6.07	Aco1	6117.5	1037.5	7721.0	918.7	-0.34	0.03	10.58
Prf1	4968.6	814.0	6867.7	247.1	-0.47	0.00	4.04	mt-Nd4l	6486.8	203.5	8186.6	1439.1	-0.34	0.01	5.65
Grpel2	2135.6	433.6	2950.5	216.3	-0.47	0.02	8.11	Rab4b	5291.0	515.0	6665.2	387.5	-0.33	0.00	2.26
Htr1a	5667.5	868.3	7824.8	604.2	-0.47	0.01	5.01	Tmco6	4119.2	478.6	5172.6	440.2	-0.33	0.01	6.07
Glud1	6651.8	1069.8	9107.6	1390.2	-0.45	0.03	10.36	Ckmt2	2596.3	244.3	3258.4	181.4	-0.33	0.01	5.01
Pla2g4a	2080.8	347.6	2820.6	199.5	-0.44	0.02	9.30	Nkrf	12295.9	991.1	15340.7	887.4	-0.32	0.01	4.04
Hspa13	4115.3	241.6	5576.2	630.5	-0.44	0.00	2.65	Comt	3968.0	400.9	4944.2	312.1	-0.32	0.01	5.46
Ddx21	5702.4	689.9	7723.5	855.0	-0.44	0.01	5.35	Grm3	4461.4	82.6	5557.9	1221.7	-0.32	0.03	11.75
Gabpa	1887.6	101.7	2535.2	185.9	-0.43	0.02	8.11	Mrpl40	3192.9	49.1	2537.6	172.5	0.33	0.02	8.84
Mrpl50	10960.2	1948.1	14710.0	2764.4	-0.42	0.02	8.05	Hnrnpc	3503.7	20.2	2742.5	134.5	0.35	0.01	6.07
Gria4	15223.9	3378.6	20222.1	3373.6	-0.41	0.01	4.73	Nr3c1	2496.7	167.2	1941.3	290.2	0.36	0.04	12.02
Neurod1	9762.8	642.0	12901.9	596.7	-0.40	0.00	2.82	Gng5	2465.5	28.6	1871.1	362.9	0.40	0.03	11.76
Bckdhb	2905.7	411.6	3838.0	372.8	-0.40	0.01	6.45	Mfn1	1867.1	112.4	1410.0	295.8	0.41	0.01	4.22

Ddx42	7826.6	620.9	10328.3	397.7	-0.40	0.00	1.28	Casp8	3235.7	148.9	2363.7	152.1	0.45	0.01	4.04
Ddx28	1751.7	184.8	2301.8	367.1	-0.39	0.04	12.57	Crx	4138.7	60.2	3019.3	234.2	0.45	0.01	6.07
Elk3	3943.0	831.6	5176.1	871.1	-0.39	0.04	11.77	Ogg1	1380.0	351.5	994.1	23.1	0.47	0.04	11.76
mt-Nd1	22143.0	5452.7	29018.2	7312.2	-0.39	0.04	12.02	Ddx1	3191.5	368.5	2225.9	312.8	0.52	0.05	15.10
Bckdha	4977.7	454.1	6520.5	1185.9	-0.39	0.01	5.48	Rasgrf1	2654.0	225.2	1836.3	179.6	0.53	0.04	11.76
Slc25a19	7153.8	361.4	9314.5	1804.1	-0.38	0.00	3.95	Cyb5a	2872.2	654.6	1823.1	189.7	0.66	0.04	11.76