

MicroRNA Mouse 13.0

Probe Name	Probe Sequence	Length	Replicates	Annotations
mmu tRNA-Arg(Chr:13)_9_29 PosCtrl as	CTCTCAACCGCTGAGCCATCT	21	2	Positive Control
mmu tRNA-Arg(Chr:13)_38_58 PosCtrl as	ACTCAAGACCTTTGGAAGAGG	21	2	Positive Control
mmu tRNA-Asp(Chr:5)_2_24 PosCtrl as	TACTCACCCTATACTAACGAGG	23	2	Positive Control
mmu tRNA-Asp(Chr:5)_17_37 PosCtrl as	TGACAGGCGGGGATACTCACC	21	2	Positive Control
mmu tRNA-Gly(Chr:8)_13_33 PosCtrl as	CAGGCGAGAATTCTACCACTG	21	2	Positive Control
mmu tRNA-Gly(Chr:8)_51_70 PosCtrl as	GCATTGGCCGGGAATCGAAC	20	2	Positive Control
mmu tRNA-Val(Chr:11)_17_37 PosCtrl as	TGTTAGGCGAACGTGATAACC	21	2	Positive Control
mmu tRNA-Val(Chr:11)_31_50 PosCtrl as	GGGACCTTTCGCGTGTTAGG	20	2	Positive Control
mmu tRNA-Met(Chr:13)_41_61 PosCtrl as	GGTTTCGATCCATCGACCTCT	21	2	Positive Control
mmu tRNA-Met(Chr:13)_31_50 PosCtrl as	ATCGACCTCTGGGTTATGGG	20	2	Positive Control
mmu tRNA-Phe(Chr:14)_28_50 PosCtrl as	GGGACCTTTAGATCTTCAGTCTA	23	2	Positive Control
mmu tRNA-Phe(Chr:14)_17_37 PosCtrl as	CTTCAGTCTAACGCTCTCCCA	21	2	Positive Control
mmu tRNA-Pro(Chr:1)_17_37 PosCtrl as	ACCCTAAGCGAGAATCATACC	21	2	Positive Control
mmu tRNA-Pro(Chr:1)_51_71 PosCtrl as	GGCTCGTCCGGGATTTGAACC	21	2	Positive Control
mmu tRNA-Trp(Chr:11)_41_61 PosCtrl as	TGATTTGAACACGCAACCTTC	21	2	Positive Control
mmu tRNA-Trp(Chr:11)_13_33 PosCtrl as	GAGTCAGACGCGCTACCATTG	21	2	Positive Control
mmu U6(NR_003027)_45_65 PosCtrl as	AGGGGCCATGCTAAATCTTCT	21	2	Positive Control
mmu U6(NR_003027)_84_105 PosCtrl as	AATATGGAACGCTTCACGAATT	22	2	Positive Control
mmu Actb(NM_007393)_898_921 DegradCtrl as	AATTGAATGTAGTTTCATGGATGC	24	2	Degradation Control
mmu Actb(NM_007393)_1213_1233 DegradCtrl as	AAAACGCAGCTCAGTAACAGT	21	2	Degradation Control
mmu Hspd1(NM_010477)_1788_1811 DegradCtrl as	CAAAGCACTACTCTAGGAGTTAGA	24	2	Degradation Control
mmu Hspd1(NM_010477)_1420_1441 DegradCtrl as	AGCAGGCTTTAATGAATCCAAG	22	2	Degradation Control
mmu Pgk1(NM_008828)_1115_1135 DegradCtrl as	CAAACAATCTGCTTAGCTCG	21	2	Degradation Control
mmu Pgk1(NM_008828)_1574_1597 DegradCtrl as	ACAATGGTTTTAGTCACTAAGGAA	24	2	Degradation Control
mmu Ubd(NM_023137)_917_939 DegradCtrl as	TGTGATTGGTAATAGCTCAGAGG	23	2	Degradation Control
mmu Ubd(NM_023137)_46_68 DegradCtrl as	GCTAGCTTGATAATTTGTGATGC	23	2	Degradation Control
neg Bio B Spike_394_418 NegCtrl as	GCGCCTGAGATTCACTCAACGTGCC	25	2	NegativeControl
neg Bio C Spike_113_137 NegCtrl as	ACGTGGGTGTATTTACGCTGTGGAA	25	2	NegativeControl
neg Lambda Spike_12_609_633 NegCtrl as	CTTCCGGCAATACTCGTAAACCATA	25	2	NegativeControl
neg Lambda Spike_5_753_777 NegCtrl as	GAACAGTTATCGAAATCAGCCACA	25	2	NegativeControl
neg Lambda Spike_6_497_521 NegCtrl as	TACAACCGGAATGTTGACCTTGCTT	25	2	NegativeControl
neg Lambda Spike_8_329_353 NegCtrl as	GTCACCTTTATCTGCCGCCACTCAT	25	2	NegativeControl
neg Lambda Spike_9_1167_1191 NegCtrl as	GATGTTTGCAGACGTAATGGTGCGG	25	2	NegativeControl
mmu let-7a nat as	AACTATACAACCTACTACCTCA	22	3	

mmu let-7a 2mut as	AACTATA[C-g]AACCTACTAC[C-g]TCA	22	2
mmu let-7b nat as	AACCACACAACCTACTACCTCA	22	3
mmu let-7b 2mut as	AACCACACAA[C-g]CTA[C-g]TACCTCA	22	2
mmu let-7c nat as	AACCATACAACCTACTACCTCA	22	3
mmu let-7c 2mut as	AACCAT[A-t]CAACCTA[C-g]TACCTCA	22	2
mmu let-7d nat as	AACTATGCAACCTACTACCTCT	22	3
mmu let-7d 2mut as	AACTATG[C-g]AAC[C-g]TACTACCTCT	22	2
mmu let-7e nat as	AACTATACAACCTCCTACCTCA	22	3
mmu let-7e 2mut as	AACTATA[C-g]AACCTCCT[A-t]CCTCA	22	2
mmu let-7f nat as	AACTATACAATCTACTACCTCA	22	3
mmu let-7f 2mut as	AACTATAC[A-t]ATCTACTA[C-g]CTCA	22	2
mmu miR-15a nat as	CACAAACCATTATGTGCTGCTA	22	3
mmu miR-15a 2mut as	CACAAAC[C-g]ATTATGTG[C-g]TGCTA	22	2
mmu miR-16 nat as	CGCCAATATTTACGTGCTGCTA	22	3
mmu miR-16 2mut as	CG[C-g]CAATATTTACGTG[C-g]TGCTA	22	2
mmu miR-17 nat as	CTACCTGCACTGTAAGCACTTTG	23	3
mmu miR-17 2mut as	CTA[C-g]CTGCAC[T-a]GTAAGCACTTTG	23	2
mmu miR-18a nat as	CTATCTGCACTAGATGCACCTTA	23	3
mmu miR-18a 2mut as	CTATCTGCACTAG[A-t]TGCA[C-g]CTTA	23	2
mmu miR-19a nat as	TCAGTTTTGCATAGATTTGCACA	23	3
mmu miR-19a 2mut as	TCAGTTTTG[C-g]ATA[G-c]ATTTGCACA	23	2
mmu miR-19b nat as	TCAGTTTTGCATGGATTTGCACA	23	3
mmu miR-19b 2mut as	TCAGTTTTGCATG[G-c]ATTTG[C-g]ACA	23	2
mmu miR-20a nat as	CTACCTGCACTATAAGCACTTTA	23	3
mmu miR-20a 2mut as	CTACCTGCA[C-g]TATAAGCACT[T-a]TA	23	2
mmu miR-21 nat as	TCAACATCAGTCTGATAAGCTA	22	3
mmu miR-21 2mut as	TCAACATCAG[T-a]CTGATAAG[C-g]TA	22	2
mmu miR-22 nat as	ACAGTTCCTCAACTGGCAGCTT	22	3
mmu miR-22 2mut as	ACAGTT[C-g]TTCAACT[G-c]GCAGCTT	22	2
mmu miR-23a nat as	GGAAATCCCTGGCAATGTGAT	21	3
mmu miR-23a 2mut as	GGAAATCC[C-g]TGGA[A-t]TGTGAT	21	2
mmu miR-24 nat as	CTGTTCCCTGCTGAAGTGAAGCA	22	3
mmu miR-24 2mut as	CTGTTCCCTG[C-g]TGAAGT[G-c]AGCCA	22	2
mmu miR-25 nat as	TCAGACCGAGACAAGTGCAATG	22	3
mmu miR-25 2mut as	TCAGA[C-g]CGAGACA[A-t]GTGCAATG	22	2
mmu miR-26a nat as	AGCCTATCCTGGATTACTTGAA	22	3
mmu miR-26a 2mut as	AG[C-g]CTATCCTGGATTA[C-g]TTGAA	22	2

mmu miR-26b nat as	ACCTATCCTGAATTACTTGAA	21	3
mmu miR-26b 2mut as	AC[C-g]TATCCTGA[A-t]TTACTTGAA	21	2
mmu miR-27a nat as	GCGGAACTTAGCCACTGTGAA	21	3
mmu miR-27a 2mut as	GCGGAACTTAG[C-g]CACTGT[G-c]AA	21	2
mmu miR-28 nat as	CTCAATAGACTGTGAGCTCCTT	22	3
mmu miR-28 2mut as	CTCAA[T-a]AGACTGTGAG[C-g]TCCTT	22	2
mmu miR-29a nat as	TAACCGATTTTCAGATGGTGCTA	22	3
mmu miR-29a 2mut as	TAAC[C-g]GATTTTCAGA[T-a]GGTGCTA	22	2
mmu miR-30a nat as	CTTCCAGTCGAGGATGTTTACA	22	3
mmu miR-30a 2mut as	CTT[C-g]CAGTCGAGGATG[T-a]TTACA	22	2
mmu miR-32 nat as	TGCAACTTAGTAATGTGCAATA	22	3
mmu miR-32 2mut as	TGCAA[C-g]TTAGTAAT[G-c]TGCAATA	22	2
mmu miR-33 nat as	TGCAATGCAACTACAATGCAC	21	3
mmu miR-33 2mut as	TGCAA[T-a]GCAACTA[C-g]AATGCAC	21	2
mmu miR-93 nat as	CTACCTGCACGAACAGCACTTTG	23	3
mmu miR-93 2mut as	CTACC[T-a]GCACGAACAGCA[C-g]TTTG	23	2
mmu miR-96 nat as	AGCAAAAATGTGCTAGTGCCAAA	23	3
mmu miR-96 2mut as	AGCAAAAAT[G-c]TGCTAGTG[C-g]CAAA	23	2
mmu miR-98 nat as	AACAATACAACCTACTACCTCA	22	3
mmu miR-98 2mut as	AACA[A-t]TACAACCTACTA[C-g]CTCA	22	2
mmu miR-99a nat as	CACAAGATCGGATCTACGGGTT	22	3
mmu miR-99a 2mut as	CA[C-g]AAGATCGGATCTAC[G-c]GGTT	22	2
mmu miR-100 nat as	CACAAGTTCGGATCTACGGGTT	22	3
mmu miR-100 2mut as	CACA[A-t]GTT[C-g]GGATCTACGGGTT	22	2
mmu miR-101a nat as	TTCAGTTATCACAGTACTGTA	21	3
mmu miR-101a 2mut as	TTC[A-t]GTTATCA[C-g]AGTACTGTA	21	2
mmu miR-29b nat as	AACACTGATTTCAAATGGTGCTA	23	3
mmu miR-29b 2mut as	AACA[C-g]TGATTT[C-g]AAATGGTGCTA	23	2
mmu miR-103 nat as	TCATAGCCCTGTACAATGCTGCT	23	3
mmu miR-103 2mut as	TCATAG[C-g]CCTGTACA[A-t]TGCTGCT	23	2
mmu miR-107 nat as	TGATAGCCCTGTACAATGCTGCT	23	3
mmu miR-107 2mut as	TG[A-t]TAGCCCTGTACAATG[C-g]TGCT	23	2
mmu miR-7a nat as	ACAACAAAATCACTAGTCTTCCA	23	3
mmu miR-7a 2mut as	ACAA[C-g]AAAATCACTAGT[C-g]TTCCA	23	2
mmu miR-9 nat as	TCATACAGCTAGATAACCAAAGA	23	3
mmu miR-9 2mut as	TCATA[C-g]AGCTAGATAA[C-g]CAAAGA	23	2
mmu let-7g nat as	AACTGTACAACTACTACCTCA	22	3

mmu let-7g 2mut as	AA[C-g]TGTACA[A-t]ACTACTACCTCA	22	2
mmu let-7i nat as	AACAGCACAAACTACTACCTCA	22	3
mmu let-7i 2mut as	AACAGCACAA[A-t]CTACTAC[C-g]TCA	22	2
mmu miR-1 nat as	ATACATACTTCTTTACATTCCA	22	3
mmu miR-1 2mut as	ATA[C-g]ATACTTC[T-a]TTACATTCCA	22	2
mmu miR-15b nat as	TGTA AACCATGATGTGCTGCTA	22	3
mmu miR-15b 2mut as	TGTA AAC[A-t]TGATGTG[C-g]TGCTA	22	2
mmu miR-23b nat as	GGTAATCCCTGGCAATGTGAT	21	3
mmu miR-23b 2mut as	GGTAAT[C-g]CCTGGC[A-t]ATGTGAT	21	2
mmu miR-27b nat as	GCAGAACTTAGCCACTGTGAA	21	3
mmu miR-27b 2mut as	GCAGAAC[T-a]TAGCCA[C-g]TGTGAA	21	2
mmu miR-30b nat as	AGCTGAGTGTAGGATGTTTACA	22	3
mmu miR-30b 2mut as	AG[C-g]TGAG[T-a]GTAGGATGTTTACA	22	2
mmu miR-99b nat as	CGCAAGGTCGGTTCTACGGGTG	22	3
mmu miR-99b 2mut as	CGCA[A-t]GGTCGGTTCTA[C-g]GGGTG	22	2
mmu miR-124 nat as	GGCATTACCCGCGTGCCTTA	20	3
mmu miR-124 2mut as	GGCATTCA[C-g]CGCGTGCC[T-a]TA	20	2
mmu miR-125a-5p nat as	TCACAGGTTAAAGGGTCTCAGGGA	24	3
mmu miR-125a-5p 2mut as	TCA[C-g]AGGT[T-a]AAAGGGTCTCAGGGA	24	2
mmu miR-125a-3p nat as	GGCTCCCAAGAACCTCACCTGT	22	3
mmu miR-125a-3p 2mut as	GG[C-g]TCCCAAGAACCTCA[C-g]CTGT	22	2
mmu miR-125b-5p nat as	TCACAAGTTAGGGTCTCAGGGA	22	3
mmu miR-125b-5p 2mut as	TCA[C-g]AAGTT[A-t]GGGTCTCAGGGA	22	2
mmu miR-126-5p nat as	CGCGTACCAAAAGTAATAATG	21	3
mmu miR-126-5p 2mut as	CG[C-g]GTAC[C-g]AAAAGTAATAATG	21	2
mmu miR-126-3p nat as	CGCATTATTACTCACGGTACGA	22	3
mmu miR-126-3p 2mut as	CGCA[T-a]TATTA[C-g]TACGGTACGA	22	2
mmu miR-127 nat as	AGCCAAGCTCAGACGGATCCGA	22	3
mmu miR-127 2mut as	AGCCAAG[C-g]TCAG[A-t]CGGATCCGA	22	2
mmu miR-128 nat as	AAAGAGACCGGTTCACTGTGA	21	3
mmu miR-128 2mut as	AAAGA[G-c]ACCGGTTCA[C-g]TGTGA	21	2
mmu miR-130a nat as	ATGCCCTTTTAACATTGCACTG	22	3
mmu miR-130a 2mut as	ATGCC[C-g]TTTTA[A-t]CATTGCACTG	22	2
mmu miR-132 nat as	CGACCATGGCTGTAGACTGTTA	22	3
mmu miR-132 2mut as	CGACCATGG[C-g]TGT[A-t]GACTGTTA	22	2
mmu miR-133a nat as	CAGCTGGTTGAAGGGGACCAAA	22	3
mmu miR-133a 2mut as	CAG[C-g]TGGTTGA[A-t]GGGGACCAAA	22	2

mmu miR-134 nat as	CCCCTCTGGTCAACCAGTCACA	22	3
mmu miR-134 2mut as	CCCCTCT[G-c]GTCAAC[C-g]AGTCACA	22	2
mmu miR-135a nat as	TCACATAGGAATAAAAAGCCATA	23	3
mmu miR-135a 2mut as	TCACATAGGAAT[A-t]AAAAG[C-g]CATA	23	2
mmu miR-136 nat as	CCATCATCAAACAAATGGAGT	22	3
mmu miR-136 2mut as	CCAT[C-g]ATCAAA[A-t]CAAATGGAGT	22	2
mmu miR-137 nat as	CTACGCGTATTCTTAAGCAATAA	23	3
mmu miR-137 2mut as	CTACGCGTATT[C-g]TTAAGCA[A-t]TAA	23	2
mmu miR-138 nat as	CGGCCTGATTCACAACACCAGCT	23	3
mmu miR-138 2mut as	CGG[C-g]CTGA[T-a]TCACAACACCAGCT	23	2
mmu miR-140 nat as	CTACCATAGGGTAAAACCACTG	22	3
mmu miR-140 2mut as	CTACCATA[G-c]GGTAAAACCA[C-g]TG	22	2
mmu miR-141 nat as	CCATCTTTACCAGACAGTGTTA	22	3
mmu miR-141 2mut as	CCATCTTTA[C-g]CAGACAG[T-a]GTTA	22	2
mmu miR-142-5p nat as	AGTAGTGCTTTCTACTTTATG	21	3
mmu miR-142-5p 2mut as	AGTAGTGCTT[T-a]CTAC[T-a]TTATG	21	2
mmu miR-142-3p nat as	TCCATAAAGTAGGAAACACTACA	23	3
mmu miR-142-3p 2mut as	TCCATAAAGTA[G-c]GAAACA[C-g]TACA	23	2
mmu miR-144 nat as	AGTACATCATCTATACTGTA	20	3
mmu miR-144 2mut as	AGTA[C-g]ATC[A-t]TCTATACTGTA	20	2
mmu miR-145 nat as	AGGGATTCCCTGGGAAAACCTGGAC	23	3
mmu miR-145 2mut as	AGGGATTCCCT[G-c]GGAAAACCT[G-c]GAC	23	2
mmu miR-146a nat as	AACCCATGGAATTCAGTTCTCA	22	3
mmu miR-146a 2mut as	AAC[C-g]CATGGAATTCAGT[T-a]CTCA	22	2
mmu miR-149 nat as	GGGAGTGAAGACACGGAGCCAGA	23	3
mmu miR-149 2mut as	GGGA[G-c]TGAAGACACGGAG[C-g]CAGA	23	2
mmu miR-150 nat as	CACTGGTACAAGGGTTGGGAGA	22	3
mmu miR-150 2mut as	CA[C-g]TGGTA[C-g]AAGGGTTGGGAGA	22	2
mmu miR-151-5p nat as	ACTAGACTGTGAGCTCCTCGA	21	3
mmu miR-151-5p 2mut as	ACTAGA[C-g]TGTGAGCTCC[T-a]CGA	21	2
mmu miR-151-3p nat as	CCTCAAGGAGCCTCAGTCTAG	21	3
mmu miR-151-3p 2mut as	CCTC[A-t]AGGAGC[C-g]TCAGTCTAG	21	2
mmu miR-152 nat as	CCAAGTTCTGTCATGCACTGA	21	3
mmu miR-152 2mut as	CCAAGTTC[T-a]GTCATGCA[C-g]TGA	21	2
mmu miR-153 nat as	GATCACTTTTGTGACTATGCAA	22	3
mmu miR-153 2mut as	GAT[C-g]ACTTTTGT[G-c]ACTATGCAA	22	2
mmu miR-154 nat as	CGAAGGCAACACGGATAACCTA	22	3

mmu miR-154 2mut as	CGAAGGCAACAC[G-c]GATAA[C-g]CTA	22	2
mmu miR-155 nat as	ACCCCTATCACAATTAGCATTA	23	3
mmu miR-155 2mut as	AC[C-g]CCTAT[C-g]ACAATTAGCATTA	23	2
mmu miR-10b nat as	CACAAATTCGGTTCTACAGGGTA	23	3
mmu miR-10b 2mut as	CACAAATTT[C-g]GGTTCTACA[G-c]GGTA	23	2
mmu miR-129-5p nat as	GCAAGCCCAGACCGCAAAAAG	21	3
mmu miR-129-5p 2mut as	GCAAGCC[C-g]AGA[C-g]CGCAAAAAG	21	2
mmu miR-181a nat as	ACTCACCGACAGCGTTGAATGTT	23	3
mmu miR-181a 2mut as	ACTCA[C-g]CGAC[A-t]GCGTTGAATGTT	23	2
mmu miR-182 nat as	CGGTGTGAGTTCTACCATTGCCAAA	25	3
mmu miR-182 2mut as	CGGTGTGAG[T-a]TCTAC[C-g]ATTGCCAAA	25	2
mmu miR-183 nat as	AGTGAATTCTACCAGTGCCATA	22	3
mmu miR-183 2mut as	AGTGAAT[T-a]CTACCAGTGC[C-g]ATA	22	2
mmu miR-184 nat as	ACCCTTATCAGTTCTCCGTCCA	22	3
mmu miR-184 2mut as	AC[C-g]CTTATCAGTTCTCCG[T-a]CCA	22	2
mmu miR-185 nat as	TCAGGAAGTGCCTTTCTCTCCA	22	3
mmu miR-185 2mut as	TCAGG[A-t]ACTGCCTTTCT[C-g]TCCA	22	2
mmu miR-186 nat as	AGCCCAAAGGAGAATTCTTTG	22	3
mmu miR-186 2mut as	AGC[C-g]CAA[A-t]AGGAGAATTCTTTG	22	2
mmu miR-187 nat as	CCGGCTGCAACACAAGACACGA	22	3
mmu miR-187 2mut as	CCGGCTGCAA[C-g]ACAA[G-c]ACACGA	22	2
mmu miR-188-5p nat as	CCCTCCACCATGCAAGGGATG	21	3
mmu miR-188-5p 2mut as	CCCTC[C-g]ACC[A-t]TGCAAGGGATG	21	2
mmu miR-188-3p nat as	TGCAAACCCTGCATGTGGGAG	21	3
mmu miR-188-3p 2mut as	TGCAAACC[C-g]TGCATG[T-a]GGGAG	21	2
mmu miR-190 nat as	ACCTAATATATCAAACATATCA	22	3
mmu miR-190 2mut as	ACCTAATATAT[C-g]AAAC[A-t]TATCA	22	2
mmu miR-191 nat as	CAGCTGCTTTTGGGATTCCGTTG	23	3
mmu miR-191 2mut as	CAG[C-g]TGCTTTTGG[G-c]ATTCCGTTG	23	2
mmu miR-192 nat as	GGCTGTCAATTCATAGGTCAG	21	3
mmu miR-192 2mut as	GG[C-g]TGTCAA[T-a]TCATAGGTCAG	21	2
mmu miR-193 nat as	ACTGGGACTTTGTAGGCCAGTT	22	3
mmu miR-193 2mut as	ACTGGGA[C-g]TTT[G-c]TAGGCCAGTT	22	2
mmu miR-194 nat as	TCCACATGGAGTTGCTGTTACA	22	3
mmu miR-194 2mut as	TCCA[C-g]ATGGAGTTGCTGTT[A-t]CA	22	2
mmu miR-195 nat as	GCCAATATTTCTGTGCTGCTA	21	3
mmu miR-195 2mut as	GCCAATA[T-a]TTCTGTGCTG[C-g]TA	21	2

mmu miR-196a nat as	CCCAACAACATGAAACTACCTA	22	3
mmu miR-196a 2mut as	CCCAACA[A-t]CATGAAACTAC[C-g]TA	22	2
mmu miR-197 nat as	GCTGGGTGGAGAAGGTGGTGAA	22	3
mmu miR-197 2mut as	GCTGGGTGGAGAA[G-c]GTGG[T-a]GAA	22	2
mmu miR-199a-5p nat as	GAACAGGTAGTCTGAACACTGGG	23	3
mmu miR-199a-5p 2mut as	GAA[C-g]AGGTAG[T-a]CTGAACACTGGG	23	2
mmu miR-199a-3p nat as	TAACCAATGTGCAGACTACTGT	22	3
mmu miR-199a-3p 2mut as	TAACCAATGTG[C-g]AGACT[A-t]CTGT	22	2
mmu miR-200b nat as	TCATCATTACCAGGCAGTATTA	22	3
mmu miR-200b 2mut as	TCATCATTAC[C-g]AGGC[A-t]GTATTA	22	2
mmu miR-201 nat as	AAGAACAATGCCTTACTGAGTA	22	3
mmu miR-201 2mut as	AAGAA[C-g]AATGCCTTA[C-g]TGAGTA	22	2
mmu miR-202-5p nat as	AAAGAAGTATATGCATAGGAA	21	3
mmu miR-202-5p 2mut as	AAAGAAG[T-a]ATATG[C-g]ATAGGAA	21	2
mmu miR-202-3p nat as	TCTTCCCATGCGCTATACCTCT	22	3
mmu miR-202-3p 2mut as	TCTTCCC[A-t]TGCG[C-g]TATACCTCT	22	2
mmu miR-203 nat as	CTAGTGGTCCTAAACATTTAC	22	3
mmu miR-203 2mut as	CTAG[T-a]GGTCCTAAACATTT[C-g]AC	22	1
mmu miR-204 nat as	AGGCATAGGATGACAAAGGGAA	22	2
mmu miR-204 2mut as	AGGCA[T-a]AGGATGA[C-g]AAAGGGAA	22	1
mmu miR-205 nat as	CAGACTCCGGTGGAAATGAAGGA	22	2
mmu miR-205 2mut as	CAGA[C-g]TCCGGTGGAA[A-t]TGAAGGA	22	1
mmu miR-206 nat as	CCACACACTTCTTACATTCCA	22	2
mmu miR-206 2mut as	CCACACA[C-g]TTCCTT[A-t]CATTCCA	22	1
mmu miR-207 nat as	GAGGGAGGAGAGCCAGGAGAAGC	23	2
mmu miR-207 2mut as	GAGG[G-c]AGGAGAG[C-g]CAGGAGAAGC	23	1
mmu miR-208a nat as	ACAAGCTTTTTGCTCGTCTTAT	22	2
mmu miR-208a 2mut as	ACAAGCTTTTTG[C-g]TCGTC[T-a]TAT	22	1
mmu miR-148a nat as	ACAAAGTTCTGTAGTGCCTGA	22	2
mmu miR-148a 2mut as	ACAAAG[T-a]TCTGTAGTGCA[C-g]TGA	22	1
mmu miR-30c nat as	GCTGAGAGTGTAGGATGTTTACA	23	2
mmu miR-30c 2mut as	GCT[G-c]AGAGTGTAGGATG[T-a]TTACA	23	1
mmu miR-30d nat as	CTTCCAGTCGGGGATGTTTACA	22	2
mmu miR-30d 2mut as	CTT[C-g]CAGT[C-g]GGGGATGTTTACA	22	1
mmu miR-122 nat as	CAAACACCATTGTCACACTCCA	22	2
mmu miR-122 2mut as	CAA[C-g]ACCATTGTCACA[C-g]TCCA	22	1
mmu miR-143 nat as	GAGCTACAGTGCTTCATCTCA	21	2

mmu miR-143 2mut as	GAG[C-g]TACAGTGCTTCATC[T-a]CA	21	1
mmu miR-30e nat as	CTTCCAGTCAAGGATGTTTACA	22	2
mmu miR-30e 2mut as	CTT[C-g]CAGTC[A-t]AGGATGTTTACA	22	1
mmu miR-139-5p nat as	CTGGAGACACGTGCACTGTAGA	22	2
mmu miR-139-5p 2mut as	CTGGAGAC[A-t]CGTGCA[C-g]TGTAGA	22	1
mmu miR-10a nat as	CACAAATTCGGATCTACAGGGTA	23	2
mmu miR-10a 2mut as	CA[C-g]AAATTCGGATCTAC[A-t]GGGTA	23	1
mmu miR-34a nat as	ACAACCAGCTAAGACACTGCCA	22	2
mmu miR-34a 2mut as	ACAAC[C-g]AGCTAAG[A-t]CACTGCCA	22	1
mmu miR-181b nat as	ACCCACCGACAGCAATGAATGTT	23	2
mmu miR-181b 2mut as	ACCCACCGA[C-g]AGCAAT[G-c]AATGTT	23	1
mmu miR-181c nat as	ACTCACCGACAGGTTGAATGTT	22	2
mmu miR-181c 2mut as	ACTCAC[C-g]GACAGGTT[G-c]AATGTT	22	1
mmu miR-210 nat as	TCAGCCGCTGTCACACGCACAG	22	2
mmu miR-210 2mut as	TCAGC[C-g]GCTGTACAC[A-t]CGCACAG	22	1
mmu miR-214 nat as	ACTGCCTGTCTGTGCCTGCTGT	22	2
mmu miR-214 2mut as	ACTG[C-g]CTGTCTGTGC[C-g]TGCTGT	22	1
mmu miR-216a nat as	TCACAGTTGCCAGCTGAGATTA	22	2
mmu miR-216a 2mut as	TCACAGTTGC[C-g]AGCT[G-c]AGATTA	22	1
mmu miR-218 nat as	ACATGGTTAGATCAAGCACAA	21	2
mmu miR-218 2mut as	ACATGGTTA[G-c]ATCAAG[C-g]ACAA	21	1
mmu miR-219 nat as	AGAATTGCGTTTGGACAATCA	21	2
mmu miR-219 2mut as	AGAATTG[C-g]GTTTG[G-c]ACAATCA	21	1
mmu miR-221 nat as	GAAACCCAGCAGACAATGTAGCT	23	2
mmu miR-221 2mut as	GAAACCCAGCAGA[C-g]AATGT[A-t]GCT	23	1
mmu miR-222 nat as	ACCCAGTAGCCAGATGTAGCT	21	2
mmu miR-222 2mut as	ACC[C-g]AGTAG[C-g]CAGATGTAGCT	21	1
mmu miR-223 nat as	TGGGGTATTTGACAAACTGACA	22	2
mmu miR-223 2mut as	TGGGGTA[T-a]TTGACAAA[C-g]TGACA	22	1
mmu miR-290-5p nat as	AAAGTGCCCCCATAGTTTGAGT	22	2
mmu miR-290-5p 2mut as	AAAGTG[C-g]CCCCATAGTTTG[A-t]GT	22	1
mmu miR-290-3p nat as	GGGCTTAAAACTAGGCGGCACTTT	24	2
mmu miR-290-3p 2mut as	GGG[C-g]TTAAA[A-t]CTAGGCGGCACTTT	24	1
mmu miR-291a-5p nat as	AGAGAGGGCCTCCACTTTGATG	22	2
mmu miR-291a-5p 2mut as	AGAGAGGGCCTC[C-g]ACTTTG[A-t]TG	22	1
mmu miR-291a-3p nat as	GCACACAAAGTGAAGCACTTT	22	2
mmu miR-291a-3p 2mut as	GCACA[C-g]AAAGTGGA[A-t]GCACTTT	22	1

mmu miR-292-5p nat as	CAAAGAGCCCCAGTTTGAGT	22	2
mmu miR-292-5p 2mut as	CAA[A-t]GAG[C-g]CCCCAGTTTGAGT	22	1
mmu miR-292-3p nat as	ACACTCAAACCTGGCGGCACTTT	24	2
mmu miR-292-3p 2mut as	ACA[C-g]TCAAACCT[G-c]GCGGCACTTT	24	1
mmu miR-293 nat as	ACACTACAACTCTGCGGCACT	22	2
mmu miR-293 2mut as	ACACTACA[A-t]ACT[C-g]TGCGGCACT	22	1
mmu miR-294 nat as	ACACACAAAAGGGAAGCACTTT	22	2
mmu miR-294 2mut as	ACAC[A-t]CAAAGGGAAGCA[C-g]TTT	22	1
mmu miR-295 nat as	AGACTCAAAGTAGTAGCACTTT	23	2
mmu miR-295 2mut as	AGACTCAAAGT[A-t]GTAG[C-g]ACTTT	23	1
mmu miR-296-5p nat as	ACAGGATTGAGGGGGGCGCCT	21	2
mmu miR-296-5p 2mut as	ACAGGAT[T-a]GAGGGGGGCG[C-g]CT	21	1
mmu miR-296-3p nat as	GGAGAGCCTCCACCCAACCCTC	22	2
mmu miR-296-3p 2mut as	GGAG[A-t]GCCTCCACC[C-g]AACCCCTC	22	1
mmu miR-297a nat as	ACATGCACATGCACACATACAT	22	2
mmu miR-297a 2mut as	ACATGCA[C-g]ATGCACACATA[C-g]AT	22	1
mmu miR-298 nat as	GGGAAGAACAGCCCTCCTCTGCC	23	2
mmu miR-298 2mut as	GGGAAGA[A-t]CAGCCCTCCT[C-g]TGCC	23	1
mmu miR-299 nat as	AAGCGGTTTACCGTCCCACATA	22	2
mmu miR-299 2mut as	AAGC[G-c]GTTTAC[C-g]GTCCCACATA	22	1
mmu miR-300 nat as	GAAGAGAGCTTGCCCTTGATA	22	2
mmu miR-300 2mut as	GAAGA[G-c]AGCTTG[C-g]CCTTGATA	22	1
mmu miR-301a nat as	GCTTTGACAATACTATTGCACTG	23	2
mmu miR-301a 2mut as	GCTTTGACAA[T-a]ACTATTGCA[C-g]TG	23	1
mmu miR-302a nat as	TCACCAAACATGGAAGCACTTA	23	2
mmu miR-302a 2mut as	TCACCAAAA[C-g]ATGGAAGCA[C-g]TTA	23	1
mmu miR-34c nat as	GCAATCAGCTAACTACACTGCCT	23	2
mmu miR-34c 2mut as	GC[A-t]ATCAGCTAACTACA[C-g]TGCCCT	23	1
mmu miR-34b-5p nat as	ACAATCAGCTAATTACACTGCCT	23	2
mmu miR-34b-5p 2mut as	ACAAT[C-g]AGCTAATTAC[A-t]CTGCCT	23	1
mmu miR-34b-3p nat as	GATGGCAGTGGAGTTAGTGATT	22	2
mmu miR-34b-3p 2mut as	GATGG[C-g]AGT[G-c]GAGTTAGTGATT	22	1
mmu miR-106a nat as	CTACCTGCACTGTTAGCACTTTG	23	2
mmu miR-106a 2mut as	CTACC[T-a]GCACTGTTAGCA[C-g]TTTG	23	1
mmu miR-106b nat as	ATCTGCACTGTCAGCACTTTA	21	2
mmu miR-106b 2mut as	ATCTGCA[C-g]TGTCAGCAC[T-a]TTA	21	1
mmu miR-130b nat as	ATGCCCTTTCATCATTGCACTG	22	2

mmu miR-130b 2mut as	ATGC[C-g]CTTTCATCATTG[C-g]ACTG	22	1
mmu miR-129-3p nat as	ATGCTTTTTGGGGTAAGGGCTT	22	2
mmu miR-129-3p 2mut as	ATGCTTTTT[G-c]GGGTAAGGG[C-g]TT	22	1
rno miR-136 nat as	TCCATCATCAAACAAATGGAGT	23	2
rno miR-136 2mut as	TCCATCAT[C-g]AAAACAA[A-t]TGGAGT	23	1
mmu miR-320 nat as	TCGCCCTCTCAACCCAGCTTTT	22	2
mmu miR-320 2mut as	TCGCCCTCTCAA[C-g]CCAGC[T-a]TTT	22	1
mmu miR-200a nat as	ACATCGTTACCAGACAGTGTTA	22	2
mmu miR-200a 2mut as	ACATCGTTA[C-g]CAGA[C-g]AGTGTTA	22	1
mmu miR-29c nat as	TAACCGATTTCAAATGGTGCTA	22	2
mmu miR-29c 2mut as	TAAC[C-g]GATTTCAAATGGTG[C-g]TA	22	1
mmu miR-31 nat as	CAGCTATGCCAGCATCTTGCCCT	22	2
mmu miR-31 2mut as	CAGCTATGC[C-g]AGCATCTT[G-c]CCT	22	1
mmu miR-92a nat as	CAGGCCGGGACAAGTGCAATA	21	2
mmu miR-92a 2mut as	CAGGC[C-g]GGGACA[A-t]GTGCAATA	21	1
mmu miR-322 nat as	TCCAAAACATGAATTGCTGCTG	22	2
mmu miR-322 2mut as	TC[C-g]AAAA[C-g]ATGAATTGCTGCTG	22	1
mmu miR-323-3p nat as	AGAGGTCGACCGTGTAATGTG	21	2
mmu miR-323-3p 2mut as	AGAGGT[C-g]GAC[C-g]GTGTAATGTG	21	1
mmu miR-323-5p nat as	GCGAACGCGCCACGGACCACCT	22	2
mmu miR-323-5p 2mut as	GCGAACGC[G-c]CCACGGAC[C-g]ACCT	22	1
mmu miR-324-5p nat as	ACACCAATGCCCTAGGGGATGCG	23	2
mmu miR-324-5p 2mut as	ACACCAATG[C-g]CCTAGGG[G-c]ATGCG	23	1
rno miR-324-3p nat as	CCAGCAGCACCTGGGGCAGTGG	22	2
rno miR-324-3p 2mut as	CC[A-t]GCAG[C-g]ACCTGGGGCAGTGG	22	1
mmu miR-324-3p nat as	AGCAGCACCTGGGGCAGTGG	20	2
mmu miR-324-3p 2mut as	AG[C-g]AGCA[C-g]CTGGGGCAGTGG	20	1
rno miR-325-5p nat as	ACACTTACTGAGCACCTACTAGG	23	2
rno miR-325-5p 2mut as	ACAC[T-a]TACTGAGCACCTA[C-g]TAGG	23	1
mmu miR-325 nat as	TTGATAGGAGGTGCTCAATAAA	22	2
mmu miR-325 2mut as	TTGATA[G-c]GAGGTG[C-g]TCAATAAA	22	1
mmu miR-326 nat as	ACTGGAGGAAGGGCCCAGAGG	21	2
mmu miR-326 2mut as	ACT[G-c]GAGGAAGGGCC[C-g]AGAGG	21	1
rno miR-327 nat as	ACCCTCATGCCCTCAAGG	19	2
rno miR-327 2mut as	ACCCTCATG[C-g]CCCT[C-g]AAGG	19	1
mmu miR-328 nat as	ACGGAAGGGCAGAGAGGGCCAG	22	2
mmu miR-328 2mut as	ACGGAAGGGCAG[A-t]GAGGG[C-g]CAG	22	1

mmu miR-329 nat as	AAAAAGGTTAGCTGGGTGTGTT	22	2
mmu miR-329 2mut as	AAAA[A-t]GGTTAG[C-g]TGGGTGTGTT	22	1
mmu miR-330 nat as	GCCTAAGACACAGGCCAGAGA	22	2
mmu miR-330 2mut as	GCCTAA[G-c]ACA[C-g]AGGCCAGAGA	22	1
mmu miR-331-3p nat as	TTCTAGGATAGGCCAGGGGC	21	2
mmu miR-331-3p 2mut as	TTCTA[G-c]GATAGG[C-g]CCAGGGGC	21	1
mmu miR-331-5p nat as	GGATCCCTGGGACCATACCTAG	22	2
mmu miR-331-5p 2mut as	GGATCCC[T-a]GGGACCATA[C-g]CTAG	22	1
mmu miR-335-5p nat as	ACATTTTTCGTTATTGCTTTGA	23	2
mmu miR-335-5p 2mut as	AC[A-t]TTTTTCGTTATTG[C-g]TCTTGA	23	1
rno miR-336 nat as	AGACTAGATATGGAAGGGTGA	21	2
rno miR-336 2mut as	AGA[C-g]TAGATATGGAAGGG[T-a]GA	21	1
rno miR-337 nat as	AAAGGCATCATATAGGAGCTGAA	23	2
rno miR-337 2mut as	AAA[G-c]GCATCATATAGGAG[C-g]TGAA	23	1
mmu miR-337-5p nat as	AACTCCTGCATGACGCCGTTT	21	2
mmu miR-337-5p 2mut as	AA[C-g]TCCTGCATGA[C-g]GCCGTTT	21	1
mmu miR-337-3p nat as	AGGCATCATATAGGAGCTGAA	21	2
mmu miR-337-3p 2mut as	AGGCATCATAT[A-t]GGAG[C-g]TGAA	21	1
rno miR-148b-5p nat as	CCTGAGTGTATAACAGAACTTC	22	2
rno miR-148b-5p 2mut as	CCTGAGTGT[A-t]TAA[C-g]AGAACTTC	22	1
mmu miR-148b nat as	ACAAAGTTCTGTGATGCACTGA	22	2
mmu miR-148b 2mut as	ACAAAGTTC[T-a]GTGATGCA[C-g]TGA	22	1
rno miR-338 nat as	TCAACAAAATCACTGATGCTGGA	23	2
rno miR-338 2mut as	TCAA[C-g]AAAAT[C-g]ACTGATGCTGGA	23	1
mmu miR-338-5p nat as	CACTCAGCACCAGGATATTGTT	22	2
mmu miR-338-5p 2mut as	CACTCAGCAC[C-g]AGG[A-t]TATTGTT	22	1
mmu miR-338-3p nat as	CAACAAAATCACTGATGCTGGA	22	2
mmu miR-338-3p 2mut as	CAACAAAATCA[C-g]TGATGCT[G-c]GA	22	1
mmu miR-339-5p nat as	CGTGAGCTCCTGGAGGACAGGGA	23	2
mmu miR-339-5p 2mut as	CGTGAG[C-g]TCCTGGA[G-c]GACAGGGA	23	1
rno miR-339-3p nat as	TGGCTCTGTCGTCGAGGCGCTCA	23	2
rno miR-339-3p 2mut as	TGGCTCTGT[C-g]GTCGA[G-c]GCGCTCA	23	1
mmu miR-339-3p nat as	CGGCTCTGTCGCCGAGGCGCTCA	23	2
mmu miR-339-3p 2mut as	CGGCTCTGT[C-g]GCCGAGG[C-g]GCTCA	23	1
mmu miR-340-5p nat as	AATCAGTCTCATTGCTTTATAA	22	2
mmu miR-340-5p 2mut as	AAT[C-g]AGTCT[C-g]ATTGCTTTATAA	22	1
rno miR-340-3p nat as	GGCTATAAAGTAACTGAGACGGA	23	2

rno miR-340-3p 2mut as	GGCT[A-t]TAAAGTAACTGAGA[C-g]GGA	23	1
mmu miR-340-3p nat as	GCTATAAAGTAACTGAGACGGA	22	2
mmu miR-340-3p 2mut as	GCTATAAAGTAA[C-g]TGAG[A-t]CGGA	22	1
mmu miR-341 nat as	ACCGACCGACCGATCGACCGA	21	2
mmu miR-341 2mut as	ACCGACCGA[C-g]CGATCG[A-t]CCGA	21	1
mmu miR-342-5p nat as	CTCAATCACAGATAGCACCCCT	22	2
mmu miR-342-5p 2mut as	CT[C-g]AAT[C-g]ACAGATAGCACCCCT	22	1
mmu miR-342-3p nat as	ACGGGTGCGATTTCTGTGTGAGA	23	2
mmu miR-342-3p 2mut as	AC[G-c]GGTG[C-g]GATTTCTGTGTGAGA	23	1
rno miR-343 nat as	TCTGGGCACACGGAGGGAGA	20	2
rno miR-343 2mut as	TCTGGGCACA[C-g]GGA[G-c]GGAGA	20	1
rno miR-344-5p nat as	CCTGGAATCTAGCCAGGAGCCTGA	24	2
rno miR-344-5p 2mut as	CCTGGAAT[C-g]TAGCCAGGAG[C-g]CTGA	24	1
rno miR-344-3p nat as	ACGGTCAGGCTTTGGCTAGATCA	23	2
rno miR-344-3p 2mut as	ACGGTCAGG[C-g]TTT[G-c]GCTAGATCA	23	1
mmu miR-344 nat as	ACAGTCAGGCTTTGGCTAGATCA	23	2
mmu miR-344 2mut as	ACAGTCAGGCTTTGG[C-g]TAGA[T-a]CA	23	1
rno miR-345-5p nat as	GCACTGGACTAGGGGTCAGCA	21	2
rno miR-345-5p 2mut as	GCACT[G-c]GACTAGGGGT[C-g]AGCA	21	1
rno miR-345-3p nat as	TCTCCAGACCCCTAGTTCAGGG	22	2
rno miR-345-3p 2mut as	TCTCCAGAC[C-g]CCTAG[T-a]TCAGGG	22	1
mmu miR-345-5p nat as	AAGCACTGGACTAGGGGTCAGC	22	2
mmu miR-345-5p 2mut as	AAGCA[C-g]TGGA[C-g]TAGGGGTCAGC	22	1
mmu miR-345-3p nat as	GTCTCCAGACCCCTAGTTCAGG	22	2
mmu miR-345-3p 2mut as	GTCTCCAGACCC[C-g]TAGT[T-a]CAGG	22	1
rno miR-346 nat as	AGAGGCAGGCACTCAGGCAGACA	23	2
rno miR-346 2mut as	AGA[G-c]GCAGGCACTCAGG[C-g]AGACA	23	1
mmu miR-346 nat as	AGAGGCAGGCACTCGGGCAGACA	23	2
mmu miR-346 2mut as	AGAGGC[A-t]GGCACT[C-g]GGGCAGACA	23	1
rno miR-347 nat as	TGGGCGACCCAGAGGGACA	19	2
rno miR-347 2mut as	TGGG[C-g]GACCCAGAGG[G-c]ACA	19	1
rno miR-349 nat as	AGAGGTTAAGACAGCAGGGCTG	22	2
rno miR-349 2mut as	AGAGGT[T-a]AAGA[C-g]AGCAGGGCTG	22	1
rno miR-350 nat as	GTGAAAGTGTATGGGCTTTGTGAA	24	2
rno miR-350 2mut as	GTGAAA[G-c]TGTATGGG[C-g]TTTGTGAA	24	1
mmu miR-350 nat as	GAAAGTGTATGGGCTTTGTGAA	22	2
mmu miR-350 2mut as	GAAAGTG[T-a]ATGGGCTTTGT[G-c]AA	22	1

rno miR-351 nat as	TCAGGCTCAAAGGGCTCCTCAGGGA	25	2
rno miR-351 2mut as	TCAGGCTCAA[A-t]GGGCTC[C-g]TCAGGGA	25	1
mmu miR-351 nat as	CAGGCTCAAAGGGCTCCTCAGGGA	24	2
mmu miR-351 2mut as	CAGGCT[C-g]AAAGGGCTCCTC[A-t]GGGA	24	1
rno miR-352 nat as	TACTATGCAACCTACTACTCT	21	2
rno miR-352 2mut as	TACTAT[G-c]CAAC[C-g]TACTACTCT	21	1
mmu miR-135b nat as	TCACATAGGAATGAAAAGCCATA	23	2
mmu miR-135b 2mut as	TCAC[A-t]TAGGAATGAAAAG[C-g]CATA	23	1
mmu miR-101b nat as	TTCAGCTATCACAGTACTGTA	21	2
mmu miR-101b 2mut as	TT[C-g]AGCTATCACAGTACT[G-c]TA	21	1
mmu miR-200c nat as	TCCATCATTACCCGGCAGTATTA	23	2
mmu miR-200c 2mut as	TCCATCATT[C-g]CCGG[C-g]AGTATTA	23	1
mmu miR-139-3p nat as	CTCCAACAGGGCCGCGTCTCCA	22	2
mmu miR-139-3p 2mut as	CT[C-g]CAACAGGGCC[G-c]CGTCTCCA	22	1
mmu miR-212 nat as	TGGCCGTGACTGGAGACTGTTA	22	2
mmu miR-212 2mut as	TGGCC[G-c]TGACTGGAGA[C-g]TGTTA	22	1
mmu miR-211 nat as	AGGCAAAGGATGACAAAGGGAA	22	2
mmu miR-211 2mut as	AGG[C-g]AAAG[G-c]ATGACAAAGGGAA	22	1
mmu miR-224 nat as	AACGGAACCACTAGTACTTA	21	2
mmu miR-224 2mut as	AA[C-g]GGAA[C-g]CACTAGTACTTA	21	1
mmu miR-125b-3p nat as	AGCTCCCAAGAGCCTAACCCGT	22	2
mmu miR-125b-3p 2mut as	AGCTCCC[A-t]AGAGCCTAACCC[C-g]GT	22	1
mmu miR-7b nat as	ACAACAAAATCACAAGTCTTCCA	23	2
mmu miR-7b 2mut as	ACAACAAAATCACAAG[T-a]CTT[C-g]CA	23	1
mmu miR-217 nat as	TCCAGTCAGTTCTGATGCAGTA	23	2
mmu miR-217 2mut as	TCCAGTCAGTT[C-g]CTGAT[G-c]CAGTA	23	1
rno miR-219-2-3p nat as	ACAGATGTCCAGCCACAATTCT	22	2
rno miR-219-2-3p 2mut as	ACAGATGT[C-g]CAGCC[A-t]CAATTCT	22	1
rno miR-299 nat as	ATGTATGTGGGACGGTAAACCA	22	2
rno miR-299 2mut as	ATGT[A-t]TGTGGGACGGTAAA[C-g]CA	22	1
mmu miR-361 nat as	GTACCCCTGGAGATTCTGATAA	22	2
mmu miR-361 2mut as	GTA[C-g]CCCTGGAGATT[C-a]GATAA	22	1
mmu miR-362-5p nat as	ATTCACACCTAGGTTCCAAGGATT	24	2
mmu miR-362-5p 2mut as	ATTCACAC[C-g]TAGGTTCCA[A-t]GGATT	24	1
mmu miR-362-3p nat as	TGAATCCTTGAACAGGTGTGTT	22	2
mmu miR-362-3p 2mut as	TGAATC[C-g]TTGAA[C-g]AGGTGTGTT	22	1
mmu miR-363 nat as	TACAGATGGATACCGTGCAATT	22	2

mmu miR-363 2mut as	TACAGAT[G-c]GATA[C-g]CGTGCAATT	22	1
mmu miR-365 nat as	ATAAGGATTTTTAGGGGCATTA	22	2
mmu miR-365 2mut as	ATAAGGATTTTT[A-t]GGGG[C-g]ATTA	22	1
mmu miR-302b nat as	CTACTAAAACATGGAAGCACTTA	23	2
mmu miR-302b 2mut as	CTACTAAAAC[A-t]TGGAAGCA[C-g]TTA	23	1
mmu miR-302d nat as	ACACTCAAACATGGAAGCACTTA	23	2
mmu miR-302d 2mut as	ACACTCAAACATGG[A-t]AGCA[C-g]TTA	23	1
mmu miR-367 nat as	TCACCATTGCTAAAGTGCAATT	22	2
mmu miR-367 2mut as	TCA[C-g]CATTGCTAAAGTGC[A-t]ATT	22	1
mmu miR-369-5p nat as	GCGAATATAACACGGTTCGATCT	22	2
mmu miR-369-5p 2mut as	GCGAATA[T-a]AACAC[C-g]GGTCGATCT	22	1
mmu miR-369-3p nat as	AAAGATCAACCATGTATTATT	21	2
mmu miR-369-3p 2mut as	AAAGAT[C-g]AAC[C-g]ATGTATTATT	21	1
mmu miR-370 nat as	ACCAGGTTCCACCCCAGCAGGC	22	2
mmu miR-370 2mut as	AC[C-g]AGGTTCCAC[C-g]CCAGCAGGC	22	1
mmu miR-375 nat as	TCACGCGAGCCGAACGAACAAA	22	2
mmu miR-375 2mut as	TCA[C-g]GCGAG[C-g]CGAACGAACAAA	22	1
mmu miR-377 nat as	ACAAAAGTTGCCTTTGTGTGAT	22	2
mmu miR-377 2mut as	ACAAAAGTTG[C-g]CTTTGT[G-c]TGAT	22	1
mmu miR-378 nat as	CCTTCTGACTCCAAGTCCAGT	21	2
mmu miR-378 2mut as	CCTTCTGACTCCA[A-t]GTC[C-g]AGT	21	1
mmu miR-379 nat as	CCTACGTTCCATAGTCTACCA	21	2
mmu miR-379 2mut as	CCTACGTT[C-g]ATAGTCTA[C-g]CA	21	1
mmu miR-381 nat as	ACAGAGAGCTTGCCCTTGATA	22	2
mmu miR-381 2mut as	ACA[G-c]AGAG[C-g]TTGCCCTTGATA	22	1
mmu miR-382 nat as	CGAATCCACCACGAACAACCTTC	22	2
mmu miR-382 2mut as	CGAAT[C-g]CACCAC[G-c]AACAACCTTC	22	1
mmu miR-376a nat as	ACGTGGATTTTCCTCTACGAT	21	2
mmu miR-376a 2mut as	ACGTGGATTTTC[C-g]TCTA[C-g]GAT	21	1
mmu miR-380-5p nat as	CGCATGTTCTATGGTCAACCAT	22	2
mmu miR-380-5p 2mut as	CG[C-g]ATGTT[C-g]TATGGTCAACCAT	22	1
mmu miR-380-3p nat as	AAGATGTGGACCATACTACATA	22	2
mmu miR-380-3p 2mut as	AAGATGTGGACCA[T-a]ACTA[C-g]ATA	22	1
mmu miR-383 nat as	AGCCACAGTCACCTTCTGATCT	22	2
mmu miR-383 2mut as	AGCC[A-t]CAGTCACCTT[C-g]TGATCT	22	1
mmu miR-335-3p nat as	GGTCAGGAGCAATAATGAAAAA	22	2
mmu miR-335-3p 2mut as	GGTCA[G-c]GAG[C-g]AATAATGAAAAA	22	1

mmu miR-133b nat as	TAGCTGGTTGAAGGGGACCAAA	22	2
mmu miR-133b 2mut as	TAGCTGGTTG[A-t]AGGGGA[C-g]CAAA	22	1
rno miR-10a-3p nat as	TATTCCCCTAGATACGAATTTG	22	2
rno miR-10a-3p 2mut as	TATT[C-g]CCCTAGATAC[G-c]AATTTG	22	1
rno miR-10b nat as	ACACAAATTCCGTTCTACAGGG	22	2
rno miR-10b 2mut as	ACACAAATT[C-g]GGTTCTACA[G-c]GG	22	1
rno miR-17-3p nat as	CCACAAGTGCCTTCACTGCAGT	22	2
rno miR-17-3p 2mut as	CCA[C-g]AAGTG[C-g]CTTCACTGCAGT	22	1
rno miR-30b-3p nat as	GACGTAAACATCCACATCCCAG	22	2
rno miR-30b-3p 2mut as	GACGTAAAC[A-t]TCCACAT[C-g]CCAG	22	1
rno miR-34b nat as	CAATCAGCTAATTACACTGCCTA	23	2
rno miR-34b 2mut as	CA[A-t]TCAGCTAATTACACTG[C-g]CTA	23	1
rno miR-143 nat as	TGAGCTACAGTGCTTCATCTCA	22	2
rno miR-143 2mut as	TGAGC[T-a]ACAGTG[C-g]TTCATCTCA	22	1
rno miR-200c nat as	CCATCATTACCCGGCAGTATTA	22	2
rno miR-200c 2mut as	CCATCATTACC[C-g]GGCAG[T-a]ATTA	22	1
rno miR-200b nat as	GTCATCATTACCAGGCAGTATTA	23	2
rno miR-200b 2mut as	GTCATCATTAC[C-g]AGGCAG[T-a]ATTA	23	1
rno miR-214 nat as	CTGCCTGTCTGTGCCTGCTGT	21	2
rno miR-214 2mut as	CTGCCTGT[C-g]TGTGCCTG[C-g]TGT	21	1
rno miR-217 nat as	ATCCAGTCAGTTCCTGATGCAGTA	24	2
rno miR-217 2mut as	ATC[C-g]AGTCAGTTCCTGATG[C-g]AGTA	24	1
rno miR-219-1-3p nat as	CGGGACGTCCAGACGCAACTCT	22	2
rno miR-219-1-3p 2mut as	CGGGACGTCCAGACG[C-g]AAC[T-a]CT	22	1
rno miR-223 nat as	GGGGTATTTGACAAACTGACA	21	2
rno miR-223 2mut as	GGGG[T-a]ATTTGACAAA[C-g]TGACA	21	1
rno miR-290 nat as	AAAAAGTGCCCCATAGTTTGAG	23	2
rno miR-290 2mut as	AAAAAG[T-a]GCCC[C-g]CATAGTTTGAG	23	1
rno miR-291a-3p nat as	GGCACACAAAGTGGAAGCACTTT	23	2
rno miR-291a-3p 2mut as	GGCACACAAAGTG[G-c]AAG[C-g]ACTTT	23	1
rno miR-292-3p nat as	ACACTCAAACCTGGCGGCACTT	23	2
rno miR-292-3p 2mut as	ACACTCAAAC[C-g]TGGC[G-c]GCACTT	23	1
rno miR-297 nat as	CATGCATACATGCACACATACAT	23	2
rno miR-297 2mut as	CATGCATAC[A-t]TGCACA[C-g]ATACAT	23	1
rno miR-300-5p nat as	ACAAAGGATAACCTCTCTTCAA	22	2
rno miR-300-5p 2mut as	ACAAAGGATAAC[C-g]TCTCT[T-a]CAA	22	1
mmu miR-215 nat as	GTCTGTCAAATCATAGGTCAT	21	2

mmu miR-215 2mut as	GTCTGT[C-g]AAATCATAGG[T-a]CAT	21	1
mmu miR-384-5p nat as	ACATTGCCTAGGAATTGTTTACA	23	2
mmu miR-384-5p 2mut as	ACATTG[C-g]CTA[G-c]GAATTGTTTACA	23	1
mmu miR-384-3p nat as	ATTGTGAACAATTTCTAGGAAT	22	2
mmu miR-384-3p 2mut as	ATTGTGAA[C-g]AATTTCT[A-t]GGAAT	22	1
mmu miR-196b nat as	CCCAACAACAGGAAACTACCTA	22	2
mmu miR-196b 2mut as	CCCAACAACAGGAAA[C-g]TAC[C-g]TA	22	1
mmu miR-409-5p nat as	ATGCAAAGTTGCTCGGGTAACCT	23	2
mmu miR-409-5p 2mut as	ATGCAAAGTTGCT[C-g]GGG[T-a]AACCT	23	1
mmu miR-409-3p nat as	AGGGGTTCCACCGAGCAACATTC	22	2
mmu miR-409-3p 2mut as	AGGGGTT[C-g]ACCGAGCAA[C-g]ATTC	22	1
mmu miR-410 nat as	ACAGGCCATCTGTGTTATATT	21	2
mmu miR-410 2mut as	ACAGG[C-g]CATCTGTG[T-a]TATATT	21	1
mmu miR-376b nat as	AAGTGGATGTTCCCTCTATGAT	21	2
mmu miR-376b 2mut as	AAGTGGAT[G-c]TTC[C-g]TCTATGAT	21	1
mmu miR-411 nat as	CGTACGCTATACGGTCTACTA	21	2
mmu miR-411 2mut as	CGTA[C-g]GCTATACGGTC[T-a]ACTA	21	1
mmu miR-412 nat as	CGGCTAGTGGACCAGGTGAA	20	2
mmu miR-412 2mut as	CGG[C-g]TAGTG[G-c]ACCAGGTGAA	20	1
rno miR-421 nat as	CAACAAACATTTAATGAGGCC	21	2
rno miR-421 2mut as	CAA[C-g]AAACATTTAA[T-a]GAGGCC	21	1
mmu miR-423-5p nat as	AAAGTCTCGCTCTCTGCCCTCA	23	2
mmu miR-423-5p 2mut as	AAAGTCTCG[C-g]TCTCTGCCCT[T-a]CA	23	1
mmu miR-423-3p nat as	ACTGAGGGGCTCAGACCGAGCT	23	2
mmu miR-423-3p 2mut as	ACT[G-c]AGGGGCT[C-g]AGACCGAGCT	23	1
mmu miR-425 nat as	TCAACGGGAGTGATCGTGTCATT	23	2
mmu miR-425 2mut as	TCAA[C-g]GGGAGT[G-c]ATCGTGTCATT	23	1
mmu miR-20b nat as	CTACCTGCACTATGAGCACTTTG	23	2
mmu miR-20b 2mut as	CTA[C-g]CTGCACTATGAGCAC[T-a]TTG	23	1
mmu miR-431 nat as	TGCATGACGGCCTGCAAGACA	21	2
mmu miR-431 2mut as	TGCA[T-a]GACGG[C-g]CTGCAAGACA	21	1
mmu miR-433 nat as	ACACCGAGGAGCCATCATGAT	22	2
mmu miR-433 2mut as	ACACCGA[G-c]GAG[C-g]CCATCATGAT	22	1
mmu miR-434-5p nat as	TGGTTCAAACCATGAGTCGAGC	22	2
mmu miR-434-5p 2mut as	TGGTT[C-g]AAACCATGAG[T-a]CGAGC	22	1
mmu miR-434-3p nat as	AGGAGTCGAGTGATGGTTCAA	22	2
mmu miR-434-3p 2mut as	AGGAGT[C-g]GAGTG[A-t]TGGTTCAA	22	1

mmu miR-448 nat as	ATGGGACATCCTACATATGCAA	22	2
mmu miR-448 2mut as	ATGGGA[C-g]ATCCTAC[A-t]TATGCAA	22	1
mmu miR-429 nat as	ACGGCATTACCAGACAGTATTA	22	2
mmu miR-429 2mut as	AC[G-c]GCATTACCAGA[C-g]AGTATTA	22	1
mmu miR-449a nat as	ACCAGCTAACAAATACACTGCCA	22	2
mmu miR-449a 2mut as	AC[C-g]AGCTAACAAATA[C-g]ACTGCCA	22	1
mmu miR-450a-5p nat as	ATATTAGGAACACATCGCAAAA	22	2
mmu miR-450a-5p 2mut as	ATATTAGGAAC[A-t]CAT[C-g]GCAAAA	22	1
rno miR-450a nat as	CATTAGGAACACATCGCAAAA	22	2
rno miR-450a 2mut as	CATTAGGAA[C-g]ACATCGCAA[A-t]AA	22	1
mmu miR-451 nat as	AACTCAGTAATGGTAACGGTTT	22	2
mmu miR-451 2mut as	AACTCAG[T-a]AATGGTAA[C-g]GGTTT	22	1
mmu miR-452 nat as	GTCTCAGTTTCCTCTGCAAACA	22	2
mmu miR-452 2mut as	GTCTCAGTTTC[C-g]TCT[G-c]CAAACA	22	1
mmu miR-92b nat as	GGAGGCCGGGACGAGTGCAATA	22	2
mmu miR-92b 2mut as	GGAGGC[C-g]GGGACGAG[T-a]GCAATA	22	1
mmu miR-463 nat as	CTACCTTATATGGTGTCTATCA	22	2
mmu miR-463 2mut as	CTA[C-g]CTTATATGGTGTCTA[T-a]CA	22	1
mmu miR-464 nat as	TATCTCACAGAATAAACTTGGTA	23	2
mmu miR-464 2mut as	TAT[C-g]TCACAGA[A-t]TAAACTTGGTA	23	1
mmu miR-465a-5p nat as	TCACATCAGTGCCATTCTAAATA	23	2
mmu miR-465a-5p 2mut as	TCA[C-g]ATCAGTGCCATTCTAA[A-t]TA	23	1
mmu miR-465a-3p nat as	TCTACTTAGAAAGGCCCTGATC	22	2
mmu miR-465a-3p 2mut as	TCTA[C-g]TTAGAAAGG[C-g]CCTGATC	22	1
mmu miR-466a-5p nat as	TATGTACATGTACACACACATA	22	2
mmu miR-466a-5p 2mut as	TATGTACATG[T-a]ACACACA[C-g]ATA	22	1
mmu miR-466a-3p nat as	TCTTATGTGTGCGTGTATGTATA	23	2
mmu miR-466a-3p 2mut as	TCTTATGTGTG[C-g]GTG[T-a]ATGTATA	23	1
mmu miR-467a nat as	CGCATATACATGCAGGCACTTA	22	2
mmu miR-467a 2mut as	CGCATA[T-a]ACATGCAGG[C-g]ACTTA	22	1
mmu miR-468 nat as	CAGACACACGCACATCAGTCATA	23	2
mmu miR-468 2mut as	CAGACA[C-g]ACGCACA[T-a]CAGTCATA	23	1
mmu miR-469 nat as	GGACACCAAGATCAATGAAAGAGGCA	26	2
mmu miR-469 2mut as	GGA[C-g]ACCAAGATCAATGAAAGA[G-c]GCA	26	1
mmu miR-470 nat as	ACTCACCAGTGCCAGTCCAAGAA	23	2
mmu miR-470 2mut as	ACTCACCAG[T-a]GCCAGTC[C-g]AAGAA	23	1
mmu miR-471 nat as	GTGAAAAGCACTATACTACGTA	22	2

mmu miR-471 2mut as	GTGAAAAG[C-g]ACTATACT[A-t]CGTA	22	1
rno miR-224 nat as	TAAACGGAACCACTAGTGACTTG	23	2
rno miR-224 2mut as	TA[A-t]ACGGAACCA[C-g]TAGTGACTTG	23	1
rno miR-412 nat as	ACGGCTAGTGGACCAGGTGAAGT	23	2
rno miR-412 2mut as	ACGG[C-g]TAGTGGACCAGG[T-a]GAAGT	23	1
mmu miR-484 nat as	ATCGGGAGGGGACTGAGCCTGA	22	2
mmu miR-484 2mut as	ATCGGGAGGGGA[C-g]TGAGCC[T-a]GA	22	1
mmu miR-485 nat as	GAATTCATCACGGCCAGCCTCT	22	2
mmu miR-485 2mut as	GAATT[C-g]ATC[A-t]CGGCCAGCCTCT	22	1
mmu miR-486 nat as	CTCGGGCAGCTCAGTACAGGA	22	2
mmu miR-486 2mut as	CT[C-g]GGGGCAGCTCAGT[A-t]CAGGA	22	1
mmu miR-490 nat as	CAGCATGGAGTCCTCCAGTTG	22	2
mmu miR-490 2mut as	CAGCAT[G-c]GAGTCCTC[C-g]AGGTTG	22	1
mmu miR-491 nat as	CCTCATGGAAGGGTCCCCACT	22	2
mmu miR-491 2mut as	CCTCATGGAAGGGT[C-g]CCC[A-t]CT	22	1
mmu miR-146b nat as	AGCCTATGGAATTCAGTTCTCA	22	2
mmu miR-146b 2mut as	AG[C-g]CTATGGA[A-t]TTCAGTTCTCA	22	1
mmu miR-494 nat as	GAGGTTTCCCGTGTATGTTTCA	22	2
mmu miR-494 2mut as	GAGGTTTCC[C-g]GTGTA[T-a]GTTTCA	22	1
mmu miR-495 nat as	AAGAAGTGCACCATGTTTGT	22	2
mmu miR-495 2mut as	AAGAAGT[G-c]CAC[C-g]ATGTTTGT	22	1
mmu miR-496 nat as	GAGATTGGCCATGTAATACTCA	22	2
mmu miR-496 2mut as	GAGATTGGC[C-g]ATGTAATA[C-g]TCA	22	1
mmu miR-181d nat as	ACCCACCGACAACAATGAATGT	23	2
mmu miR-181d 2mut as	ACCCACCG[A-t]CAA[C-g]AATGAATGT	23	1
mmu miR-499 nat as	AAACATCACTGCAAGTCTTAA	21	2
mmu miR-499 2mut as	AA[A-t]CATCA[C-g]TGCAAGTCTTAA	21	1
mmu miR-504 nat as	GATAGAGTGCAGACCAGGGTCT	22	2
mmu miR-504 2mut as	GAT[A-t]GAGTG[C-g]AGACCAGGGTCT	22	1
mmu miR-532-5p nat as	ACGGTCCTACACTCAAGGCATG	22	2
mmu miR-532-5p 2mut as	ACGGTCCTACACT[C-g]AAGGC[A-t]TG	22	1
mmu miR-532-3p nat as	TGCAAGCCTTGGGTGTGGGAGG	22	2
mmu miR-532-3p 2mut as	TGCAAG[C-g]CTTGGG[T-a]GTGGGAGG	22	1
mmu miR-489 nat as	GCTGCCATATATGTGGTGTGTCATT	23	2
mmu miR-489 2mut as	GCTG[C-g]CATATATGTGGTGT[C-g]ATT	23	1
rno miR-489 nat as	GCTGCCATATATGTGATGTCATT	23	2
rno miR-489 2mut as	GCTGC[C-g]ATATATGT[G-c]ATGTCATT	23	1

rno miR-207 nat as	AAGGGAGGAGAGCCAGGAGAAGC	23	2
rno miR-207 2mut as	AAGGG[A-t]GGAGAGC[C-g]AGGAGAAGC	23	1
mmu miR-501-5p nat as	TTTCACCCAGGGACAAAGGATT	22	2
mmu miR-501-5p 2mut as	TTTCACC[C-g]AGGGACAA[A-t]GGATT	22	1
mmu miR-483 nat as	CTCCCTTCTCTTCTCCCGTCTT	22	2
mmu miR-483 2mut as	CTCCCTTCT[C-g]TTCTCCCG[T-a]CTT	22	1
rno miR-483 nat as	ACAAGACGGGAGGGGAGGAGTGA	23	2
rno miR-483 2mut as	ACAAGA[C-g]GGGAGGG[G-c]AGGAGTGA	23	1
rno miR-370 nat as	AACCAGTTCCACCCAGCAGGC	23	2
rno miR-370 2mut as	AACCAGTTCC[A-t]CCC[C-g]AGCAGGC	23	1
rno miR-377 nat as	CCAAAAGTTGCCTTTGTGTGAT	22	2
rno miR-377 2mut as	CCAAAAGTTGC[C-g]TTTGTG[T-a]GAT	22	1
rno miR-1 nat as	ATACACACTTCTTTACATTCCA	22	2
rno miR-1 2mut as	ATAC[A-t]CACTTCTTTACATT[C-g]CA	22	1
rno miR-455 nat as	CGATGTAGTCCAAAGGCACATA	22	2
rno miR-455 2mut as	CG[A-t]TGTAGTC[C-g]AAAGGCACATA	22	1
mmu miR-539 nat as	ACACACCAAGGATAATTTCTCC	22	2
mmu miR-539 2mut as	ACACAC[C-g]AAGGATAA[T-a]TTCTCC	22	1
mmu miR-546 nat as	GACTCCGTGCCACCAT	16	2
mmu miR-546 2mut as	GACTC[C-g]GTGC[C-g]ACCAT	16	1
mmu miR-540-5p nat as	ACAGAGTCAGAGGGTGACCCTTG	23	2
mmu miR-540-5p 2mut as	AC[A-t]GAGT[C-g]AGAGGGTGACCCTTG	23	1
mmu miR-540-3p nat as	CCAGGATCGACCTCTGACCT	20	2
mmu miR-540-3p 2mut as	CCAGGATC[G-c]ACCTCTGA[C-g]CT	20	1
mmu miR-543 nat as	AAGAAGTGCACCGCGAATGTTT	22	2
mmu miR-543 2mut as	AAGAAGTGCA[C-g]CGCG[A-t]ATGTTT	22	1
mmu miR-541 nat as	AGTGTGACCAACATCAGAATCCCTT	25	2
mmu miR-541 2mut as	AGTGT[G-c]ACCAACATCAGAATC[C-g]CTT	25	1
mmu miR-542-5p nat as	TCGTGACATGATGATCCCCGAG	22	2
mmu miR-542-5p 2mut as	TC[G-c]TGACATGATGATCC[C-g]CGAG	22	1
mmu miR-542-3p nat as	TTTCAGTTATCAATCTGTCACA	22	2
mmu miR-542-3p 2mut as	TTTCAGTTATCAAT[C-g]TGTC[A-t]CA	22	1
mmu miR-547 nat as	CTCACTCAAAGATGTACCAAG	21	2
mmu miR-547 2mut as	CT[C-g]ACTCAAAGATGTA[C-g]CAAG	21	1
rno miR-543 nat as	GCGAAAAACACGCGGGCAACTT	22	2
rno miR-543 2mut as	GCGAAAAA[C-g]ACGCGGGCAA[C-g]TT	22	1
mmu miR-487b nat as	AAGTGGATGACCCTGTACGATT	22	2

mmu miR-487b 2mut as	AAGTGGATGA[C-g]CCT[G-c]TACGATT	22	1
mmu miR-376c nat as	ACGTGAAATTTCTCTATGTT	21	2
mmu miR-376c 2mut as	AC[G-c]TGAAATTT[C-g]CTCTATGTT	21	1
mmu miR-450a-3p nat as	ATGAATGCAAAGCATCCCCAAT	22	2
mmu miR-450a-3p 2mut as	ATG[A-t]ATGCAAAGCATC[C-g]CCAAT	22	1
mmu miR-503 nat as	CTGCAGTACTGTTCCCGCTGCTA	23	2
mmu miR-503 2mut as	CTGCA[G-c]TACTGTTCCCG[C-g]TGCTA	23	1
mmu miR-291b-5p nat as	GGAGAGGGCCTCCACTTTGATC	22	2
mmu miR-291b-5p 2mut as	GGAGAGGG[C-g]CTCCACTTT[G-c]ATC	22	1
mmu miR-291b-3p nat as	ACAAACAAAATGGATGCACTTT	22	2
mmu miR-291b-3p 2mut as	ACAAA[C-g]AAAATGGA[T-a]GCACTTT	22	1
rno miR-493 nat as	CTGGCACACAGTAGACCTTCA	21	2
rno miR-493 2mut as	CTGGCA[C-g]ACAGTAGA[C-g]CTTCA	21	1
rno miR-494 nat as	AGGTTTCCCGTGTATGTTTCA	21	2
rno miR-494 2mut as	AGGTTT[C-g]CCGTGTATGT[T-a]TCA	21	1
rno miR-376b-5p nat as	TAACCATAGAAGGAATATCCAC	22	2
rno miR-376b-5p 2mut as	TAAC[C-g]ATAGAAGG[A-t]ATATCCAC	22	1
rno miR-381 nat as	GAGAGCTTGCCCTTGATA	19	2
rno miR-381 2mut as	GAGAGCT[T-a]GCC[C-g]TTGTATA	19	1
rno miR-487b nat as	AGTGGATGACCCTGTACGATT	21	2
rno miR-487b 2mut as	AGTGG[A-t]GACC[C-g]TGTACGATT	21	1
rno miR-409-5p nat as	CAAAGTTGCTCGGGTAACCT	20	2
rno miR-409-5p 2mut as	CAAAGTTGCT[C-g]GGG[T-a]AACCT	20	1
rno miR-409-3p nat as	GGGGTTCACCGAGCAACATT	20	2
rno miR-409-3p 2mut as	GGGG[T-a]TCAC[C-g]GAGCAACATT	20	1
mmu miR-374 nat as	CACTTAGCAGGTTGTATTATAT	22	2
mmu miR-374 2mut as	CA[C-g]TTAGCAGGTTGTATTA[T-a]AT	22	1
rno miR-20b-5p nat as	ACCTGCACTATGAGCACTTTG	21	2
rno miR-20b-5p 2mut as	ACCTGCA[C-g]TATGAGCAC[T-a]TTG	21	1
rno miR-20b-3p nat as	CCAGAAGTGCTCACACTGCAGT	22	2
rno miR-20b-3p 2mut as	CC[A-t]GAAGTGCTCACACTG[C-g]AGT	22	1
mmu miR-568 nat as	GTGTGTATACATTTATACAT	20	2
mmu miR-568 2mut as	GTGTGTATA[C-g]ATT[T-a]ATACAT	20	1
mmu miR-551b nat as	CTGAAACCAAGTATGGGTCGC	21	2
mmu miR-551b 2mut as	CTGAA[A-t]CCAAGTATGGGT[C-g]GC	21	1
mmu miR-574-5p nat as	ACACACTCACACACACACTCA	23	2
mmu miR-574-5p 2mut as	ACACACT[C-g]ACAC[A-t]CACACACTCA	23	1

mmu miR-574-3p nat as	TGTGGGTGTGTGCATGAGCGTG	22	2
mmu miR-574-3p 2mut as	TGTGGGTGTGTG[C-g]ATG[A-t]GCGTG	22	1
mmu miR-590-5p nat as	CTGCACTTTTATGAATAAGCTC	22	2
mmu miR-590-5p 2mut as	CTGCA[C-g]TTTTAT[G-c]AATAAGCTC	22	1
mmu miR-590-3p nat as	ACTAGCTTATACATAAAATTA	21	2
mmu miR-590-3p 2mut as	ACTAG[C-g]TTATACATAAA[A-t]TTA	21	1
mmu miR-615-5p nat as	GATCCGAGCACCGGGGACCCCC	22	2
mmu miR-615-5p 2mut as	GATC[C-g]GAGCACCGGGGAC[C-g]CCC	22	1
mmu miR-615-3p nat as	AAGAGGGAGACCCAGGCTCGGA	22	2
mmu miR-615-3p 2mut as	AAGAGGGAGA[C-g]CCAGGCT[C-g]GGA	22	1
mmu miR-652 nat as	CACAACCCTAGTGGCGCCATT	21	2
mmu miR-652 2mut as	CA[C-g]AACCCCTAGTGGCGC[C-g]ATT	21	1
mmu miR-653 nat as	CAGTAGAGATTGTTCAACAC	21	2
mmu miR-653 2mut as	CAGTAGAG[A-t]TTGTTTCAA[C-g]AC	21	1
mmu miR-654-3p nat as	AAGGTGATGGTCAGCAGACATA	22	2
mmu miR-654-3p 2mut as	AAGGTGATGGT[C-g]AGCAGA[C-g]ATA	22	1
mmu miR-421 nat as	GCGCCAATTAATGTCTGTTGAT	23	2
mmu miR-421 2mut as	GCG[C-g]CCAATTAATGTCTG[T-a]TGAT	23	1
mmu miR-302c nat as	CCACTGAAACATGGAAGCACTT	22	2
mmu miR-302c 2mut as	CCACTGAA[A-t]CATGGAAGCA[C-g]TT	22	1
rno miR-505 nat as	GGAAACCAGCAAGTGTGAC	20	2
rno miR-505 2mut as	GGAAAC[C-g]AGCAAGTGT[G-c]AC	20	1
rno miR-664 nat as	TAGGCTGGGGAGTAAATGAATA	22	2
rno miR-664 2mut as	TAGG[C-g]TGG[G-c]GAGTAAATGAATA	22	1
mmu miR-497 nat as	TACAAACCACAGTGTGCTGCTG	22	2
mmu miR-497 2mut as	TA[C-g]AAACC[A-t]CAGTGTGCTGCTG	22	1
rno miR-758 nat as	GGTTAGTGGACCAGGTCACAAA	22	2
rno miR-758 2mut as	GGTTAGTGGACC[A-t]GGT[C-g]ACAAA	22	1
mmu miR-671-5p nat as	CTCCAGCCCCTCCAGGGCTTCCT	23	2
mmu miR-671-5p 2mut as	CTCC[A-t]GCCCCTCCAGGG[C-g]TTCCT	23	1
mmu miR-671-3p nat as	GGTGGAGCCCTGAGAACCGGA	21	2
mmu miR-671-3p 2mut as	GGTGGAG[C-g]CCTGAGA[A-t]CCGGA	21	1
mmu miR-1224 nat as	CTCCACCTCCCAGTCCTCAC	21	2
mmu miR-1224 2mut as	CTCCACCTCCC[C-g]AGTC[C-g]TCAC	21	1
mmu miR-301b nat as	GCTTTGACAATACCATTGCACTG	23	2
mmu miR-301b 2mut as	GCTTTGACAATA[C-g]CAT[T-a]GCACTG	23	1
mmu miR-675-5p nat as	ACTGTGGGCCCTTCCGCACCA	22	2

mmu miR-675-5p 2mut as	ACTGTGGGCCCTT[T-a]CCGCA[C-g]CA	22	1
mmu miR-675-3p nat as	ACTGAGCGTTAGGGCATAACAG	22	2
mmu miR-675-3p 2mut as	ACTGAGC[G-c]GTTAGGGCATA[C-g]AG	22	1
mmu miR-744 nat as	TGCTGTTAGCCCTAGCCCCGCA	22	2
mmu miR-744 2mut as	TGCTGTTAG[C-g]CCTAGCCCC[G-c]CA	22	1
mmu miR-216b nat as	TCACATTTGCCTGCAGAGATTT	22	2
mmu miR-216b 2mut as	TCA[C-g]ATTTGCCTGCAGAG[A-t]TTT	22	1
mmu miR-592 nat as	ACATCATCGCATATTGACACAAT	23	2
mmu miR-592 2mut as	ACAT[C-g]ATCGCATATTGACA[C-g]AAT	23	1
mmu miR-758 nat as	TAGTGGACCAGGTCACAAA	19	2
mmu miR-758 2mut as	TAGTGG[A-C-g]CAGGTCAC[A-t]AA	19	1
mmu miR-668 nat as	GGTAGTGGGCCGAGCCGAGTGACA	24	2
mmu miR-668 2mut as	GGTA[G-c]TGGGCCGAG[C-g]CGAGTGACA	24	1
mmu miR-665 nat as	AGGGACCTCAGCCTCCTGGT	20	2
mmu miR-665 2mut as	AGGG[A-t]CCTCAG[C-g]CTCCTGGT	20	1
mmu miR-667 nat as	CTTGGGCTGGGTGGCAGGTGTCA	23	2
mmu miR-667 2mut as	CTTGGG[C-g]TGGGTGGC[A-t]GGTGTCA	23	1
mmu miR-770-5p nat as	CGTGGCCCAGACACGTGGTGCT	22	2
mmu miR-770-5p 2mut as	CGTGGC[C-g]CAG[A-t]CACGTGGTGCT	22	1
mmu miR-770-3p nat as	CCAGCTCCACGTCAGGCCACG	22	2
mmu miR-770-3p 2mut as	CCAGCT[C-g]CACG[T-a]CAGGCCACG	22	1
mmu miR-762 nat as	GCTCTGTCCCGGCCCCAGCCCC	22	2
mmu miR-762 2mut as	GCTCT[G-c]TCCCGGCCCCAG[C-g]CCC	22	1
mmu miR-802 nat as	AAGGATGAATCTTTGTTACTGA	22	2
mmu miR-802 2mut as	AAGGATGAAT[C-g]TTTG[T-a]TACTGA	22	1
mmu miR-672 nat as	TCACACACAGTACACCAACCTCA	23	2
mmu miR-672 2mut as	TCACA[C-g]ACAGTACACCAAC[C-g]TCA	23	1
mmu miR-670 nat as	TTCACCACATACACTCAGGGAT	22	2
mmu miR-670 2mut as	TTC[A-t]CCACATACA[C-g]TCAGGGAT	22	1
mmu miR-761 nat as	TGTGTCAAGTTTACCCTGCTGC	22	2
mmu miR-761 2mut as	TGTGTCA[G-c]TTTACCCTG[C-g]TGC	22	1
mmu miR-764-5p nat as	AGGAGGACATGTGAGCACC	19	2
mmu miR-764-5p 2mut as	AGG[A-t]GGACATGTGAG[C-g]ACC	19	1
mmu miR-764-3p nat as	ACAGTTGCCACTATGGCCTCCT	22	2
mmu miR-764-3p 2mut as	AC[A-t]GTTG[C-g]CACTATGGCCTCCT	22	1
mmu miR-763 nat as	GCCACTGGTTCTTCCAGCTGG	22	2
mmu miR-763 2mut as	GCCACTGG[T-a]TCTT[C-g]CCAGCTGG	22	1

mmu miR-669a nat as	ACATGAACATGCACACACAAC	22	2
mmu miR-669a 2mut as	ACATGAACATGCA[C-g]ACACA[A-t]CT	22	1
mmu miR-666-5p nat as	GGCTCTCACAGCTGTGCCCGCT	22	2
mmu miR-666-5p 2mut as	GGCTCTCAC[A-t]GCTGTGC[C-g]CGCT	22	1
mmu miR-666-3p nat as	AGCAGGCGATCACGCTGCAGCC	22	2
mmu miR-666-3p 2mut as	AGCAGG[C-g]GATCACGCTGCA[G-c]CC	22	1
mmu miR-759 nat as	GTCAAAATTGTTTGCACCTCTGC	22	2
mmu miR-759 2mut as	GTCAAAATTGTTT[C-g]ACT[C-g]TGC	22	1
mmu miR-673-5p nat as	CTCCAAGGACCAGAGCTGTGAG	22	2
mmu miR-673-5p 2mut as	CTCCAAGG[A-t]CCAGAG[C-g]TGTGAG	22	1
mmu miR-673-3p nat as	GGTGACAGAACTCAGCCCCGGA	23	2
mmu miR-673-3p 2mut as	GGTGACAGAA[C-g]TCAGCCCC[C-g]GGA	23	1
mmu miR-760 nat as	TCCCCACAGACCCAGAGCCG	20	2
mmu miR-760 2mut as	TCCCCA[C-g]AGA[C-g]CCAGAGCCG	20	1
mmu miR-674 nat as	TACACCACTCCCATCTCAGTGC	22	2
mmu miR-674 2mut as	TACACCA[C-g]TCCCATCT[C-g]AGTGC	22	1
mmu miR-488 nat as	GACCAAGAAACAGCCTTTCAA	21	2
mmu miR-488 2mut as	GAC[C-g]AAG[A-t]AACAGCCTTTCAA	21	1
mmu miR-677 nat as	TCAGAAGCTAATCATCACTGAA	22	2
mmu miR-677 2mut as	TC[A-t]GAAGCTAATCATCA[C-g]TGAA	22	1
mmu miR-678 nat as	CCTCCAGTCCTTGACCCGAGAC	22	2
mmu miR-678 2mut as	CCTCC[A-t]GTC[C-g]TTTGACCCGAGAC	22	1
mmu miR-679 nat as	ACCAAGAGTCACCTCACAGTCC	22	2
mmu miR-679 2mut as	ACCAAGAGT[C-g]ACCTCACAG[T-a]CC	22	1
mmu miR-680 nat as	CCCCATGTCAGCAGATGCC	21	2
mmu miR-680 2mut as	CCCCATGTCAGC[A-t]GATG[C-g]CC	21	1
mmu miR-681 nat as	AGCTGCCTGCCAGCGAGGCTG	21	2
mmu miR-681 2mut as	AGC[T-a]GCCTGCCAGCGAGG[C-g]TG	21	1
mmu miR-682 nat as	CAGACTTCACTGTGACTGCAG	21	2
mmu miR-682 2mut as	CAGA[C-g]TTCACCTGTG[A-t]CTGCAG	21	1
mmu miR-449c nat as	CCAGCTAGCAATGCACTGCCT	21	2
mmu miR-449c 2mut as	CCAG[C-g]TAGCA[A-t]TGCCTGCCT	21	1
mmu miR-683 nat as	GAGGACACAGCTTACAGCAGG	21	2
mmu miR-683 2mut as	GAGG[A-t]CACAG[C-g]TTACAGCAGG	21	1
mmu miR-684 nat as	TTGACTTGAAGGGAAAAC	19	2
mmu miR-684 2mut as	TTGA[C-g]TTGAAGGGAAA[A-t]CT	19	1
mmu miR-685 nat as	GTGCCTCACCTCAGCCATTGA	21	2

mmu miR-685 2mut as	GT[G-c]CCTCAC[C-g]TCAGCCATTGA	21	1
mmu miR-686 nat as	TCTTCACCGTCTGGGAAGCAAT	22	2
mmu miR-686 2mut as	TCTTCAC[C-g]GTCTGGGAAGC[A-t]AT	22	1
mmu miR-719 nat as	AACATTTTTCTGTAGCCGAGAT	22	2
mmu miR-719 2mut as	AACATTTTT[T-a]CTGTAG[C-g]CGAGAT	22	1
mmu miR-687 nat as	TCATTGCTGCATTCCAGGATAG	22	2
mmu miR-687 2mut as	TC[A-t]TTG[C-g]TGCATTCCAGGATAG	22	1
mmu miR-688 nat as	GAATAAGTAGTCGCCTGCGA	20	2
mmu miR-688 2mut as	GAATAAG[T-a]AGTCGCCTG[C-g]GA	20	1
mmu miR-689 nat as	GGACCCCGCCGAGCGGGGACG	21	2
mmu miR-689 2mut as	GGACCCCG[C-g]CGAGCGGGG[A-t]CG	21	1
mmu miR-690 nat as	TTTGGTTGTGAGCCTAGCCTTT	22	2
mmu miR-690 2mut as	TTTGGTTGT[G-c]AGC[C-g]TAGCCTTT	22	1
mmu miR-691 nat as	TTTTCTGCCTCTCTTCAGGAAT	22	2
mmu miR-691 2mut as	TTTTCTG[C-g]CTCTC[T-a]TCAGGAAT	22	1
mmu miR-692 nat as	GAGTGAGGCGCTCAAAGAGAT	21	2
mmu miR-692 2mut as	GAGTGAGG[C-g]GCTCAAAGA[G-c]AT	21	1
mmu miR-693-5p nat as	GAAAACTTTCGGATGTGGCTG	21	2
mmu miR-693-5p 2mut as	GAAAA[C-g]TTTC[G-c]GATGTGGCTG	21	1
mmu miR-693-3p nat as	TTACAGCCACATCTGAAAGCTGC	23	2
mmu miR-693-3p 2mut as	TTACAGC[C-g]ACATCTGAAAG[C-g]TGC	23	1
mmu miR-694 nat as	CTTCAGGCAACATTTTCAG	19	2
mmu miR-694 2mut as	CTT[C-g]AGGCAACATTT[T-a]CAG	19	1
mmu miR-669b nat as	ACATGCACATGCACACAAAAC	22	2
mmu miR-669b 2mut as	ACATGCACATGCA[C-g]ACAAA[A-t]CT	22	1
mmu miR-467b nat as	CATATACATGCAGGCACTTAC	21	2
mmu miR-467b 2mut as	CATAT[A-t]CATGCAGG[C-g]ACTTAC	21	1
mmu miR-669c nat as	ACACACATCCACACACAAC	22	2
mmu miR-669c 2mut as	ACAC[A-t]CAT[C-g]CACACACAAC	22	1
mmu miR-297b-5p nat as	ACATGTTTCATGCACACATACAT	22	2
mmu miR-297b-5p 2mut as	ACATGT[T-a]CATGCACACATA[C-g]AT	22	1
mmu miR-297b-3p nat as	TATGGGTATGTGTATGTATA	22	2
mmu miR-297b-3p 2mut as	TAT[G-c]GGTAT[G-c]TGTGTATGTATA	22	1
mmu miR-695 nat as	TTCAGTCACCTATGCCCAATCT	22	2
mmu miR-695 2mut as	TTC[A-t]GTCA[C-g]CTATGCCCAATCT	22	1
mmu miR-696 nat as	CCCACAGCAAGCACACGC	18	2
mmu miR-696 2mut as	CCCACAGCA[A-t]GCACA[C-g]GC	18	1

mmu miR-720 nat as	TGGAGGCCCCAGCGAGAT	18	2
mmu miR-720 2mut as	TGG[A-t]GGCCCCAG[C-g]GAGAT	18	1
mmu miR-455 nat as	GTGTATATGCCCGTGGACTGC	21	2
mmu miR-455 2mut as	GTG[T-a]ATATG[C-g]CCGTGGACTGC	21	1
mmu miR-697 nat as	TCTCCACAGGACCAGGATGTT	21	2
mmu miR-697 2mut as	TCTCCA[C-g]AGGACCAGGA[T-a]GTT	21	1
mmu miR-698 nat as	AGGGAAGGAAACGAGAATG	19	2
mmu miR-698 2mut as	AGG[G-c]AAGGAAA[C-g]GAGAATG	19	1
mmu miR-700 nat as	GGTGGACTCGGTTCCCGCGTG	21	2
mmu miR-700 2mut as	GGTGG[A-C-g]TCGG[T-a]TCCCGCGTG	21	1
mmu miR-701 nat as	TCCATCTATTTTCAGCGGCTAA	21	2
mmu miR-701 2mut as	TCCATC[T-a]ATTTTCAG[C-g]GGCTAA	21	1
mmu miR-702 nat as	GAGCGGGGTAAAGGGTGGGCA	21	2
mmu miR-702 2mut as	GAG[C-g]GGGG[T-a]AAAGGGTGGGCA	21	1
mmu miR-703 nat as	TTCTTTCCTTCTGAAGGTTTT	21	2
mmu miR-703 2mut as	TT[C-g]TTTCTTCTGAAGG[T-a]TT	21	1
mmu miR-704 nat as	CTAGGAGCAGAGCACATGTCT	21	2
mmu miR-704 2mut as	CTAGGAGCA[G-c]AGCA[C-g]ATGTCT	21	1
mmu miR-705 nat as	TGCCACCCCACCTCCCACC	20	2
mmu miR-705 2mut as	TGCC[A-t]CCCAC[C-g]TCCCACC	20	1
mmu miR-706 nat as	TTTTTTGAGACAGGGTTTCTCT	22	2
mmu miR-706 2mut as	TTTTTTGAGAC[A-t]GGGTTT[C-g]TCT	22	1
mmu miR-707 nat as	CGTAGGCAAGCGGCATGACTG	21	2
mmu miR-707 2mut as	CG[T-a]AGG[C-g]AAGCGGCATGACTG	21	1
mmu miR-708 nat as	CCCAGCTAGATTGTAAGCTCCTT	23	2
mmu miR-708 2mut as	CCCAGCTAGAT[T-a]GTAAGCTC[C-g]TT	23	1
mmu miR-709 nat as	TCCTCCTGCCTCTGCCTCC	19	2
mmu miR-709 2mut as	TCCTC[C-g]TGCCTCT[G-c]CCTCC	19	1
mmu miR-710 nat as	CTCAACTCTCCCCAAGACTTGG	22	2
mmu miR-710 2mut as	CTC[A-t]ACTCTC[C-g]CCAAGACTTGG	22	1
mmu miR-711 nat as	CTTACATCTCTCCCGGGTCCC	22	2
mmu miR-711 2mut as	CTTAC[A-t]TCTCT[C-g]CCCGGGTCCC	22	1
mmu miR-712 nat as	GGTACCGCCCGGGTGAAGGAG	21	2
mmu miR-712 2mut as	GGTA[C-g]CGCCCGGGTGAAGGAG	21	1
mmu miR-713 nat as	GCTGTGTGCCTTCAGTGCA	19	2
mmu miR-713 2mut as	GCT[G-c]TGTG[C-g]CTTCAGTGCA	19	1
mmu miR-714 nat as	GCGACCGACCGGCCCTCGTCG	21	2

mmu miR-714 2mut as	GCG[A-t]CCGACCGGCC[C-g]TCGTCTCG	21	1
mmu miR-715 nat as	CACGCGGGGGTGTGCACGGAG	21	2
mmu miR-715 2mut as	CA[C-g]GCGGGGGTGTGCACG[G-c]AG	21	1
mmu miR-500 nat as	TGAACCCTTGCCCAGGTGCATT	22	2
mmu miR-500 2mut as	TGAACC[C-g]TTG[C-g]CCAGGTGCATT	22	1
mmu miR-501-3p nat as	CAAATCCTTGCCCGGGTGCATT	22	2
mmu miR-501-3p 2mut as	CA[A-t]ATCCTTG[C-g]CCGGGTGCATT	22	1
mmu miR-717 nat as	AGAGAAGGTATCTCTGTCTGAG	22	2
mmu miR-717 2mut as	AGAGA[A-t]GGTATCTCTGTCT[G-c]AG	22	1
mmu miR-450b-5p nat as	TATTCAGGAACATACTGCAAAA	22	2
mmu miR-450b-5p 2mut as	TA[T-a]TCAGGAACATA[C-g]TGCAAAA	22	1
mmu miR-450b-3p nat as	ATGCATGCAAAATGTTCCCAAT	22	2
mmu miR-450b-3p 2mut as	ATG[C-g]ATGCAAAATGTT[C-g]CCAAT	22	1
mmu miR-505 nat as	AGAAAACCAGCAAGTGTGACG	22	2
mmu miR-505 2mut as	AGAAAA[C-g]CAGCAAG[T-a]GTTGACG	22	1
mmu miR-718 nat as	CGACACCCGGCCGGGCGGAAG	21	2
mmu miR-718 2mut as	CGACAC[C-g]CGG[C-g]CGGGCGGAAG	21	1
mmu miR-721 nat as	TTCCCCTTTTAATTGCACTG	21	2
mmu miR-721 2mut as	TTCC[C-g]CCTTTAATT[G-c]CACTG	21	1
mmu miR-676 nat as	AGCTCAACAACCTCAGGACGG	21	2
mmu miR-676 2mut as	AGCTCAA[C-g]AACC[T-a]CAGGACGG	21	1
mmu miR-804 nat as	TCCAGGTGAGGAACAACCTCACA	22	2
mmu miR-804 2mut as	TC[C-g]AGGTGAGGAACA[A-t]CTCACA	22	1
mmu miR-805 nat as	CCCTATGTCCTGATCAATTC	20	2
mmu miR-805 2mut as	CC[C-g]TATGTCCT[G-c]ATCAATTC	20	1
mmu miR-741 nat as	TCTACATAGAATGGCATCTCTCA	23	2
mmu miR-741 2mut as	TCTA[C-g]ATAGAATGGCA[T-a]CTCTCA	23	1
mmu miR-742 nat as	TTTACCCAGCATGGTGGCTTTC	22	2
mmu miR-742 2mut as	TTTACC[C-g]AGCATGGTGGCT[T-a]TC	22	1
mmu miR-743a nat as	TCTACTCAGCTTGGTGTCTTTC	22	2
mmu miR-743a 2mut as	TCTACTCAGCT[T-a]GGTGT[C-g]TTC	22	1
mmu miR-743b-5p nat as	TGATGGACACCAGTCTGAACA	21	2
mmu miR-743b-5p 2mut as	TGA[T-a]GGA[C-g]ACCAGTCTGAACA	21	1
mmu miR-743b-3p nat as	TCTATTCAGCATGATGTCTTTC	22	2
mmu miR-743b-3p 2mut as	TCTATT[C-g]AGCATGAT[G-c]TCTTTC	22	1
mmu miR-871 nat as	CATGACTGGCACTAATCTGAATA	23	2
mmu miR-871 2mut as	CATGAC[T-a]GGCA[C-g]TAATCTGAATA	23	1

mmu miR-879 nat as	GGCTTAGAGCTATAAGCCTCT	21	2
mmu miR-879 2mut as	GGCTTAGAG[C-g]TATA[A-t]GCCTCT	21	1
mmu miR-880 nat as	TCTACTCAGAGAGGATGGAGTA	22	2
mmu miR-880 2mut as	TCTA[C-g]TCAGAGAGGATGGA[G-c]TA	22	1
mmu miR-881 nat as	TCTATTGAGAAAAGACACAGTT	22	2
mmu miR-881 2mut as	TCTATT[C-g]AGAAAAGA[C-g]ACAGTT	22	1
mmu miR-882 nat as	ACTAATGCGCTAACTCTCTCCT	22	2
mmu miR-882 2mut as	ACTAAT[G-c]CGCTAACT[C-g]TCTCCT	22	1
mmu miR-883a-5p nat as	GTAAGTCTACTTCTCTCAGCA	22	2
mmu miR-883a-5p 2mut as	GT[A-t]ACTGCTA[C-g]TTCTCTCAGCA	22	1
mmu miR-883a-3p nat as	ATACTGAGAGCTGTTGCAGTTA	22	2
mmu miR-883a-3p 2mut as	ATACT[G-c]AGAGCTG[T-a]TGCAGTTA	22	1
mmu miR-883b-5p nat as	TGACTGCTACCCATTCTCAGTA	22	2
mmu miR-883b-5p 2mut as	TG[A-t]CTGCTACC[C-g]ATTCTCAGTA	22	1
mmu miR-883b-3p nat as	ATACTGAGAGATGTTGCAGTTA	22	2
mmu miR-883b-3p 2mut as	ATACTGA[G-c]AGATGTT[G-c]CAGTTA	22	1
mmu miR-190b nat as	AACCCAATATCAAACATATCA	21	2
mmu miR-190b 2mut as	AACC[C-g]AATATCAAAC[A-t]TATCA	21	1
mmu miR-874 nat as	TCGGTCCCTCGGGCCAGGGCAG	22	2
mmu miR-874 2mut as	TCGGTCC[C-g]TCGGGC[C-g]AGGGCAG	22	1
mmu miR-876-5p nat as	TAGTGATTCACAGAGAAATCCA	22	2
mmu miR-876-5p 2mut as	TAGTGATTC[A-t]CAGAGAAAT[C-g]CA	22	1
mmu miR-876-3p nat as	TGAATTACTTTGTAAACCACTA	22	2
mmu miR-876-3p 2mut as	TGAATTACT[T-a]TGTAAC[C-g]ACTA	22	1
mmu miR-105 nat as	ACCACAAGCATCTGAGCACTTGG	23	2
mmu miR-105 2mut as	AC[C-g]ACAAGCATCTGAGC[A-t]CTTGG	23	1
mmu miR-147 nat as	TAGCAGAAGCATTTCGGCACAC	22	2
mmu miR-147 2mut as	TAGCA[G-c]AAGCATTTCGG[C-g]ACAC	22	1
mmu miR-18b nat as	CTAACAGCACTAGATGCACCTTA	23	2
mmu miR-18b 2mut as	CTAACAG[C-g]ACTA[G-c]ATGCACCTTA	23	1
mmu miR-193b nat as	AGCGGGACTTTGTGGGCCAGTT	22	2
mmu miR-193b 2mut as	AG[C-g]GGGACTTTGTGGGC[C-g]AGTT	22	1
mmu miR-220 nat as	AAGTGTCTGACACTGTGGTGG	21	2
mmu miR-220 2mut as	AAGTGT[C-g]TGACACTGT[G-c]GTGG	21	1
mmu miR-297c nat as	ACATGTACATGCACACATACAT	22	2
mmu miR-297c 2mut as	ACATGTACATGCA[C-g]ACAT[A-t]CAT	22	1
mmu miR-327 nat as	ATCCTCATGCCCTCAAGT	19	2

mmu miR-327 2mut as	ATC[C-g]TCATGCCCTC[A-t]AGT	19	1
mmu miR-343 nat as	TCTGGGCACATGAAGGGAGA	20	2
mmu miR-343 2mut as	TCTGGG[C-g]ACATGAAGGG[A-t]GA	20	1
mmu miR-453 nat as	TGCAAGCTCACTATGAGGCAACCT	24	2
mmu miR-453 2mut as	TGCAAGCTCA[C-g]TATGAGGCAA[C-g]CT	24	1
mmu miR-465b-5p nat as	CAGATCAGCACCATTCTAAATA	22	2
mmu miR-465b-5p 2mut as	CAGAT[C-g]AGCACCATTCTAA[A-t]TA	22	1
mmu miR-465c-5p nat as	CAGATCAGCGCCATTCTAAATA	22	2
mmu miR-465c-5p 2mut as	CAG[A-t]TCAGCG[C-g]CATTCTAAATA	22	1
mmu miR-466b-5p nat as	CATGTACATGTACACACACATC	22	2
mmu miR-466b-5p 2mut as	CATGTACATGT[A-t]CACACA[C-g]ATC	22	1
mmu miR-466b-3-3p nat as	TCTTATGTGTGCGTGTATGTATT	23	2
mmu miR-466b-3-3p 2mut as	TCTTATGTGTG[C-g]GTGTATGT[A-t]TT	23	1
mmu miR-466c-5p nat as	TATGTACATGCACACACACATC	22	2
mmu miR-466c-5p 2mut as	TATGT[A-t]CATGCACACA[C-g]ACATC	22	1
mmu miR-466e-5p nat as	TATGTACATGTACACACACATC	22	2
mmu miR-466e-5p 2mut as	TATG[T-a]ACATGTACA[C-g]ACACATC	22	1
mmu miR-466f-5p nat as	CATGCACATGCACACACACGTA	22	2
mmu miR-466f-5p 2mut as	CATGCAC[A-t]TGCA[C-g]ACACACGTA	22	1
mmu miR-466f-3p nat as	GTGTGTATGTGTGTGTATG	21	2
mmu miR-466f-3p 2mut as	GTG[T-a]GTA[T-a]GTGTGTGTATG	21	1
mmu miR-466g nat as	TGTGTGTGCATGTGTCTGTAT	21	2
mmu miR-466g 2mut as	TGTGTGT[G-c]CATGTGT[C-g]TGTAT	21	1
mmu miR-466h nat as	TACACAAGCACATGCACACA	22	2
mmu miR-466h 2mut as	TA[C-g]ACACAAGCACATGCA[C-g]ACA	22	1
mmu miR-467c nat as	CACATATACATGCACGCACTTA	22	2
mmu miR-467c 2mut as	CA[C-g]ATAT[A-t]CATGCACGCACTTA	22	1
mmu miR-467d nat as	CGCATATACATGCGCGCACTTA	22	2
mmu miR-467d 2mut as	CGCATATAC[A-t]TGCGCGCA[C-g]TTA	22	1
mmu miR-493 nat as	CCTGGCACACAGTAGGACCTCA	23	2
mmu miR-493 2mut as	CCTGGCACACAG[T-a]AGGA[C-g]CTTCA	23	1
mmu miR-509-5p nat as	ATGATTGCCACATTCTGGAGTA	22	2
mmu miR-509-5p 2mut as	ATGATTG[C-g]CACATTC[T-a]GGAGTA	22	1
mmu miR-509-3p nat as	CCATTACAGAAATGTCAATCA	21	2
mmu miR-509-3p 2mut as	CCATTA[C-g]AGAAATGTCA[A-t]TCA	21	1
mmu miR-654-5p nat as	ACACATGTTCTGCAGCTTACCA	22	2
mmu miR-654-5p 2mut as	ACAC[A-t]TGTTCTGCAG[C-g]TTACCA	22	1

mmu miR-875-5p nat as	CACCTGATAAAACTGAGGTATA	22	2
mmu miR-875-5p 2mut as	CACCT[G-c]ATAAAACT[G-c]AGGTATA	22	1
mmu miR-466d-5p nat as	CATGTACATGTACGCACACACA	22	2
mmu miR-466d-5p 2mut as	CATGTA[C-g]ATGT[A-t]CGCACACACA	22	1
mmu miR-466d-3p nat as	CTATGTGTGCGTGTATGTATA	21	2
mmu miR-466d-3p 2mut as	CTATGTGTG[C-g]GTG[T-a]ATGTATA	21	1
mmu miR-449b nat as	GCCAGCTAACAACACTGCCT	20	2
mmu miR-449b 2mut as	GCC[A-t]GCTAACAACACTG[C-g]CT	20	1
mmu miR-878-5p nat as	TGTCTTGACATCCAAGTAGATA	22	2
mmu miR-878-5p 2mut as	TGTCT[T-a]GACAT[C-g]CAAGTAGATA	22	1
mmu miR-878-3p nat as	TCTACCCAGTGTGGTGTGCATGC	22	2
mmu miR-878-3p 2mut as	TCTA[C-g]CCAGTGTGGTGTGC[A-t]TGC	22	1
mmu miR-872 nat as	CCTGAACTAACAAGTAACCTT	21	2
mmu miR-872 2mut as	CCTGAA[C-g]TAACAAGTAAC[C-g]TT	21	1
mmu miR-873 nat as	AGGAGACTCACAAGTTCCTGC	21	2
mmu miR-873 2mut as	AGGAGACT[C-g]ACA[A-t]GTTCTGC	21	1
mmu miR-875-3p nat as	CATAGCCTCAGTATTTTCAGG	21	2
mmu miR-875-3p 2mut as	CATAGC[C-g]TCAGTATTTTC[A-t]GG	21	1
mmu miR-208b nat as	ACAAACCTTTTGTTCGTCTTAT	22	2
mmu miR-208b 2mut as	ACAAAC[C-g]TTTTGTTCG[T-a]CTTAT	22	1
mmu miR-877 nat as	CCCTGCGCCATCTCCTCTAC	20	2
mmu miR-877 2mut as	CCCTG[C-g]GCCATC[T-a]CCTCTAC	20	1
mmu miR-511 nat as	TGAGTGCAGAGCAAAAGGCAT	21	2
mmu miR-511 2mut as	TGAGTG[C-g]AGAGCAAAA[G-c]GCAT	21	1
mmu miR-544 nat as	GAGCTTGCTAAAAATGCAGAAT	22	2
mmu miR-544 2mut as	GAG[C-g]TTG[C-g]TAAAAATGCAGAAT	22	1
mmu miR-598 nat as	TAACGATGACGACGATGACGTA	22	2
mmu miR-598 2mut as	TAACGATGACGA[C-g]GAT[G-c]ACGTA	22	1
rno miR-466b nat as	CATGGACATACACACACACATA	22	2
rno miR-466b 2mut as	CATGG[A-t]CATA[C-g]ACACACACATA	22	1
rno miR-466c nat as	CATGTACATGCACACATCACA	21	2
rno miR-466c 2mut as	CATGT[A-t]CATG[C-g]ACACATCACA	21	1
rno miR-743b nat as	TCTATTCAGTATGGTGTCTTTC	22	2
rno miR-743b 2mut as	TCTATTCAGTAT[G-c]GTGT[C-g]TTTC	22	1
rno miR-871 nat as	TGTGACCGGCACCAATCTGAATA	23	2
rno miR-871 2mut as	TGTGA[C-g]CGGCACC[A-t]ATCTGAATA	23	1
rno miR-878 nat as	TCTACCCAGTATGGTGTGCATGC	22	2

rno miR-878 2mut as	TCTA[C-g]CCAGTATGG[T-a]GTCATGC	22	1
rno miR-880 nat as	TCTACTCAGAATGAATGGAGTA	22	2
rno miR-880 2mut as	TCTACTC[A-t]GAAT[G-c]AATGGAGTA	22	1
rno miR-881 nat as	TCTATTCAGAAATGCCACAGTT	22	2
rno miR-881 2mut as	TCTATTCAGAAATG[C-g]CAC[A-t]GTT	22	1
mmu miR-582-5p nat as	AGTAACTGGTTGAACAACACTGTA	22	2
mmu miR-582-5p 2mut as	AGTAA[C-g]TGGTTGAACA[A-t]CTGTA	22	1
mmu miR-582-3p nat as	TTGGGTTCAAGTTGTTCAACAGG	22	2
mmu miR-582-3p 2mut as	TTGGGTT[C-g]AGTTGTTCAA[C-g]AGG	22	1
mmu miR-467e nat as	ACATATACATGCTCACACTTAT	22	2
mmu miR-467e 2mut as	ACATA[T-a]ACATGCTCA[C-g]ACTTAT	22	1
rno miR-190b nat as	AACCTAATATCAAACATATCA	21	2
rno miR-190b 2mut as	AA[C-g]CTAATATC[A-t]AACATATCA	21	1
rno miR-196c nat as	CCCAACAACACGAAACTACCTA	22	2
rno miR-196c 2mut as	CCCAACAACACGA[A-t]ACTAC[C-g]TA	22	1
rno miR-463 nat as	CTACCCAAATTGGCGTCTATCA	22	2
rno miR-463 2mut as	CTACC[C-g]AAATT[G-c]GCGTCTATCA	22	1
rno miR-532-5p nat as	ACAGTCCTACACTCAAGGCATG	22	2
rno miR-532-5p 2mut as	ACAGTCCTACA[C-g]TCA[A-t]GGCATG	22	1
rno miR-598-5p nat as	CTCGCACCATCGGCATCACCGC	22	2
rno miR-598-5p 2mut as	CTCG[C-g]ACCAT[C-g]GGCATCACCGC	22	1
rno miR-673 nat as	CTCCAAGGACCGGAGCTGTGAG	22	2
rno miR-673 2mut as	CTCCAAGGA[C-g]CGGAGCTG[T-a]GAG	22	1
rno miR-674-3p nat as	TTGTTCTGAGATGGGAGCTGTG	22	2
rno miR-674-3p 2mut as	TT[G-c]TTCTGAGATGGGAG[C-g]TGTG	22	1
rno miR-742 nat as	TTTACCCAACATGGTGGCTTTC	22	2
rno miR-742 2mut as	TTTACCCAA[C-g]ATGGT[G-c]GCTTTC	22	1
rno miR-743a nat as	TCTACCCAGTTTGGCGTCTTTC	22	2
rno miR-743a 2mut as	TCTACC[C-g]AGTTTGGCG[T-a]CTTTC	22	1
rno miR-760-5p nat as	CGGGCTCTGGTGGCCTGAGGGG	22	2
rno miR-760-5p 2mut as	CGGGCTCT[G-c]GTGGC[C-g]TGAGGGG	22	1
mmu miR-466 nat as	AATATGTGTGCATGTATTTATA	22	2
mmu miR-466 2mut as	AATATGTGTG[C-g]ATGTATTT[A-t]TA	22	1
mmu miR-669k nat as	TTGCATGCGTGTATATGCATA	21	2
mmu miR-669k 2mut as	TTGCATG[C-g]GTGT[A-t]TATGCATA	21	1
mmu miR-669g nat as	ATCATGTCAACACATAACAATGCA	23	2
mmu miR-669g 2mut as	ATCATGTCAACACATA[C-g]AAT[G-c]CA	23	1

mmu miR-669d nat as	ACATATACATGCACACACAAGT	22	2
mmu miR-669d 2mut as	ACATA[T-a]ACATGCA[C-g]ACACAAGT	22	1
mmu miR-466i nat as	TAGTGTGTATGTGTGTGTAT	22	2
mmu miR-466i 2mut as	TAGTGTGTATG[T-a]GTGTGTG[T-a]AT	22	1
mmu miR-1-2-as nat as	TGGAATGTAAGAAGTATGTA	21	2
mmu miR-1-2-as 2mut as	TGGAATGT[A-t]AAGAAG[T-a]ATGTA	21	1
mmu miR-1186 nat as	CATGCCTTTAATTCCAGCACTC	22	2
mmu miR-1186 2mut as	CATG[C-g]CTTTAATTCCA[G-c]CACTC	22	1
mmu miR-1187 nat as	TTACACACATACACACACATA	23	2
mmu miR-1187 2mut as	TTACA[C-g]ACAT[A-t]CACACACACATA	23	1
mmu miR-669j nat as	TGTTTGCATGTGAGTATATGCA	22	2
mmu miR-669j 2mut as	TGTTTGCATG[T-a]GAG[T-a]ATATGCA	22	1
mmu miR-669f nat as	ATACGTGTGTGTATGTATATG	23	2
mmu miR-669f 2mut as	ATACGTGTGTG[T-a]GTATGT[A-t]TATG	23	1
mmu miR-669i nat as	GTATGCATGTGTGTATATGCA	21	2
mmu miR-669i 2mut as	GTATGCAT[G-c]TGTGT[A-t]TATGCA	21	1
mmu miR-669h-5p nat as	GCACTCAACTATACCCCATGCAT	24	2
mmu miR-669h-5p 2mut as	GCACTC[A-t]ACTATACAC[C-g]CATGCAT	24	1
mmu miR-669h-3p nat as	TGTGCATGTGTGTATATGCATA	22	2
mmu miR-669h-3p 2mut as	TGTGCATG[T-a]GTGTAT[A-t]TGCATA	22	1
mmu miR-1188 nat as	TCCTGGCCCAACCTCACACCA	21	2
mmu miR-1188 2mut as	TCCTGGC[C-g]CAACCTCA[C-g]ACCA	21	1
mmu miR-466f nat as	ACATGCACATGCACACACAGT	22	2
mmu miR-466f 2mut as	ACATGCACATGCACA[C-g]ACA[C-g]GT	22	1
mmu miR-466k nat as	TCACATGTACATGTACACACACA	23	2
mmu miR-466k 2mut as	TCACATGTACATGTA[C-g]ACAC[A-t]CA	23	1
mmu miR-467f nat as	TGTAGGTGTGTGTGTATAT	21	2
mmu miR-467f 2mut as	TGT[A-t]GGTGT[G-c]TGTGTGTATAT	21	1
mmu miR-1190 nat as	GACAGAGGGGAACCTCAGCTGA	22	2
mmu miR-1190 2mut as	GACAGAGGGGAA[C-g]CTC[A-t]GCTGA	22	1
mmu miR-466j nat as	TTACACACATGCACATGCACACA	23	2
mmu miR-466j 2mut as	TT[A-t]CACACATGCACATGCA[C-g]ACA	23	1
mmu miR-1191 nat as	TAGGGCTACATAGTAAGACTG	21	2
mmu miR-1191 2mut as	TAGGG[C-g]TACATA[G-c]TAAGACTG	21	1
mmu miR-1192 nat as	AATTTGGTCTGTTTGTGTTT	22	2
mmu miR-1192 2mut as	AAT[T-a]TGGT[C-g]TGTTTGTGTTT	22	1
mmu miR-1193 nat as	GATAGTAAACGGGTGACCTA	21	2

mmu miR-1193 2mut as	GATAGTAAA[A-t]CGGGTGAC[C-g]TA	21	1
mmu miR-1194 nat as	AGGATCTAGCAGTTACTCATTCC	22	2
mmu miR-1194 2mut as	AGGAT[C-g]TAGCAGTTACT[C-g]ATTC	22	1
mmu miR-669e nat as	ATGAACATGCACACACAAGACA	22	2
mmu miR-669e 2mut as	AT[G-c]AACATGCA[C-g]ACACAAGACA	22	1
mmu miR-467g nat as	ATATATGTGTGTGTATGTATA	21	2
mmu miR-467g 2mut as	ATATATGTGTG[T-a]GTATG[T-a]ATA	21	1
mmu miR-467h nat as	ACATATACATGCACACACTTAT	22	2
mmu miR-467h 2mut as	ACA[T-a]ATACATGCA[C-g]ACACTTAT	22	1
mmu miR-1195 nat as	TGAGCAGGCTGGCCTCGAACTCA	23	2
mmu miR-1195 2mut as	TGAG[C-g]AGGCTGGCCT[C-g]GAACTCA	23	1
mmu miR-1196 nat as	AGGCAGAGGCAGGTAGATTT	20	2
mmu miR-1196 2mut as	AGGCAGAGG[C-g]AGGTA[G-c]ATTT	20	1
mmu miR-1197 nat as	AGAAGTAGACCATGTGTCCTA	21	2
mmu miR-1197 2mut as	AGAAGTAGACCAT[G-c]TGTC[C-g]TA	21	1
mmu miR-1198 nat as	CCAAGCCAGCCAGGAACACATA	22	2
mmu miR-1198 2mut as	CCAAGCCAGC[C-g]AGGAACA[C-g]ATA	22	1
mmu miR-1199 nat as	CCGCGCGACCGGGACTCAGA	20	2
mmu miR-1199 2mut as	CCGCG[C-g]GACCGGGAC[T-a]CAGA	20	1
rno miR-146b nat as	ACAGCCTATGGAATTCAGTTCTCA	24	2
rno miR-146b 2mut as	ACAGCCTATGG[A-t]ATTCAGTT[C-g]TCA	24	1
rno miR-551b nat as	ACTGAAACCAAGTATGGGTCCGC	23	2
rno miR-551b 2mut as	ACTG[A-t]AAC[C-g]AAGTATGGGTCCGC	23	1
mmu miR-1839-5p nat as	CAAGACCTGTTCTATCTACCTT	22	2
mmu miR-1839-5p 2mut as	CA[A-t]GACCTGTTCTATCTAC[C-g]TT	22	1
mmu miR-1902 nat as	AAGTCATGCCTACTGCACCTCT	22	2
mmu miR-1902 2mut as	AAGT[C-g]ATG[C-g]CTACTGCACCTCT	22	1
mmu miR-1897-5p nat as	CCCCCTCTTCTCCATCCAAAG	22	2
mmu miR-1897-5p 2mut as	CCCCCTCTT[T-a]CTCCAT[C-g]CAAAG	22	1
mmu miR-1897-3p nat as	CTCACCGGACAGAACGAGTTGA	22	2
mmu miR-1897-3p 2mut as	CTCA[C-g]CGGACAGA[A-t]CGAGTTGA	22	1
mmu miR-1905 nat as	CTACCGCGTGGTGGGACTGGTG	22	2
mmu miR-1905 2mut as	CTACCGCGT[G-c]GTGGGA[C-g]TGGTG	22	1
mmu miR-1895 nat as	TCCTCCTCGTCTCCTCGGGGG	22	2
mmu miR-1895 2mut as	TCCTC[C-g]TCGTCTCCT[C-g]GGGGG	22	1
mmu miR-1903 nat as	TGTCTCAGGAAGAAGAAGG	22	2
mmu miR-1903 2mut as	TGTCT[C-g]AGGAAGA[A-t]GAAGAAGG	22	1

mmu miR-1899 nat as	GGAAGCAGATTCGGCCATCGCT	22	2
mmu miR-1899 2mut as	GGAAGCAG[A-t]TTCGG[C-g]CATCGCT	22	1
mmu miR-1900 nat as	TGAAGGACCAGAGAGGGCGGCC	22	2
mmu miR-1900 2mut as	TGA[A-t]GGACCAGAGAGGG[C-g]GGCC	22	1
mmu miR-1892 nat as	ATCCTCCCTCCCGTCCCCAAAT	22	2
mmu miR-1892 2mut as	ATC[C-g]TCCCTCCC[G-c]TCCCCAAAT	22	1
mmu miR-1906 nat as	AGCCCTGCCTCAGGCTGCTGCA	22	2
mmu miR-1906 2mut as	AGCCCTG[C-g]CTCAGGCT[G-c]CTGCA	22	1
mmu miR-1896 nat as	CTCCTCACCCACCATCAGAGAG	22	2
mmu miR-1896 2mut as	CT[C-g]CTCACCCAC[C-g]ATCAGAGAG	22	1
mmu miR-1904 nat as	CCTCCCTCCAGAGGAGCAGAAC	22	2
mmu miR-1904 2mut as	CCTC[C-g]CTCCAGAGGAG[C-g]AGAAC	22	1
mmu miR-1898 nat as	GATCCCCTGTGAACCTTGACCT	22	2
mmu miR-1898 2mut as	GATCCCCTGTG[A-t]ACCTTGA[C-g]CT	22	1
mmu miR-1907 nat as	ACCTCCAGATCCTCTGCTGCTC	22	2
mmu miR-1907 2mut as	ACCTCCAGAT[C-g]CTCTGCTG[C-g]TC	22	1
mmu miR-1894-5p nat as	AGAGGCAGGTGGTAGGGGAGAG	22	2
mmu miR-1894-5p 2mut as	AGAGG[C-g]AGGTGGTAGGGG[A-t]GAG	22	1
mmu miR-1894-3p nat as	CTCCCTTACCCCTCTCCCTTGC	22	2
mmu miR-1894-3p 2mut as	CTCCC[T-a]TCACC[C-g]TCTCCCTTGC	22	1
mmu miR-1893 nat as	CGAGGCGTCCAGCGCCCGCGCC	22	2
mmu miR-1893 2mut as	CGAGGCGTCC[A-t]GCGCC[C-g]GCGCC	22	1
mmu miR-1901 nat as	GGACCCCGGGAGTACGAGCGG	22	2
mmu miR-1901 2mut as	GGACCC[C-g]CGGGAGTAC[G-c]AGCGG	22	1
mmu miR-1927 nat as	TCAGTCCCTAACATCCAGAGGTC	23	2
mmu miR-1927 2mut as	TCAGT[C-g]CCTAA[C-g]ATCCAGAGGTC	23	1
mmu miR-1928 nat as	GAGCTGGCAATGTAGCT	17	2
mmu miR-1928 2mut as	GAG[C-g]TGGCAA[T-a]GTAGCT	17	1
mmu miR-1929 nat as	CTCTGCTCTATAAAGTCCTAGAA	23	2
mmu miR-1929 2mut as	CTCT[G-c]CTCTATAAAGTC[C-g]TAGAA	23	1
mmu miR-1930 nat as	ACGCTGCAGGTACTATGGAGGT	22	2
mmu miR-1930 2mut as	ACG[C-g]TGCAGGTACT[A-t]TGGAGGT	22	1
mmu miR-1931 nat as	GCCATCGCACCAGCCCTTGCAT	22	2
mmu miR-1931 2mut as	GCCATCGCA[C-g]CAGCC[C-g]TTGCAT	22	1
mmu miR-1932 nat as	CCGACCTAGCGCTGTCCGCAAC	22	2
mmu miR-1932 2mut as	CCG[A-t]CCTAGCG[C-g]TGTCCGCAAC	22	1
mmu miR-1933-5p nat as	AAACTAAGACCGAACACCATGACT	24	2

mmu miR-1933-5p 2mut as	AAACTA[A-t]GACCGAACAC[C-g]ATGACT	24	1
mmu miR-1933-3p nat as	ATAGTCACACTGATGGTCCTGG	22	2
mmu miR-1933-3p 2mut as	ATAGTC[A-t]CACTGATGGTC[C-g]TGG	22	1
mmu miR-1934 nat as	AGAGGACGAAGCAGGGGACCAGA	23	2
mmu miR-1934 2mut as	AG[A-t]GGA[C-g]GAAGCAGGGGACCAGA	23	1
mmu miR-1935 nat as	AGAGATCCGCCAGCCTCTGCCT	22	2
mmu miR-1935 2mut as	AGAGATCCGCCAGC[C-g]TCT[G-c]CCT	22	1
mmu miR-1936 nat as	GCCAGTTCACAGCAGGTCAGTTA	23	2
mmu miR-1936 2mut as	GCCAGTTCA[C-g]AGCAGGTCAG[T-a]TA	23	1
mmu miR-1937a nat as	TGGGGGCTCGTCCGGGATT	19	2
mmu miR-1937a 2mut as	TGGGGG[C-g]TCGTCCGGG[A-t]TT	19	1
mmu miR-1938 nat as	GACCGAACTACAAGTCCCACCG	22	2
mmu miR-1938 2mut as	GACCGAA[C-g]TACAAGTCCC[A-t]CCG	22	1
mmu miR-1939 nat as	GTGCATTGGCAGGGAATCGA	20	2
mmu miR-1939 2mut as	GTG[C-g]ATTGGCAGGGAAT[C-g]GA	20	1
mmu miR-1940 nat as	AACTGCTCCACCTTCTCAGTCCTCCAT	27	2
mmu miR-1940 2mut as	AACTGCTC[C-g]ACCTTCTCAGTC[C-g]TCCAT	27	1
mmu miR-1941-5p nat as	AAGCCTCTGTACCAGCATCTCCCT	24	2
mmu miR-1941-5p 2mut as	AAGCCTCTGTACC[A-t]GCAT[C-g]TCCCT	24	1
mmu miR-1941-3p nat as	ATGGGAGATACTGCTAAGATG	21	2
mmu miR-1941-3p 2mut as	ATGGGAGA[T-a]ACTG[C-g]TAAGATG	21	1
mmu miR-1942 nat as	CAACCAGATGAAGACATCTGA	21	2
mmu miR-1942 2mut as	CAAC[C-g]AGATG[A-t]AGACATCTGA	21	1
mmu miR-1943 nat as	TCCAGGTGCCAGATCCTCCCTT	23	2
mmu miR-1943 2mut as	TCCAGGT[G-c]CCCAGAT[C-g]CTCCCTT	23	1
mmu miR-1944 nat as	AATCAGAACTTGACATTGACACAGAG	27	2
mmu miR-1944 2mut as	AATCAGA[A-t]CTTGACATTGACA[C-g]AGAG	27	1
mmu miR-1945 nat as	GTCCCGACAGTACCCGCGAAGA	22	2
mmu miR-1945 2mut as	GT[C-g]CCGACAGTA[C-g]CCGCGAAGA	22	1
mmu miR-1306 nat as	CATCACCACCAGAGCCAACGT	21	2
mmu miR-1306 2mut as	CATCA[C-g]CACCAGAGCC[A-t]ACGT	21	1
mmu miR-1946a nat as	AAAAGTGTGTGCCACCACTGCCGGCT	27	2
mmu miR-1946a 2mut as	AAAAGTGTGTGCC[A-t]CCTAG[C-g]CCGGCT	27	1
mmu miR-1947 nat as	CAGCACTCAGCTAGCTCGTCCT	22	2
mmu miR-1947 2mut as	CAGCAC[T-a]CAG[C-g]TAGCTCGTCCT	22	1
mmu miR-1937b nat as	TGGGGGCTCGTCCGGGAT	18	2
mmu miR-1937b 2mut as	TGGGGG[C-g]TCGT[C-g]CGGGAT	18	1

mmu miR-1948 nat as	CTGTACGAGTGCTCTGCCTAAA	22	2
mmu miR-1948 2mut as	CT[G-c]TACGAGTGCTCTGC[C-g]TAAA	22	1
mmu miR-1949 nat as	AACTATGCTGACATCCTGGTATAG	24	2
mmu miR-1949 2mut as	AA[C-g]TAT[G-c]CTGACATCCTGGTATAG	24	1
mmu miR-1950 nat as	TGACCATATCCTTAGATGCAGA	22	2
mmu miR-1950 2mut as	TGAC[C-g]ATA[T-a]CCTTAGATGCAGA	22	1
mmu miR-669l nat as	ACATATACATGCACACACAAC	22	2
mmu miR-669l 2mut as	ACA[T-a]ATACATGCA[C-g]ACACAAC	22	1
mmu miR-669m nat as	ATATGTTTGTGTGGATGTATAT	22	2
mmu miR-669m 2mut as	ATATG[T-a]TTGTGT[G-c]GATGTATAT	22	1
mmu miR-669o nat as	ACATAAACATGCACACACAAC	23	2
mmu miR-669o 2mut as	ACA[T-a]AAACATG[C-g]ACACACAAC	23	1
mmu miR-1951 nat as	TAGCCACACCAGTCTCCACTAC	22	2
mmu miR-1951 2mut as	TAGC[C-g]ACAC[C-g]AGTCTCCACTAC	22	1
mmu miR-1952 nat as	CAGAAGGAGGGTGGAGA	17	2
mmu miR-1952 2mut as	CA[G-c]AAGGAGGG[T-a]GGAGA	17	1
mmu miR-1953 nat as	CAGAAGCCTGAGAACTTTCCCA	22	2
mmu miR-1953 2mut as	CAG[A-t]AGCCTGAGAA[C-g]TTTCCCA	22	1
mmu miR-1954 nat as	AACAGGGTCTCACTCTGCAGT	21	2
mmu miR-1954 2mut as	AACAGGGT[C-g]TCACTCT[G-c]CAGT	21	1
mmu miR-1955 nat as	AAAAGCTGCAGTGCATCCTGGGACT	25	2
mmu miR-1955 2mut as	AAAAGCTGCAGT[G-c]CAT[C-g]CTGGGACT	25	1
mmu miR-669n nat as	ACACACATCCACACACAAAT	20	2
mmu miR-669n 2mut as	ACAC[A-t]CATC[C-g]ACACACAAAT	20	1
mmu miR-1956 nat as	TCCGCTGACTCAGCCCTGGACT	22	2
mmu miR-1956 2mut as	TCCGCTGA[C-g]TCAGCC[C-g]TGGACT	22	1
mmu miR-1937c nat as	TGGGGGCTCTTCCGGGAT	18	2
mmu miR-1937c 2mut as	TGGGGGCT[C-g]TTC[C-g]GGGAT	18	1
mmu miR-1957 nat as	GTCATATGCTCTACCACTG	19	2
mmu miR-1957 2mut as	GTC[A-t]TATGCT[C-g]TACCACTG	19	1
mmu miR-1958 nat as	ACTTACTGCTTCCACTTTCCCTA	22	2
mmu miR-1958 2mut as	ACTTACTG[C-g]TTC[C-g]ACTTTCCCTA	22	1
mmu miR-1959 nat as	CTCCACTGAGCTACATCCCC	20	2
mmu miR-1959 2mut as	CTCCA[C-g]TGAGCTAC[A-t]CCCC	20	1
mmu miR-1960 nat as	AGCCCTCTTCTAACAGCACTGG	22	2
mmu miR-1960 2mut as	AG[C-g]CCTCTTCTAACAG[C-g]ACTGG	22	1
mmu miR-1961 nat as	TTCTAACTACTACCTCA	17	2

mmu miR-1961 2mut as	TT[C-g]TAA[C-g]TACTACCTCA	17	1
mmu miR-1962 nat as	ATGTGTCCCAGTGCCAGCCTCT	22	2
mmu miR-1962 2mut as	AT[G-c]TGTCCCAGTGCCAG[C-g]CTCT	22	1
mmu miR-1963 nat as	GAAGGCCTCATGATCTCGTCCCA	23	2
mmu miR-1963 2mut as	GAA[G-c]GCCTCATGATCTCGTC[C-g]CA	23	1
mmu miR-1964 nat as	AAAGCCGGAGCCCAGAAGTCGG	22	2
mmu miR-1964 2mut as	AAAGCCGGAGC[C-g]CAGAAG[T-a]CGG	22	1
mmu miR-1965 nat as	TGCGCCACTACGGCCCCGGCTT	21	2
mmu miR-1965 2mut as	TGCGCCA[C-g]TACGGCCCCGG[C-g]TT	21	1
mmu miR-1966 nat as	GACTCTCTCCTGAGCCAGCTCCCTT	25	2
mmu miR-1966 2mut as	GAC[T-a]CTCTCCTGAGCCAG[C-g]TCCCTT	25	1
mmu miR-1967 nat as	GCATCTTCTCCCAGGATCCTCA	23	2
mmu miR-1967 2mut as	GCATCT[T-a]CTCC[C-g]CAGGATCCTCA	23	1
mmu miR-1968 nat as	AGTCCACCATCCTTAACAGCTGCA	24	2
mmu miR-1968 2mut as	AGTC[C-g]ACCA[T-a]CCTTAACAGCTGCA	24	1
mmu miR-1969 nat as	ACCCATGTTAAAGTCTCCATCTT	23	2
mmu miR-1969 2mut as	ACCCATGTTAAAGT[C-g]TCCAT[C-g]TT	23	1
mmu miR-1946b nat as	AAAAGCATGTGCCACCACTGCCCGGC	26	2
mmu miR-1946b 2mut as	AAAAGCATGTGCCAC[C-g]ACTGC[C-g]CGGC	26	1
mmu miR-1970 nat as	CAAAGCCTATCCCCAGTGACACA	23	2
mmu miR-1970 2mut as	CAAAGCCTA[T-a]CCCCAGTGA[C-g]ACA	23	1
mmu miR-1274a nat as	TGGCGCCTGAACAGGGACCTGA	22	2
mmu miR-1274a 2mut as	TGGCG[C-g]CTGAACAG[G-c]GACCTGA	22	1
mmu miR-1971 nat as	TCTCAGCCCAGCCTTTAC	18	2
mmu miR-1971 2mut as	TCTCAGC[C-g]CAGCCTT[T-a]AC	18	1
mmu miR-1983 nat as	AGAAAACATGCTCCAGGTGAG	21	2
mmu miR-1983 2mut as	AGAAAACATGCT[C-g]CAGGT[G-c]AG	21	1
mmu miR-1839-3p nat as	GCTGTTGGTAGATAAGTAGGTCT	23	2
mmu miR-1839-3p 2mut as	GCTG[T-a]TGGTAGATAAGTAGG[T-a]CT	23	1
mmu miR-1981 nat as	GCCACGTCTAAGCCCAGCCTTTAC	24	2
mmu miR-1981 2mut as	GCCAC[G-c]TCTAAGCC[C-g]AGCCTTTAC	24	1
mmu miR-1982.1 nat as	CTGTGGGAGAAACATAGGGTGAGA	23	2
mmu miR-1982.1 2mut as	CTGT[G-c]GGAGAA[C-g]ATAGGGTGAGA	23	1
mmu miR-1982.2 nat as	CTGTGGGAGAAACATAGGGTGA	21	2
mmu miR-1982.2 2mut as	CTGTGGGAGAA[C-g]ATA[G-c]GGTGA	21	1