MicroRNA Human 13.0

COMBIMATRIX

Probe Name	Probe Sequence	Length	Replicates	Annotations
hsa|tRNA-Arg(Chr:6)_45_65|PosCtrl|as|	CCAGGAGTCGAACCTAGAATC	21	2	Positive Control
hsa|tRNA-Arg(Chr:6)_11_30|PosCtrl|as|	CAGACGCGTTATCCATTGCG	20	2	Positive Control
hsa|tRNA-Asp(Chr:1)_13_33|PosCtrl|as|	AGGCGGGGATACTCACCACTA	21	2	Positive Control
hsa|tRNA-Gly(Chr:17)_12_33|PosCtrl|as|	CAGGCGAGAATTCTACCACTGA	22	2	Positive Control
hsa|tRNA-Gly(Chr:17)_51_70|PosCtrl|as|	GCATTGGCCGGGAATCGAAC	20	2	Positive Control
hsa|tRNA-Val(Chr:1)_13_33|PosCtrl|as|	AGGCGAACGTGATAACCACTA	21	2	Positive Control
hsa|tRNA-Val(Chr:1)_53_72|PosCtrl|as|	GTTTCCGCCCGGTTTCGAAC	20	2	Positive Control
hsa|tRNA-Met(Chr:6)_31_51|PosCtrl|as|	CATCGACCTCTGGGTTATGGG	21	2	Positive Control
hsa|tRNA-Met(Chr:6)_42_62|PosCtrl|as|	TGGTTTCGATCCATCGACCTC	21	2	Positive Control
hsa|tRNA-Pro(Chr:14)_2_22|PosCtrl|as|	CATACCCCTAGACCAACGAGC	21	2	Positive Control
hsa|tRNA-Pro(Chr:14)_20_40|PosCtrl|as|	CGCACCCTAAGCGAGAATCAT	21	2	Positive Control
hsa|tRNA-Phe(Chr:12)_24_46|PosCtrl|as|	CCTTTAGATCTTCAGTCTAACGC	23	2	Positive Control
hsa|tRNA-Phe(Chr:12)_12_31|PosCtrl|as|	TCTAACGCTCTCCCAACTGA	20	2	Positive Control
hsa|tRNA-Trp(Chr:17)_42_62|PosCtrl|as|	GTGACTTGAACACGCAACCTT	21	2	Positive Control
hsa|tRNA-Trp(Chr:17)_28_48|PosCtrl|as|	CAACCTTCTGATCTGGAGTCA	21	2	Positive Control
hsa|U6(M14486)_81_101|PosCtrl|as|	ATGGAACGCTTCACGAATTTG	21	2	Positive Control
hsa|U6(M14486)_5_25|PosCtrl|as|	GTATATGTGCTGCCGAAGCGA	21	2	Positive Control
hsa|ACTB(NM_001101)_1233_1255|DegradCtrl|as|	GCGCAAGTTAGGTTTTGTCAAGA	23	2	Degradation Control
hsa|ACTB(NM_001101)_1479_1499|DegradCtrl|as|	TTTTAGGATGGCAAGGGACTT	21	2	Degradation Control
hsa|HSPD1(NM_002156)_2274_2296|DegradCtrl|as|	ACAAAGGTTGTCACATAATTGGA	23	2	Degradation Control
hsa|HSPD1(NM_002156)_1849_1872|DegradCtrl|as|	ACTAGTCTAGGAGTTAGAACATGC	24	2	Degradation Control
hsa|PGK1(NM_000291)_1825_1847|DegradCtrl|as|	CAGCAATATAGACATCTGATCCG	23	2	Degradation Control
hsa|PGK1(NM_000291)_1783_1805|DegradCtrl|as|	CACCCTTCCTAACAAAGTATGAC	23	2	Degradation Control
hsa|UBD(NM_006398)_327_347|DegradCtrl|as|	GGTCTTAGACCGGACATGTTC	21	2	Degradation Control
hsa|UBD(NM_006398)_572_593|DegradCtrl|as|	CGTCTTAGTCTCGATCATTGCT	22	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|	GAACAGGTTATCGAAATCAGCCACA	25	2	NegativeControl
neg|Lambda Spike 6_497_521|NegCtrl|as|	TACAACCGGAATGTTGACCTTGCCT	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
hsa|let-7a|nat|as|	AACTATACAACCTACTACCTCA	22	2	
hsa|let-7a|2mut|as|	AACTATA[C-g]AAC[C-g]TACTACCTCA	22	1	
ppa|miR-1|nat|as|	TACATACTTCTTTACATTCCA	21	2	

ppa|miR-1|2mut|as|	TACATA[C-g]TTCTTTAC[A-t]TTCCA	21	1	
hsa|let-7b|nat|as|	AACCACACAACCTACTACCTCA	22	2	
hsa|let-7b|2mut|as|	AACCA[C-g]ACAACCTACTA[C-g]CTCA	22	1	
hsa|let-7c|nat|as|	AACCATACAACCTACTACCTCA	22	2	
hsa|let-7c|2mut|as|	AACC[A-t]TACAACCTACTA[C-g]CTCA	22	1	
hsa|let-7d|nat|as|	AACTATGCAACCTACTACCTCT	22	2	
hsa|let-7d|2mut|as|	AACTATGCA[A-t]CCTACTAC[C-g]TCT	22	1	
hsa|let-7e|nat|as|	AACTATACAACCTCCTACCTCA	22	2	
hsa|let-7e|2mut|as|	AACTATACAA[C-g]CTCCTACC[T-a]CA	22	1	
hsa|let-7f|nat|as|	AACTATACAATCTACTACCTCA	22	2	
hsa|let-7f|2mut|as|	AACTATA[C-g]AAT[C-g]TACTACCTCA	22	1	
hsa|miR-15a|nat|as|	CACAAACCATTATGTGCTGCTA	22	2	
hsa|miR-15a|2mut|as|	CACAAACC[A-t]TTATGTG[C-g]TGCTA	22	1	
hsa|miR-16|nat|as|	CGCCAATATTTACGTGCTGCTA	22	2	
hsa|miR-16|2mut|as|	CG[C-g]CAATA[T-a]TTACGTGCTGCTA	22	1	
hsa|miR-17|nat|as|	CTACCTGCACTGTAAGCACTTTG	23	2	
hsa|miR-17|2mut|as|	CTA[C-g]CTGCAC[T-a]GTAAGCACTTTG	23	1	
hsa|miR-18a|nat|as|	CTATCTGCACTAGATGCACCTTA	23	2	
hsa|miR-18a|2mut|as|	CT[A-t]TCTGCACTAGATGCA[C-g]CTTA	23	1	
hsa|miR-19a|nat|as|	TCAGTTTTGCATAGATTTGCACA	23	2	
hsa|miR-19a|2mut|as|	TCAGTTTTG[C-g]ATA[G-c]ATTTGCACA	23	1	
hsa|miR-19b|nat|as|	TCAGTTTTGCATGGATTTGCACA	23	2	
hsa|miR-19b|2mut|as|	TCAGTTTTG[C-g]ATGG[A-t]TTTGCACA	23	1	
hsa|miR-20a|nat|as|	CTACCTGCACTATAAGCACTTTA	23	2	
hsa|miR-20a|2mut|as|	CTA[C-g]CTGCACTATAAG[C-g]ACTTTA	23	1	
hsa|miR-21|nat|as|	TCAACATCAGTCTGATAAGCTA	22	2	
hsa|miR-21|2mut|as|	TCAACATCAG[T-a]CTGATAAG[C-g]TA	22	1	
hsa|miR-22|nat|as|	ACAGTTCTTCAACTGGCAGCTT	22	2	
hsa|miR-22|2mut|as|	ACAGTTC[T-a]TCAACTGG[C-g]AGCTT	22	1	
hsa|miR-23a|nat|as|	GGAAATCCCTGGCAATGTGAT	21	2	
hsa|miR-23a|2mut|as|	GGA[A-t]ATC[C-g]CTGGCAATGTGAT	21	1	
hsa|miR-24|nat|as|	CTGTTCCTGCTGAACTGAGCCA	22	2	
hsa|miR-24|2mut|as|	CTGTTCCTG[C-g]TGAACT[G-c]AGCCA	22	1	
hsa|miR-25|nat|as|	TCAGACCGAGACAAGTGCAATG	22	2	
hsa|miR-25|2mut|as|	TCAGACC[G-c]AGA[C-g]AAGTGCAATG	22	1	
hsa|miR-26a|nat|as|	AGCCTATCCTGGATTACTTGAA	22	2	
hsa|miR-26a|2mut|as|	AG[C-g]CTATCCTGGATTA[C-g]TTGAA	22	1	

hsa|miR-26b|nat|as|	ACCTATCCTGAATTACTTGAA	21	2	
hsa|miR-26b|2mut|as|	ACCTAT[C-g]CTGAATTACTT[G-c]AA	21	1	
hsa|miR-27a|nat|as|	GCGGAACTTAGCCACTGTGAA	21	2	
hsa|miR-27a|2mut|as|	GCGGAA[C-g]TTAG[C-g]CACTGTGAA	21	1	
hsa|miR-28-5p|nat|as|	CTCAATAGACTGTGAGCTCCTT	22	2	
hsa|miR-28-5p|2mut|as|	CTCAAT[A-t]GACTGTGAG[C-g]TCCTT	22	1	
hsa|miR-28-3p|nat|as|	TCCAGGAGCTCACAATCTAGTG	22	1	
hsa|miR-28-3p|2mut|as|	TCCAGGAGCTC[A-t]CAAT[C-g]TAGTG	22	1	
hsa|miR-29a|nat|as|	TAACCGATTTCAGATGGTGCTA	22	2	
hsa|miR-29a|2mut|as|	TAAC[C-g]GATTTCAGA[T-a]GGTGCTA	22	1	
hsa|miR-30a|nat|as|	CTTCCAGTCGAGGATGTTTACA	22	2	
hsa|miR-30a|2mut|as|	CTTC[C-g]AGTCG[A-t]GGATGTTTACA	22	1	
hsa|miR-31|nat|as|	AGCTATGCCAGCATCTTGCCT	21	2	
hsa|miR-31|2mut|as|	AG[C-g]TATGC[C-g]AGCATCTTGCCT	21	1	
hsa|miR-32|nat|as|	TGCAACTTAGTAATGTGCAATA	22	2	
hsa|miR-32|2mut|as|	TGCAA[C-g]TTAGTA[A-t]TGTGCAATA	22	1	
hsa|miR-33a|nat|as|	TGCAATGCAACTACAATGCAC	21	2	
hsa|miR-33a|2mut|as|	TG[C-g]AATGCAACTACA[A-t]TGCAC	21	1	
hsa|miR-92a|nat|as|	ACAGGCCGGGACAAGTGCAATA	22	2	
hsa|miR-92a|2mut|as|	ACAGG[C-g]CGGG[A-t]CAAGTGCAATA	22	1	
hsa|miR-93|nat|as|	CTACCTGCACGAACAGCACTTTG	23	2	
hsa|miR-93|2mut|as|	CTACCTG[C-g]ACGAAC[A-t]GCACTTTG	23	1	
hsa|miR-95|nat|as|	TGCTCAATAAATACCCGTTGAA	22	2	
hsa|miR-95|2mut|as|	TGCTCAATAAATA[C-g]CCGT[T-a]GAA	22	1	
hsa|miR-96|nat|as|	AGCAAAAATGTGCTAGTGCCAAA	23	2	
hsa|miR-96|2mut|as|	AGCAAAAAT[G-c]TGCTAGTG[C-g]CAAA	23	1	
hsa|miR-98|nat|as|	AACAATACAACTTACTACCTCA	22	2	
hsa|miR-98|2mut|as|	AACAATACAA[C-g]TTA[C-g]TACCTCA	22	1	
hsa|miR-99a|nat|as|	CACAAGATCGGATCTACGGGTT	22	2	
hsa|miR-99a|2mut|as|	CACAAGAT[C-g]GGATCT[A-t]CGGGTT	22	1	
hsa|miR-100|nat|as|	CACAAGTTCGGATCTACGGGTT	22	2	
hsa|miR-100|2mut|as|	CACAAGTT[C-g]GGAT[C-g]TACGGGTT	22	1	
hsa|miR-101|nat|as|	TTCAGTTATCACAGTACTGTA	21	2	
hsa|miR-101|2mut|as|	TT[C-g]AGTTATCACAGTACT[G-c]TA	21	1	
hsa|miR-29b|nat|as|	AACACTGATTTCAAATGGTGCTA	23	2	
hsa|miR-29b|2mut|as|	AACAC[T-a]GATTTCAAATGGTG[C-g]TA	23	1	
hsa|miR-103|nat|as|	TCATAGCCCTGTACAATGCTGCT	23	2	

hsa|miR-103|2mut|as|	TCATAGCC[C-g]TGTACAATGCT[G-c]CT	23	1	
hsa|miR-105|nat|as|	ACCACAGGAGTCTGAGCATTTGA	23	2	
hsa|miR-105|2mut|as|	AC[C-g]ACAGGAGTCTGAGCA[T-a]TTGA	23	1	
hsa|miR-106a|nat|as|	CTACCTGCACTGTAAGCACTTTT	23	2	
hsa|miR-106a|2mut|as|	CTACC[T-a]GCACTGTAAGCA[C-g]TTTT	23	1	
hsa|miR-107|nat|as|	TGATAGCCCTGTACAATGCTGCT	23	2	
hsa|miR-107|2mut|as|	TGATAG[C-g]CCTGTACAATG[C-g]TGCT	23	1	
hsa|miR-7|nat|as|	ACAACAAAATCACTAGTCTTCCA	23	2	
hsa|miR-7|2mut|as|	ACAA[C-g]AAAATCACTAGTC[T-a]TCCA	23	1	
hsa|miR-9|nat|as|	TCATACAGCTAGATAACCAAAGA	23	2	
hsa|miR-9|2mut|as|	TCATA[C-g]AGCTAGA[T-a]AACCAAAGA	23	1	
hsa|let-7g|nat|as|	AACTGTACAAACTACTACCTCA	22	2	
hsa|let-7g|2mut|as|	AACTGTACA[A-t]ACTACTA[C-g]CTCA	22	1	
hsa|let-7i|nat|as|	AACAGCACAAACTACTACCTCA	22	2	
hsa|let-7i|2mut|as|	AACAGCACA[A-t]ACTACTAC[C-g]TCA	22	1	
hsa|miR-1|nat|as|	ATACATACTTCTTTACATTCCA	22	2	
hsa|miR-1|2mut|as|	ATACATACTTCT[T-a]TACATT[C-g]CA	22	1	
hsa|miR-15b|nat|as|	TGTAAACCATGATGTGCTGCTA	22	2	
hsa|miR-15b|2mut|as|	TGTAAACCATG[A-t]TGTG[C-g]TGCTA	22	1	
hsa|miR-23b|nat|as|	GGTAATCCCTGGCAATGTGAT	21	2	
hsa|miR-23b|2mut|as|	GGTAATCC[C-g]TGGCAAT[G-c]TGAT	21	1	
hsa|miR-27b|nat|as|	GCAGAACTTAGCCACTGTGAA	21	2	
hsa|miR-27b|2mut|as|	GCAGAACTTAG[C-g]CACTGT[G-c]AA	21	1	
hsa|miR-30b|nat|as|	AGCTGAGTGTAGGATGTTTACA	22	2	
hsa|miR-30b|2mut|as|	AG[C-g]TGAGTGTAGGA[T-a]GTTTACA	22	1	
hsa|miR-99b|nat|as|	CGCAAGGTCGGTTCTACGGGTG	22	2	
hsa|miR-99b|2mut|as|	CGCAAGGT[C-g]GGTTCT[A-t]CGGGTG	22	1	
hsa|miR-124|nat|as|	GGCATTCACCGCGTGCCTTA	20	2	
hsa|miR-124|2mut|as|	GGCATT[C-g]ACCGC[G-c]TGCCTTA	20	1	
hsa|miR-125a-5p|nat|as|	TCACAGGTTAAAGGGTCTCAGGGA	24	2	
hsa|miR-125a-5p|2mut|as|	TCACAGGTTAA[A-t]GGGTCT[C-g]AGGGA	24	1	
hsa|miR-125a-3p|nat|as|	GGCTCCCAAGAACCTCACCTGT	22	1	
hsa|miR-125a-3p|2mut|as|	GGCTCC[C-g]AAGAACCT[C-g]ACCTGT	22	1	
hsa|miR-125b|nat|as|	TCACAAGTTAGGGTCTCAGGGA	22	2	
hsa|miR-125b|2mut|as|	TCA[C-g]AAGTTAGGGTC[T-a]CAGGGA	22	1	
hsa|miR-126|nat|as|	CGCATTATTACTCACGGTACGA	22	2	
hsa|miR-126|2mut|as|	CGCATTATTA[C-g]TCACGG[T-a]ACGA	22	1	

hsa|miR-127-3p|nat|as|	AGCCAAGCTCAGACGGATCCGA	22	2	
hsa|miR-127-3p|2mut|as|	AG[C-g]CAAG[C-g]TCAGACGGATCCGA	22	1	
hsa|miR-128|nat|as|	AAAGAGACCGGTTCACTGTGA	21	2	
hsa|miR-128|2mut|as|	AAAGAGAC[C-g]GGTTCAC[T-a]GTGA	21	1	
hsa|miR-130a|nat|as|	ATGCCCTTTTAACATTGCACTG	22	2	
hsa|miR-130a|2mut|as|	ATGCCC[T-a]TTTAA[C-g]ATTGCACTG	22	1	
hsa|miR-132|nat|as|	CGACCATGGCTGTAGACTGTTA	22	2	
hsa|miR-132|2mut|as|	CGA[C-g]CATGGCTGTAG[A-t]CTGTTA	22	1	
hsa|miR-133a|nat|as|	CAGCTGGTTGAAGGGGACCAAA	22	2	
hsa|miR-133a|2mut|as|	CAGCT[G-c]GTTGAAGGGGAC[C-g]AAA	22	1	
hsa|miR-134|nat|as|	CCCCTCTGGTCAACCAGTCACA	22	2	
hsa|miR-134|2mut|as|	CCC[C-g]TCTGGTCAACCAGT[C-g]ACA	22	1	
hsa|miR-135a|nat|as|	TCACATAGGAATAAAAAGCCATA	23	2	
hsa|miR-135a|2mut|as|	TCACATAGGA[A-t]TAAAAAGC[C-g]ATA	23	1	
hsa|miR-137|nat|as|	CTACGCGTATTCTTAAGCAATAA	23	2	
hsa|miR-137|2mut|as|	CTACGCGTATT[C-g]TTAAGCA[A-t]TAA	23	1	
hsa|miR-138|nat|as|	CGGCCTGATTCACAACACCAGCT	23	2	
hsa|miR-138|2mut|as|	CGG[C-g]CTGATTC[A-t]CAACACCAGCT	23	1	
hsa|miR-140-5p|nat|as|	CTACCATAGGGTAAAACCACTG	22	2	
hsa|miR-140-5p|2mut|as|	CTACC[A-t]TAGGGTAAAAC[C-g]ACTG	22	1	
hsa|miR-141|nat|as|	CCATCTTTACCAGACAGTGTTA	22	2	
hsa|miR-141|2mut|as|	CCATCTTTA[C-g]CAG[A-t]CAGTGTTA	22	1	
hsa|miR-142-5p|nat|as|	AGTAGTGCTTTCTACTTTATG	21	2	
hsa|miR-142-5p|2mut|as|	AGTAGTG[C-g]TTTCTACTT[T-a]ATG	21	1	
hsa|miR-142-3p|nat|as|	TCCATAAAGTAGGAAACACTACA	23	2	
hsa|miR-142-3p|2mut|as|	TC[C-g]ATAAAGT[A-t]GGAAACACTACA	23	1	
hsa|miR-144|nat|as|	AGTACATCATCTATACTGTA	20	2	
hsa|miR-144|2mut|as|	AGTA[C-g]ATC[A-t]TCTATACTGTA	20	1	
hsa|miR-145|nat|as|	AGGGATTCCTGGGAAAACTGGAC	23	2	
hsa|miR-145|2mut|as|	AGGGATTCCT[G-c]GGAAAA[C-g]TGGAC	23	1	
hsa|miR-146a|nat|as|	AACCCATGGAATTCAGTTCTCA	22	2	
hsa|miR-146a|2mut|as|	AACC[C-g]ATGGAATTC[A-t]GTTCTCA	22	1	
hsa|miR-149|nat|as|	GGGAGTGAAGACACGGAGCCAGA	23	2	
hsa|miR-149|2mut|as|	GGGAGT[G-c]AAGA[C-g]ACGGAGCCAGA	23	1	
hsa|miR-150|nat|as|	CACTGGTACAAGGGTTGGGAGA	22	2	
hsa|miR-150|2mut|as|	CA[C-g]TGGTACAAGGGT[T-a]GGGAGA	22	1	
hsa|miR-151-5p|nat|as|	ACTAGACTGTGAGCTCCTCGA	21	1	

hsa|miR-151-5p|2mut|as|	ACTAGACT[G-c]TGAGCTC[C-g]TCGA	21	1	
hsa|miR-152|nat|as|	CCAAGTTCTGTCATGCACTGA	21	2	
hsa|miR-152|2mut|as|	CC[A-t]AGTT[C-g]TGTCATGCACTGA	21	1	
hsa|miR-153|nat|as|	GATCACTTTTGTGACTATGCAA	22	2	
hsa|miR-153|2mut|as|	GATCA[C-g]TTTT[G-c]TGACTATGCAA	22	1	
hsa|miR-154|nat|as|	CGAAGGCAACACGGATAACCTA	22	2	
hsa|miR-154|2mut|as|	CGAAGG[C-g]AACACGGATAA[C-g]CTA	22	1	
hsa|miR-10b|nat|as|	CACAAATTCGGTTCTACAGGGTA	23	2	
hsa|miR-10b|2mut|as|	CACAAATT[C-g]GGTTCTA[C-g]AGGGTA	23	1	
hsa|miR-129-5p|nat|as|	GCAAGCCCAGACCGCAAAAAG	21	2	
hsa|miR-129-5p|2mut|as|	GC[A-t]AGCCCAGA[C-g]CGCAAAAAG	21	1	
hsa|miR-181a|nat|as|	ACTCACCGACAGCGTTGAATGTT	23	2	
hsa|miR-181a|2mut|as|	ACTCA[C-g]CGACAGCGT[T-a]GAATGTT	23	1	
hsa|miR-183|nat|as|	AGTGAATTCTACCAGTGCCATA	22	2	
hsa|miR-183|2mut|as|	AGTGAATTCTAC[C-g]AGTGCC[A-t]TA	22	1	
hsa|miR-184|nat|as|	ACCCTTATCAGTTCTCCGTCCA	22	2	
hsa|miR-184|2mut|as|	ACC[C-g]TTATCAGTTCTCCG[T-a]CCA	22	1	
hsa|miR-185|nat|as|	TCAGGAACTGCCTTTCTCTCCA	22	2	
hsa|miR-185|2mut|as|	TCAGG[A-t]ACTGCCTTTCT[C-g]TCCA	22	1	
hsa|miR-186|nat|as|	AGCCCAAAAGGAGAATTCTTTG	22	2	
hsa|miR-186|2mut|as|	AGCC[C-g]AAAAGGAG[A-t]ATTCTTTG	22	1	
hsa|miR-187|nat|as|	CCGGCTGCAACACAAGACACGA	22	2	
hsa|miR-187|2mut|as|	CCGGCTGCAA[C-g]ACA[A-t]GACACGA	22	1	
hsa|miR-188-5p|nat|as|	CCCTCCACCATGCAAGGGATG	21	2	
hsa|miR-188-5p|2mut|as|	CCCTC[C-g]ACC[A-t]TGCAAGGGATG	21	1	
hsa|miR-188-3p|nat|as|	TGCAAACCCTGCATGTGGGAG	21	1	
hsa|miR-188-3p|2mut|as|	TGCAAA[C-g]CCTGCATGT[G-c]GGAG	21	1	
hsa|miR-190|nat|as|	ACCTAATATATCAAACATATCA	22	2	
hsa|miR-190|2mut|as|	ACCTAATATATCAAA[C-g]ATA[T-a]CA	22	1	
hsa|miR-191|nat|as|	CAGCTGCTTTTGGGATTCCGTTG	23	2	
hsa|miR-191|2mut|as|	CAGCTGCTTT[T-a]GGGATT[C-g]CGTTG	23	1	
hsa|miR-192|nat|as|	GGCTGTCAATTCATAGGTCAG	21	2	
hsa|miR-192|2mut|as|	GG[C-g]TGTCAATTCATAGG[T-a]CAG	21	1	
hsa|miR-193a-3p|nat|as|	ACTGGGACTTTGTAGGCCAGTT	22	2	
hsa|miR-193a-3p|2mut|as|	ACT[G-c]GGACTTTGTAGGC[C-g]AGTT	22	1	
hsa|miR-194|nat|as|	TCCACATGGAGTTGCTGTTACA	22	2	
hsa|miR-194|2mut|as|	TCCACATGGAGTTG[C-g]TGT[T-a]ACA	22	1	

hsa|miR-195|nat|as|	GCCAATATTTCTGTGCTGCTA	21	2	
hsa|miR-195|2mut|as|	GCCA[A-t]TATTT[C-g]TGTGCTGCTA	21	1	
hsa|miR-196a|nat|as|	CCCAACAACATGAAACTACCTA	22	2	
hsa|miR-196a|2mut|as|	CCCAACAACATG[A-t]AACTAC[C-g]TA	22	1	
hsa|miR-197|nat|as|	GCTGGGTGGAGAAGGTGGTGAA	22	2	
hsa|miR-197|2mut|as|	GCTGGGTGGAGA[A-t]GGTGGT[G-c]AA	22	1	
hsa|miR-198|nat|as|	GAACCTATCTCCCCTCTGGACC	22	2	
hsa|miR-198|2mut|as|	GA[A-t]CCTATCTCC[C-g]CTCTGGACC	22	1	
hsa|miR-199a-5p|nat|as|	GAACAGGTAGTCTGAACACTGGG	23	2	
hsa|miR-199a-5p|2mut|as|	GAACAGGT[A-t]GTCTGAA[C-g]ACTGGG	23	1	
hsa|miR-199a-3p|nat|as|	TAACCAATGTGCAGACTACTGT	22	2	
hsa|miR-199a-3p|2mut|as|	TAA[C-g]CAATGTGCAGACTA[C-g]TGT	22	1	
hsa|miR-200b|nat|as|	TCATCATTACCAGGCAGTATTA	22	2	
hsa|miR-200b|2mut|as|	TCATC[A-t]TTAC[C-g]AGGCAGTATTA	22	1	
hsa|miR-203|nat|as|	CTAGTGGTCCTAAACATTTCAC	22	2	
hsa|miR-203|2mut|as|	CTAG[T-a]GGTCCTAAACATTT[C-g]AC	22	1	
hsa|miR-204|nat|as|	AGGCATAGGATGACAAAGGGAA	22	2	
hsa|miR-204|2mut|as|	AGG[C-g]ATAGGATGACAAA[G-c]GGAA	22	1	
hsa|miR-205|nat|as|	CAGACTCCGGTGGAATGAAGGA	22	2	
hsa|miR-205|2mut|as|	CAGACTC[C-g]GGTGGAAT[G-c]AAGGA	22	1	
hsa|miR-206|nat|as|	CCACACACTTCCTTACATTCCA	22	2	
hsa|miR-206|2mut|as|	CCACACACTTC[C-g]TTAC[A-t]TTCCA	22	1	
hsa|miR-208a|nat|as|	ACAAGCTTTTTGCTCGTCTTAT	22	2	
hsa|miR-208a|2mut|as|	ACAAGCTTTTTG[C-g]TCGT[C-g]TTAT	22	1	
hsa|miR-148a|nat|as|	ACAAAGTTCTGTAGTGCACTGA	22	2	
hsa|miR-148a|2mut|as|	ACAAAGTTC[T-a]GTAGTGCA[C-g]TGA	22	1	
hsa|miR-30c|nat|as|	GCTGAGAGTGTAGGATGTTTACA	23	2	
hsa|miR-30c|2mut|as|	GCTGA[G-c]AGTGTAGGAT[G-c]TTTACA	23	1	
hsa|miR-30d|nat|as|	CTTCCAGTCGGGGATGTTTACA	22	2	
hsa|miR-30d|2mut|as|	CTTCCAGT[C-g]GGGGATGTTT[A-t]CA	22	1	
hsa|miR-122|nat|as|	CAAACACCATTGTCACACTCCA	22	2	
hsa|miR-122|2mut|as|	CAAACA[C-g]CATTGTCAC[A-t]CTCCA	22	1	
hsa|miR-143|nat|as|	GAGCTACAGTGCTTCATCTCA	21	2	
hsa|miR-143|2mut|as|	GAGCTAC[A-t]GTGCTT[C-g]ATCTCA	21	1	
hsa|miR-30e|nat|as|	CTTCCAGTCAAGGATGTTTACA	22	2	
hsa|miR-30e|2mut|as|	CTTC[C-g]AGTCAAGGAT[G-c]TTTACA	22	1	
hsa|miR-139-5p|nat|as|	CTGGAGACACGTGCACTGTAGA	22	2	

hsa|miR-139-5p|2mut|as|	CT[G-c]GAGA[C-g]ACGTGCACTGTAGA	22	1	
hsa|miR-139-3p|nat|as|	ACTCCAACAGGGCCGCGTCTCC	22	1	
hsa|miR-139-3p|2mut|as|	AC[T-a]CCAACAGGGCCG[C-g]GTCTCC	22	1	
hsa|miR-147|nat|as|	GCAGAAGCATTTCCACACAC	20	2	
hsa|miR-147|2mut|as|	GCAGA[A-t]GCATTTCCA[C-g]ACAC	20	1	
hsa|miR-10a|nat|as|	CACAAATTCGGATCTACAGGGTA	23	2	
hsa|miR-10a|2mut|as|	CA[C-g]AAA[T-a]TCGGATCTACAGGGTA	23	1	
hsa|miR-34a|nat|as|	ACAACCAGCTAAGACACTGCCA	22	2	
hsa|miR-34a|2mut|as|	ACAAC[C-g]AGCTAAGACA[C-g]TGCCA	22	1	
hsa|miR-181b|nat|as|	ACCCACCGACAGCAATGAATGTT	23	2	
hsa|miR-181b|2mut|as|	AC[C-g]CACCG[A-t]CAGCAATGAATGTT	23	1	
hsa|miR-181c|nat|as|	ACTCACCGACAGGTTGAATGTT	22	2	
hsa|miR-181c|2mut|as|	ACTCA[C-g]CGACAGGTTGAA[T-a]GTT	22	1	
hsa|miR-182|nat|as|	AGTGTGAGTTCTACCATTGCCAAA	24	2	
hsa|miR-182|2mut|as|	AGTGTGAGTTCTA[C-g]CATTGC[C-g]AAA	24	1	
hsa|miR-199b-5p|nat|as|	GAACAGATAGTCTAAACACTGGG	23	2	
hsa|miR-199b-5p|2mut|as|	GAACAGATAG[T-a]CTAAACA[C-g]TGGG	23	1	
hsa|miR-210|nat|as|	TCAGCCGCTGTCACACGCACAG	22	2	
hsa|miR-210|2mut|as|	TCAGC[C-g]GCTGTCAC[A-t]CGCACAG	22	1	
hsa|miR-211|nat|as|	AGGCGAAGGATGACAAAGGGAA	22	2	
hsa|miR-211|2mut|as|	AGG[C-g]GAAGGATGACAAAGG[G-c]AA	22	1	
hsa|miR-212|nat|as|	GGCCGTGACTGGAGACTGTTA	21	2	
hsa|miR-212|2mut|as|	GGCCGTGA[C-g]TGGAG[A-t]CTGTTA	21	1	
hsa|miR-214|nat|as|	ACTGCCTGTCTGTGCCTGCTGT	22	2	
hsa|miR-214|2mut|as|	ACTGCCTG[T-a]CTGTG[C-g]CTGCTGT	22	1	
hsa|miR-215|nat|as|	GTCTGTCAATTCATAGGTCAT	21	2	
hsa|miR-215|2mut|as|	GTCT[G-c]TCAATTCATAGGT[C-g]AT	21	1	
hsa|miR-216a|nat|as|	TCACAGTTGCCAGCTGAGATTA	22	2	
hsa|miR-216a|2mut|as|	TCACAGTTG[C-g]CAGCTGAG[A-t]TTA	22	1	
hsa|miR-217|nat|as|	TCCAATCAGTTCCTGATGCAGTA	23	2	
hsa|miR-217|2mut|as|	TC[C-g]AATCAGTTCCTGATGC[A-t]GTA	23	1	
hsa|miR-218|nat|as|	ACATGGTTAGATCAAGCACAA	21	2	
hsa|miR-218|2mut|as|	ACATGGTT[A-t]GATCAAG[C-g]ACAA	21	1	
hsa|miR-219-5p|nat|as|	AGAATTGCGTTTGGACAATCA	21	2	
hsa|miR-219-5p|2mut|as|	AGAA[T-a]TGCGTTTGGA[C-g]AATCA	21	1	
hsa|miR-219-1-3p|nat|as|	CGGGACGTCCAGACTCAACTCT	22	1	
hsa|miR-219-1-3p|2mut|as|	CGGGACGTCC[A-t]GACTCAA[C-g]TCT	22	1	

hsa|miR-220a|nat|as|	AAAGTGTCAGATACGGTGTGG	21	2	
hsa|miR-220a|2mut|as|	AAAGTGTCA[G-c]ATA[C-g]GGTGTGG	21	1	
hsa|miR-221|nat|as|	GAAACCCAGCAGACAATGTAGCT	23	2	
hsa|miR-221|2mut|as|	GAAAC[C-g]CAGCAGACAAT[G-c]TAGCT	23	1	
hsa|miR-222|nat|as|	ACCCAGTAGCCAGATGTAGCT	21	2	
hsa|miR-222|2mut|as|	ACCCAGTAG[C-g]CAGATG[T-a]AGCT	21	1	
hsa|miR-223|nat|as|	TGGGGTATTTGACAAACTGACA	22	2	
hsa|miR-223|2mut|as|	TGGGGTATTTGA[C-g]AAACTG[A-t]CA	22	1	
hsa|miR-224|nat|as|	AACGGAACCACTAGTGACTTG	21	2	
hsa|miR-224|2mut|as|	AACGGA[A-t]CCACTAGTGA[C-g]TTG	21	1	
ppa|miR-133a|nat|as|	ACAGCTGGTTGAAGGGGACCAA	22	2	
ppa|miR-133a|2mut|as|	ACAG[C-g]TGGTTGAAGGGGAC[C-g]AA	22	1	
hsa|miR-296-5p|nat|as|	ACAGGATTGAGGGGGGGCCCT	21	2	
hsa|miR-296-5p|2mut|as|	ACAGGATT[G-c]AGGGGGGGC[C-g]CT	21	1	
hsa|miR-296-3p|nat|as|	GGAGAGCCTCCACCCAACCCTC	22	1	
hsa|miR-296-3p|2mut|as|	GGAGAGCCTCC[A-t]CCCAA[C-g]CCTC	22	1	
mml|miR-299-3p|nat|as|	AAGCGGTTTACCGTCCCACATA	22	1	
mml|miR-299-3p|2mut|as|	AAGCGGTTTACCGTC[C-g]CAC[A-t]TA	22	1	
hsa|miR-301a|nat|as|	GCTTTGACAATACTATTGCACTG	23	2	
hsa|miR-301a|2mut|as|	GCTTT[G-c]ACAATA[C-g]TATTGCACTG	23	1	
hsa|miR-302a|nat|as|	TCACCAAAACATGGAAGCACTTA	23	2	
hsa|miR-302a|2mut|as|	TCA[C-g]CAAAA[C-g]ATGGAAGCACTTA	23	1	
hsa|miR-34c-5p|nat|as|	GCAATCAGCTAACTACACTGCCT	23	2	
hsa|miR-34c-5p|2mut|as|	GCAATCAGCTAA[C-g]TACACTG[C-g]CT	23	1	
hsa|miR-106b|nat|as|	ATCTGCACTGTCAGCACTTTA	21	2	
hsa|miR-106b|2mut|as|	ATCTGCACTGT[C-g]AGC[A-t]CTTTA	21	1	
hsa|miR-130b|nat|as|	ATGCCCTTTCATCATTGCACTG	22	2	
hsa|miR-130b|2mut|as|	ATG[C-g]CCTTT[C-g]ATCATTGCACTG	22	1	
hsa|miR-140-3p|nat|as|	CCGTGGTTCTACCCTGTGGTA	21	1	
hsa|miR-140-3p|2mut|as|	CCGT[G-c]GTTCTACC[C-g]TGTGGTA	21	1	
hsa|miR-127-5p|nat|as|	ATCAGAGCCCTCTGAGCTTCAG	22	1	
hsa|miR-127-5p|2mut|as|	AT[C-g]AGAGCCCTCT[G-c]AGCTTCAG	22	1	
hsa|miR-129-3p|nat|as|	ATGCTTTTTGGGGTAAGGGCTT	22	1	
hsa|miR-129-3p|2mut|as|	ATG[C-g]TTTTTGGGGT[A-t]AGGGCTT	22	1	
hsa|miR-136|nat|as|	TCCATCATCAAAACAAATGGAGT	23	2	
hsa|miR-136|2mut|as|	TCCATCA[T-a]CAAAA[C-g]AAATGGAGT	23	1	
hsa|miR-193a-5p|nat|as|	TCATCTCGCCCGCAAAGACCCA	22	1	

hsa|miR-193a-5p|2mut|as|	TCATCTCGCCCGC[A-t]AAGAC[C-g]CA	22	1	
hsa|miR-320a|nat|as|	TCGCCCTCTCAACCCAGCTTTT	22	2	
hsa|miR-320a|2mut|as|	TCGCCCT[C-g]TCAACC[C-g]AGCTTTT	22	1	
hsa|miR-200a|nat|as|	ACATCGTTACCAGACAGTGTTA	22	2	
hsa|miR-200a|2mut|as|	ACATC[G-c]TTA[C-g]CAGACAGTGTTA	22	1	
hsa|miR-29c|nat|as|	TAACCGATTTCAAATGGTGCTA	22	2	
hsa|miR-29c|2mut|as|	TAA[C-g]CGATTTCAAATGGT[G-c]CTA	22	1	
hsa|miR-323-3p|nat|as|	AGAGGTCGACCGTGTAATGTG	21	2	
hsa|miR-323-3p|2mut|as|	AG[A-t]GGT[C-g]GACCGTGTAATGTG	21	1	
hsa|miR-323-5p|nat|as|	GCGAACGCGCCACGGACCACCT	22	1	
hsa|miR-323-5p|2mut|as|	GCGAA[C-g]GCGCCACGGA[C-g]CACCT	22	1	
hsa|miR-324-5p|nat|as|	ACACCAATGCCCTAGGGGATGCG	23	2	
hsa|miR-324-5p|2mut|as|	ACACCAA[T-a]GCC[C-g]TAGGGGATGCG	23	1	
hsa|miR-328|nat|as|	ACGGAAGGGCAGAGAGGGCCAG	22	2	
hsa|miR-328|2mut|as|	ACGGAAGGGCAGA[G-c]AGGG[C-g]CAG	22	1	
hsa|miR-330-5p|nat|as|	GCCTAAGACACAGGCCCAGAGA	22	1	
hsa|miR-330-5p|2mut|as|	GCCTAAGAC[A-t]CAGGCC[C-g]AGAGA	22	1	
hsa|miR-331-3p|nat|as|	TTCTAGGATAGGCCCAGGGGC	21	2	
hsa|miR-331-3p|2mut|as|	TTCTAGGATAGG[C-g]CCAGG[G-c]GC	21	1	
hsa|miR-331-5p|nat|as|	GGATCCCTGGGACCATACCTAG	22	1	
hsa|miR-331-5p|2mut|as|	GGATCCC[T-a]GGGA[C-g]CATACCTAG	22	1	
hsa|miR-335|nat|as|	ACATTTTTCGTTATTGCTCTTGA	23	2	
hsa|miR-335|2mut|as|	ACATTT[T-a]TCGTTATTGCT[C-g]TTGA	23	1	
hsa|miR-148b|nat|as|	ACAAAGTTCTGTGATGCACTGA	22	2	
hsa|miR-148b|2mut|as|	ACAA[A-t]GTTCTGTGATGCA[C-g]TGA	22	1	
hsa|miR-338-5p|nat|as|	CACTCAGCACCAGGATATTGTT	22	1	
hsa|miR-338-5p|2mut|as|	CACTCAG[C-g]ACCAG[G-c]ATATTGTT	22	1	
hsa|miR-338-3p|nat|as|	CAACAAAATCACTGATGCTGGA	22	2	
hsa|miR-338-3p|2mut|as|	CAA[C-g]AAAA[T-a]CACTGATGCTGGA	22	1	
hsa|miR-339-5p|nat|as|	CGTGAGCTCCTGGAGGACAGGGA	23	2	
hsa|miR-339-5p|2mut|as|	CGTGAG[C-g]TCCT[G-c]GAGGACAGGGA	23	1	
hsa|miR-340|nat|as|	AATCAGTCTCATTGCTTTATAA	22	1	
hsa|miR-340|2mut|as|	AATCAGT[C-g]TCATT[G-c]CTTTATAA	22	1	
hsa|miR-342-3p|nat|as|	ACGGGTGCGATTTCTGTGTGAGA	23	2	
hsa|miR-342-3p|2mut|as|	ACGGGT[G-c]CGATTT[C-g]TGTGTGAGA	23	1	
hsa|miR-135b|nat|as|	TCACATAGGAATGAAAAGCCATA	23	2	
hsa|miR-135b|2mut|as|	TCACATA[G-c]GAATGAAAAG[C-g]CATA	23	1	

hsa|miR-200c|nat|as|	TCCATCATTACCCGGCAGTATTA	23	2	
hsa|miR-200c|2mut|as|	TC[C-g]ATCATTAC[C-g]CGGCAGTATTA	23	1	
hsa|miR-155|nat|as|	ACCCCTATCACGATTAGCATTAA	23	2	
hsa|miR-155|2mut|as|	ACCC[C-g]TATCACGATTAG[C-g]ATTAA	23	1	
mml|miR-211|nat|as|	AGGCAAAGGATGACAAAGGGAA	22	2	
mml|miR-211|2mut|as|	AGG[C-g]AAAG[G-c]ATGACAAAGGGAA	22	1	
hsa|miR-219-2-3p|nat|as|	ACAGATGTCCAGCCACAATTCT	22	1	
hsa|miR-219-2-3p|2mut|as|	ACAGA[T-a]GTCCAG[C-g]CACAATTCT	22	1	
hsa|miR-34b|nat|as|	ATGGCAGTGGAGTTAGTGATTG	22	1	
hsa|miR-34b|2mut|as|	ATGG[C-g]AGTGGAGTT[A-t]GTGATTG	22	1	
hsa|miR-34c-3p|nat|as|	CCTGGCCGTGTGGTTAGTGATT	22	1	
hsa|miR-34c-3p|2mut|as|	CCTGG[C-g]CGTGTGGTTAG[T-a]GATT	22	1	
hsa|miR-299-5p|nat|as|	ATGTATGTGGGACGGTAAACCA	22	1	
hsa|miR-299-5p|2mut|as|	ATGTATGT[G-c]GGA[C-g]GGTAAACCA	22	1	
hsa|miR-299-3p|nat|as|	AAGCGGTTTACCATCCCACATA	22	2	
hsa|miR-299-3p|2mut|as|	AAGC[G-c]GTTTA[C-g]CATCCCACATA	22	1	
hsa|miR-361-5p|nat|as|	GTACCCCTGGAGATTCTGATAA	22	2	
hsa|miR-361-5p|2mut|as|	GTA[C-g]CCCTGGAGATTC[T-a]GATAA	22	1	
hsa|miR-361-3p|nat|as|	AAATCAGAATCACACCTGGGGGA	23	1	
hsa|miR-361-3p|2mut|as|	AAAT[C-g]AGAATCAC[A-t]CCTGGGGGA	23	1	
hsa|miR-362-5p|nat|as|	ACTCACACCTAGGTTCCAAGGATT	24	2	
hsa|miR-362-5p|2mut|as|	ACTCACA[C-g]CTA[G-c]GTTCCAAGGATT	24	1	
hsa|miR-362-3p|nat|as|	TGAATCCTTGAATAGGTGTGTT	22	1	
hsa|miR-362-3p|2mut|as|	TGAAT[C-g]CTTGAATAGGTG[T-a]GTT	22	1	
hsa|miR-363|nat|as|	TACAGATGGATACCGTGCAATT	22	2	
hsa|miR-363|2mut|as|	TACAGATGG[A-t]TAC[C-g]GTGCAATT	22	1	
hsa|miR-365|nat|as|	ATAAGGATTTTTAGGGGCATTA	22	2	
hsa|miR-365|2mut|as|	ATAAGGATTTTTA[G-c]GGG[C-g]ATTA	22	1	
hsa|miR-302b|nat|as|	CTACTAAAACATGGAAGCACTTA	23	2	
hsa|miR-302b|2mut|as|	CTA[C-g]TAAAAC[A-t]TGGAAGCACTTA	23	1	
hsa|miR-302c|nat|as|	CCACTGAAACATGGAAGCACTTA	23	2	
hsa|miR-302c|2mut|as|	CCA[C-g]TGAAACATGGAAGCAC[T-a]TA	23	1	
hsa|miR-302d|nat|as|	ACACTCAAACATGGAAGCACTTA	23	2	
hsa|miR-302d|2mut|as|	ACACT[C-g]AAACATGGA[A-t]GCACTTA	23	1	
hsa|miR-367|nat|as|	TCACCATTGCTAAAGTGCAATT	22	2	
hsa|miR-367|2mut|as|	TCAC[C-g]ATTGCT[A-t]AAGTGCAATT	22	1	
hsa|miR-376c|nat|as|	ACGTGGAATTTCCTCTATGTT	21	2	

hsa|miR-376c|2mut|as|	ACGTGGAATTTCCT[C-g]TAT[G-c]TT	21	1	
hsa|miR-369-5p|nat|as|	GCGAATATAACACGGTCGATCT	22	2	
hsa|miR-369-5p|2mut|as|	GCGAA[T-a]ATAA[C-g]ACGGTCGATCT	22	1	
hsa|miR-369-3p|nat|as|	AAAGATCAACCATGTATTATT	21	2	
hsa|miR-369-3p|2mut|as|	AA[A-t]GATCAA[C-g]CATGTATTATT	21	1	
hsa|miR-370|nat|as|	ACCAGGTTCCACCCCAGCAGGC	22	2	
hsa|miR-370|2mut|as|	AC[C-g]AGGTT[C-g]CACCCCAGCAGGC	22	1	
hsa|miR-371-5p|nat|as|	AGTGCCCCCACAGTTTGAGT	20	1	
hsa|miR-371-5p|2mut|as|	AGTGC[C-g]CCCACAGTT[T-a]GAGT	20	1	
hsa|miR-371-3p|nat|as|	ACACTCAAAAGATGGCGGCACTT	23	2	
hsa|miR-371-3p|2mut|as|	ACACT[C-g]AAAAGATGGC[G-c]GCACTT	23	1	
hsa|miR-372|nat|as|	ACGCTCAAATGTCGCAGCACTTT	23	2	
hsa|miR-372|2mut|as|	ACGC[T-a]CAAATGTCGCAG[C-g]ACTTT	23	1	
hsa|miR-373|nat|as|	ACACCCCAAAATCGAAGCACTTC	23	2	
hsa|miR-373|2mut|as|	ACACCC[C-g]AAAA[T-a]CGAAGCACTTC	23	1	
hsa|miR-374a|nat|as|	CACTTATCAGGTTGTATTATAA	22	2	
hsa|miR-374a|2mut|as|	CA[C-g]TTATCAGGTT[G-c]TATTATAA	22	1	
hsa|miR-375|nat|as|	TCACGCGAGCCGAACGAACAAA	22	2	
hsa|miR-375|2mut|as|	TCA[C-g]GCGAGCC[G-c]AACGAACAAA	22	1	
hsa|miR-376a|nat|as|	ACGTGGATTTTCCTCTATGAT	21	2	
hsa|miR-376a|2mut|as|	ACGTGGATTTT[C-g]CTCTAT[G-c]AT	21	1	
hsa|miR-377|nat|as|	ACAAAAGTTGCCTTTGTGTGAT	22	2	
hsa|miR-377|2mut|as|	ACAAAAGTTGC[C-g]TTTGT[G-c]TGAT	22	1	
hsa|miR-378|nat|as|	CCTTCTGACTCCAAGTCCAGT	21	2	
hsa|miR-378|2mut|as|	CCTTCTGACT[C-g]CAAGTCC[A-t]GT	21	1	
hsa|miR-379|nat|as|	CCTACGTTCCATAGTCTACCA	21	2	
hsa|miR-379|2mut|as|	CCTACG[T-a]TCCATAGT[C-g]TACCA	21	1	
hsa|miR-380|nat|as|	AAGATGTGGACCATATTACATA	22	2	
hsa|miR-380|2mut|as|	AAGATGTGGACCA[T-a]ATTA[C-g]ATA	22	1	
hsa|miR-381|nat|as|	ACAGAGAGCTTGCCCTTGTATA	22	2	
hsa|miR-381|2mut|as|	ACAGAGAG[C-g]TTGCCCTTGT[A-t]TA	22	1	
hsa|miR-382|nat|as|	CGAATCCACCACGAACAACTTC	22	2	
hsa|miR-382|2mut|as|	CGA[A-t]TCCA[C-g]CACGAACAACTTC	22	1	
hsa|miR-383|nat|as|	AGCCACAATCACCTTCTGATCT	22	2	
hsa|miR-383|2mut|as|	AG[C-g]CACAATCACCTTCT[G-c]ATCT	22	1	
hsa|miR-330-3p|nat|as|	TCTCTGCAGGCCGTGTGCTTTGC	23	2	
hsa|miR-330-3p|2mut|as|	TCTCTGCAGGC[C-g]GTGTG[C-g]TTTGC	23	1	

hsa|miR-342-5p|nat|as|	TCAATCACAGATAGCACCCCT	21	1	
hsa|miR-342-5p|2mut|as|	TCAATCA[C-g]AGA[T-a]AGCACCCCT	21	1	
hsa|miR-337-5p|nat|as|	AACTCCTGTATGAAGCCGTTC	21	1	
hsa|miR-337-5p|2mut|as|	AACT[C-g]CTGTATG[A-t]AGCCGTTC	21	1	
hsa|miR-337-3p|nat|as|	GAAGAAAGGCATCATATAGGAG	22	2	
hsa|miR-337-3p|2mut|as|	GAAGAAAGG[C-g]ATCA[T-a]ATAGGAG	22	1	
hsa|miR-326|nat|as|	CTGGAGGAAGGGCCCAGAGG	20	2	
hsa|miR-326|2mut|as|	CTGGAGGAAGGG[C-g]CCAG[A-t]GG	20	1	
hsa|miR-151-3p|nat|as|	CCTCAAGGAGCTTCAGTCTAG	21	2	
hsa|miR-151-3p|2mut|as|	CC[T-a]CAAGGAG[C-g]TTCAGTCTAG	21	1	
hsa|miR-324-3p|nat|as|	CCAGCAGCACCTGGGGCAGT	20	2	
hsa|miR-324-3p|2mut|as|	CCAG[C-g]AGCA[C-g]CTGGGGCAGT	20	1	
hsa|miR-339-3p|nat|as|	CGGCTCTGTCGTCGAGGCGCTCA	23	1	
hsa|miR-339-3p|2mut|as|	CGGCT[C-g]TGTCG[T-a]CGAGGCGCTCA	23	1	
hsa|miR-133b|nat|as|	TAGCTGGTTGAAGGGGACCAAA	22	2	
hsa|miR-133b|2mut|as|	TAGCTGG[T-a]TGAAGGGGA[C-g]CAAA	22	1	
hsa|miR-325|nat|as|	ACACTTACTGGACACCTACTAGG	23	2	
hsa|miR-325|2mut|as|	ACAC[T-a]TACTGGACAC[C-g]TACTAGG	23	1	
hsa|miR-345|nat|as|	GAGCCCTGGACTAGGAGTCAGC	22	2	
hsa|miR-345|2mut|as|	GAGC[C-g]CTGGACTAGGAGTC[A-t]GC	22	1	
hsa|miR-346|nat|as|	AGAGGCAGGCATGCGGGCAGACA	23	2	
hsa|miR-346|2mut|as|	AGAGGCAGG[C-g]ATGCGGGCA[G-c]ACA	23	1	
ptr|miR-143|nat|as|	TGAGCTACAGTGCTTCATCTCA	22	2	
ptr|miR-143|2mut|as|	TGAGCTAC[A-t]GTG[C-g]TTCATCTCA	22	1	
ptr|miR-214|nat|as|	CTGCCTGTCTGTGCCTGCTGT	21	2	
ptr|miR-214|2mut|as|	CTGCCT[G-c]TCTGTG[C-g]CTGCTGT	21	1	
ptr|miR-223|nat|as|	GGGGTATTTGACAAACTGACA	21	2	
ptr|miR-223|2mut|as|	GGGG[T-a]ATTTGACAAA[C-g]TGACA	21	1	
hsa|miR-384|nat|as|	TATGAACAATTTCTAGGAAT	20	2	
hsa|miR-384|2mut|as|	TATGAAC[A-t]ATTT[C-g]TAGGAAT	20	1	
hsa|miR-196b|nat|as|	CCCAACAACAGGAAACTACCTA	22	2	
hsa|miR-196b|2mut|as|	CCCAA[C-g]AAC[A-t]GGAAACTACCTA	22	1	
hsa|miR-409-5p|nat|as|	ATGCAAAGTTGCTCGGGTAACCT	23	2	
hsa|miR-409-5p|2mut|as|	ATGCAAAGTTGCT[C-g]GGGTA[A-t]CCT	23	1	
hsa|miR-409-3p|nat|as|	AGGGGTTCACCGAGCAACATTC	22	2	
hsa|miR-409-3p|2mut|as|	AGGGGTTCAC[C-g]GAGCAACA[T-a]TC	22	1	
hsa|miR-410|nat|as|	ACAGGCCATCTGTGTTATATT	21	2	

hsa|miR-410|2mut|as|	ACAGG[C-g]CATCTGT[G-c]TTATATT	21	1	
hsa|miR-411|nat|as|	CGTACGCTATACGGTCTACTA	21	1	
hsa|miR-411|2mut|as|	CGTA[C-g]GCTATACGGTCT[A-t]CTA	21	1	
age|miR-222|nat|as|	GAGACCCAGTAGCCAGATGTAGCT	24	2	
age|miR-222|2mut|as|	GAGACCCAG[T-a]AGC[C-g]AGATGTAGCT	24	1	
ptr|miR-18a|nat|as|	TATCTGCACTAGATGCACCTTA	22	2	
ptr|miR-18a|2mut|as|	TATCTGCA[C-g]TAGATGCAC[C-g]TTA	22	1	
ptr|miR-17-5p|nat|as|	ACTACCTGCACTGTAAGCACTTTG	24	2	
ptr|miR-17-5p|2mut|as|	ACTACC[T-a]GCACTGTAAGCA[C-g]TTTG	24	1	
ptr|miR-17-3p|nat|as|	ACAAGTGCCTTCACTGCAGT	20	2	
ptr|miR-17-3p|2mut|as|	AC[A-t]AGTGC[C-g]TTCACTGCAGT	20	1	
lca|miR-16|nat|as|	CACCAATATTTACGTGCTGCTA	22	2	
lca|miR-16|2mut|as|	CAC[C-g]AATATTTAC[G-c]TGCTGCTA	22	1	
ggo|miR-153|nat|as|	TCACTTTTGTGACTATGCAA	20	2	
ggo|miR-153|2mut|as|	TCACTTTTGTGA[C-g]TATG[C-g]AA	20	1	
ggo|miR-196|nat|as|	CCAACAACATGAAACTACCTA	21	2	
ggo|miR-196|2mut|as|	CCA[A-t]CAACATGAAACTAC[C-g]TA	21	1	
ptr|miR-32|nat|as|	GCAACTTAGTAATGTGCAATA	21	2	
ptr|miR-32|2mut|as|	GCAA[C-g]TTAGTAA[T-a]GTGCAATA	21	1	
ptr|miR-124a|nat|as|	TGGCATTCACCGCGTGCCTTAA	22	2	
ptr|miR-124a|2mut|as|	TGGCATTCA[C-g]CGC[G-c]TGCCTTAA	22	1	
ppa|miR-216|nat|as|	CACAGTTGCCAGCTGAGATTA	21	2	
ppa|miR-216|2mut|as|	CACAGTTGC[C-g]AGCTGAGA[T-a]TA	21	1	
ppa|miR-217|nat|as|	ATCCAATCAGTTCCTGATGCAGTA	24	2	
ppa|miR-217|2mut|as|	ATC[C-g]AATCAGTT[C-g]CTGATGCAGTA	24	1	
ptr|miR-30a-3p|nat|as|	GCTGCAAACATCCGACTGAAAG	22	2	
ptr|miR-30a-3p|2mut|as|	GCTGC[A-t]AACAT[C-g]CGACTGAAAG	22	1	
ppa|miR-10b|nat|as|	ACAAATTCGGTTCTACAGGGTA	22	2	
ppa|miR-10b|2mut|as|	ACAAATTC[G-c]GTTCTA[C-g]AGGGTA	22	1	
ptr|miR-140|nat|as|	CTACCATAGGGTAAAACCACT	21	2	
ptr|miR-140|2mut|as|	CTACC[A-t]TAGGGTAAAAC[C-g]ACT	21	1	
ptr|miR-183|nat|as|	CAGTGAATTCTACCAGTGCCATA	23	2	
ptr|miR-183|2mut|as|	CAG[T-a]GAATTCTACCAGTGC[C-g]ATA	23	1	
ppy|miR-182|nat|as|	TGTGAGTTCTACCATTGCCAAA	22	2	
ppy|miR-182|2mut|as|	TGTGA[G-c]TTCTACCATTG[C-g]CAAA	22	1	
hsa|miR-422a|nat|as|	GCCTTCTGACCCTAAGTCCAGT	22	2	
hsa|miR-422a|2mut|as|	GC[C-g]TTCTG[A-t]CCCTAAGTCCAGT	22	1	

hsa|miR-423-5p|nat|as|	AAAGTCTCGCTCTCTGCCCCTCA	23	1	
hsa|miR-423-5p|2mut|as|	AAAGTCT[C-g]GCTCTCT[G-c]CCCCTCA	23	1	
hsa|miR-423-3p|nat|as|	ACTGAGGGGCCTCAGACCGAGCT	23	2	
hsa|miR-423-3p|2mut|as|	ACT[G-c]AGGGGCCT[C-g]AGACCGAGCT	23	1	
hsa|miR-424|nat|as|	TTCAAAACATGAATTGCTGCTG	22	2	
hsa|miR-424|2mut|as|	TTCAAAACATGA[A-t]TTG[C-g]TGCTG	22	1	
hsa|miR-425|nat|as|	TCAACGGGAGTGATCGTGTCATT	23	1	
hsa|miR-425|2mut|as|	TCAACGGGAG[T-a]GAT[C-g]GTGTCATT	23	1	
hsa|miR-20b|nat|as|	CTACCTGCACTATGAGCACTTTG	23	2	
hsa|miR-20b|2mut|as|	CTACCTG[C-g]ACT[A-t]TGAGCACTTTG	23	1	
hsa|miR-18b|nat|as|	CTAACTGCACTAGATGCACCTTA	23	2	
hsa|miR-18b|2mut|as|	CTAACTGCACTAG[A-t]TGCA[C-g]CTTA	23	1	
hsa|miR-432|nat|as|	CCACCCAATGACCTACTCCAAGA	23	2	
hsa|miR-432|2mut|as|	CCA[C-g]CCA[A-t]TGACCTACTCCAAGA	23	1	
hsa|miR-431|nat|as|	TGCATGACGGCCTGCAAGACA	21	2	
hsa|miR-431|2mut|as|	TGCATG[A-t]CGGC[C-g]TGCAAGACA	21	1	
hsa|miR-433|nat|as|	ACACCGAGGAGCCCATCATGAT	22	2	
hsa|miR-433|2mut|as|	ACAC[C-g]GAGGAGCCCATCAT[G-c]AT	22	1	
hsa|miR-448|nat|as|	ATGGGACATCCTACATATGCAA	22	2	
hsa|miR-448|2mut|as|	ATGGGACATC[C-g]TAC[A-t]TATGCAA	22	1	
hsa|miR-429|nat|as|	ACGGTTTTACCAGACAGTATTA	22	2	
hsa|miR-429|2mut|as|	AC[G-c]GTTTTAC[C-g]AGACAGTATTA	22	1	
hsa|miR-449a|nat|as|	ACCAGCTAACAATACACTGCCA	22	2	
hsa|miR-449a|2mut|as|	ACCAG[C-g]TAACAAT[A-t]CACTGCCA	22	1	
hsa|miR-450a|nat|as|	ATATTAGGAACACATCGCAAAA	22	2	
hsa|miR-450a|2mut|as|	ATATTAGGAACA[C-g]ATCGCA[A-t]AA	22	1	
hsa|miR-329|nat|as|	AAAGAGGTTAACCAGGTGTGTT	22	2	
hsa|miR-329|2mut|as|	AAAGAGG[T-a]TAA[C-g]CAGGTGTGTT	22	1	
hsa|miR-453|nat|as|	TGCGAACTCACCACGGACAACCT	23	2	
hsa|miR-453|2mut|as|	TG[C-g]GAACTCACCACG[G-c]ACAACCT	23	1	
hsa|miR-451|nat|as|	AACTCAGTAATGGTAACGGTTT	22	2	
hsa|miR-451|2mut|as|	AACTCA[G-c]TAATGGTAA[C-g]GGTTT	22	1	
hsa|miR-452|nat|as|	TCAGTTTCCTCTGCAAACAGTT	22	2	
hsa|miR-452|2mut|as|	TCAGTTT[C-g]CTCTG[C-g]AAACAGTT	22	1	
hsa|miR-92b|nat|as|	GGAGGCCGGGACGAGTGCAATA	22	1	
hsa|miR-92b|2mut|as|	GGAGGC[C-g]GGGACGAGT[G-c]CAATA	22	1	
ptr|miR-101|nat|as|	CTTCAGTTATCACAGTACTGTA	22	2	

ptr|miR-101|2mut|as|	CTT[C-g]AGTTA[T-a]CACAGTACTGTA	22	1	
ppa|miR-128|nat|as|	AAAAGAGACCGGTTCACTGTGA	22	2	
ppa|miR-128|2mut|as|	AAAAGAGA[C-g]CGGTTCAC[T-a]GTGA	22	1	
ptr|miR-105|nat|as|	ACAGGAGTCTGAGCATTTGA	20	2	
ptr|miR-105|2mut|as|	ACAGGAGT[C-g]TGAGC[A-t]TTTGA	20	1	
ptr|miR-106a|nat|as|	GCTACCTGCACTGTAAGCACTTTT	24	2	
ptr|miR-106a|2mut|as|	GCTACCTGCAC[T-a]GTAAG[C-g]ACTTTT	24	1	
ptr|miR-145|nat|as|	AAGGGATTCCTGGGAAAACTGGAC	24	2	
ptr|miR-145|2mut|as|	AAGGGATTCC[T-a]GGGAAAA[C-g]TGGAC	24	1	
ppa|miR-181b|nat|as|	AACCCACCGACAGCAATGAATGTT	24	2	
ppa|miR-181b|2mut|as|	AACCCA[C-g]CGACAGCAAT[G-c]AATGTT	24	1	
ptr|miR-20a|nat|as|	TACCTGCACTATAAGCACTTTA	22	2	
ptr|miR-20a|2mut|as|	TACC[T-a]GCACTATAAGCA[C-g]TTTA	22	1	
ptr|miR-224|nat|as|	TAAACGGAACCACTAGTGACTTG	23	2	
ptr|miR-224|2mut|as|	TAAACGGAA[C-g]CACTAGTGA[C-g]TTG	23	1	
ptr|miR-29b|nat|as|	ACTGATTTCAAATGGTGCTA	20	2	
ptr|miR-29b|2mut|as|	ACTGATTT[C-g]AAATGGTG[C-g]TA	20	1	
ppa|miR-7|nat|as|	AACAAAATCACTAGTCTTCCA	21	2	
ppa|miR-7|2mut|as|	AACAAAATCA[C-g]TAGTC[T-a]TCCA	21	1	
ppa|miR-139|nat|as|	AGACACGTGCACTGTAGA	18	2	
ppa|miR-139|2mut|as|	AGA[C-g]ACGTGCACTGT[A-t]GA	18	1	
ptr|miR-186|nat|as|	AAGCCCAAAAGGAGAATTCTTTG	23	2	
ptr|miR-186|2mut|as|	AAGCC[C-g]AAAAGGAGA[A-t]TTCTTTG	23	1	
hsa|miR-412|nat|as|	ACGGCTAGTGGACCAGGTGAAGT	23	2	
hsa|miR-412|2mut|as|	ACGG[C-g]TAGTGGACCAGGT[G-c]AAGT	23	1	
hsa|miR-376b|nat|as|	AACATGGATTTTCCTCTATGAT	22	2	
hsa|miR-376b|2mut|as|	AA[C-g]ATGGATTTTCCTCTAT[G-c]AT	22	1	
hsa|miR-483-5p|nat|as|	CTCCCTTCTTTCCTCCCGTCTT	22	1	
hsa|miR-483-5p|2mut|as|	CTCCCTTCTTT[C-g]CTCCC[G-c]TCTT	22	1	
hsa|miR-483-3p|nat|as|	AAGACGGGAGGAGAGGAGTGA	21	2	
hsa|miR-483-3p|2mut|as|	AAGA[C-g]GGGAGGAG[A-t]GGAGTGA	21	1	
hsa|miR-484|nat|as|	ATCGGGAGGGGACTGAGCCTGA	22	2	
hsa|miR-484|2mut|as|	AT[C-g]GGGAGGGGACTGAG[C-g]CTGA	22	1	
hsa|miR-485-5p|nat|as|	GAATTCATCACGGCCAGCCTCT	22	2	
hsa|miR-485-5p|2mut|as|	GAATTCAT[C-g]ACGGCC[A-t]GCCTCT	22	1	
hsa|miR-485-3p|nat|as|	AGAGAGGAGAGCCGTGTATGAC	22	2	
hsa|miR-485-3p|2mut|as|	AGA[G-c]AGGAGAGC[C-g]GTGTATGAC	22	1	

hsa|miR-486-5p|nat|as|	CTCGGGGCAGCTCAGTACAGGA	22	2	
hsa|miR-486-5p|2mut|as|	CTCGGGGCAG[C-g]TCAG[T-a]ACAGGA	22	1	
hsa|miR-486-3p|nat|as|	ATCCTGTACTGAGCTGCCCCG	21	1	
hsa|miR-486-3p|2mut|as|	ATCCTGTA[C-g]TGAGC[T-a]GCCCCG	21	1	
hsa|miR-487a|nat|as|	AACTGGATGTCCCTGTATGATT	22	2	
hsa|miR-487a|2mut|as|	AA[C-g]TGGATG[T-a]CCCTGTATGATT	22	1	
ggo|miR-200c|nat|as|	TCCATCATTACCCGGCAGTATT	22	2	
ggo|miR-200c|2mut|as|	TCCATCATT[A-t]CCCGG[C-g]AGTATT	22	1	
ggo|miR-141|nat|as|	CCATCTTTACCAGACAGTGTT	21	2	
ggo|miR-141|2mut|as|	CCATCTTTA[C-g]CAG[A-t]CAGTGTT	21	1	
ppa|miR-141|nat|as|	GCATCTTTACCAGACAGTGTT	21	2	
ppa|miR-141|2mut|as|	GCAT[C-g]TTTACCAGACAG[T-a]GTT	21	1	
ptr|miR-23b|nat|as|	GTGGTAATCCCTGGCAATGTGAT	23	2	
ptr|miR-23b|2mut|as|	GTGGTAATC[C-g]CTGGCAAT[G-c]TGAT	23	1	
ptr|miR-30b|nat|as|	GCTGAGTGTAGGATGTTTACA	21	2	
ptr|miR-30b|2mut|as|	GCTGAGT[G-c]TAGGATGTT[T-a]ACA	21	1	
ppa|miR-130a|nat|as|	GCCCTTTTAACATTGCACTG	20	2	
ppa|miR-130a|2mut|as|	GCCCTTTTAACA[T-a]TGCA[C-g]TG	20	1	
ppy|miR-133a|nat|as|	ACAGCTGGTTGAAGGGGACAA	21	2	
ppy|miR-133a|2mut|as|	ACAGCTGGTT[G-c]AAGGGGA[C-g]AA	21	1	
mne|miR-140|nat|as|	CTACCATAGGGTAGAACCACT	21	2	
mne|miR-140|2mut|as|	CTACC[A-t]TAGGGTAGAA[C-g]CACT	21	1	
ptr|miR-144|nat|as|	CTAGTACATCATCTATACTGTA	22	2	
ptr|miR-144|2mut|as|	CTAG[T-a]ACATCATCTATA[C-g]TGTA	22	1	
ppa|miR-144|nat|as|	GTAGTACATCATCTATACTGTA	22	2	
ppa|miR-144|2mut|as|	GTAGTACATCA[T-a]CTATA[C-g]TGTA	22	1	
ppa|miR-134|nat|as|	CCCTCTGGTCAACCAGTCACA	21	2	
ppa|miR-134|2mut|as|	CC[C-g]TCTGGTCAACCAGTC[A-t]CA	21	1	
ptr|miR-188|nat|as|	ACCCTCCACCATGCAAGGGATG	22	2	
ptr|miR-188|2mut|as|	ACCCTCCA[C-g]CATG[C-g]AAGGGATG	22	1	
ptr|miR-29a|nat|as|	AACCGATTTCAGATGGTGCTAG	22	2	
ptr|miR-29a|2mut|as|	AA[C-g]CGATTTCAGATGGTG[C-g]TAG	22	1	
ptr|miR-31|nat|as|	CAGCTATGCCAGCATCTTGCC	21	2	
ptr|miR-31|2mut|as|	CAGCTATGC[C-g]AGCATCTT[G-c]CC	21	1	
ptr|miR-33a|nat|as|	CAATGCAACTACAATGCAC	19	2	
ptr|miR-33a|2mut|as|	CAA[T-a]GCAA[C-g]TACAATGCAC	19	1	
ppy|miR-10a|nat|as|	CACAAATTCGGATCTACGGGGTA	23	2	

ppy|miR-10a|2mut|as|	CA[C-g]AAATTC[G-c]GATCTACGGGGTA	23	1	
ppa|miR-187|nat|as|	CGGCTGCAACACAAGACACGA	21	2	
ppa|miR-187|2mut|as|	CGG[C-g]TGCAACACAAGACA[C-g]GA	21	1	
ptr|miR-216a|nat|as|	CACAGTTGCCAGCTGAGATAA	21	2	
ptr|miR-216a|2mut|as|	CA[C-g]AGTTGCCAGCTGA[G-c]ATAA	21	1	
mne|miR-220|nat|as|	AAAGTGTCAGACATGGTGGTGG	22	2	
mne|miR-220|2mut|as|	AAAGTGTC[A-t]GACAT[G-c]GTGGTGG	22	1	
ggo|miR-220|nat|as|	AAAGTGTCAGACACGGTGTGG	21	2	
ggo|miR-220|2mut|as|	AAAGTGTC[A-t]GACAC[G-c]GTGTGG	21	1	
mne|miR-197|nat|as|	GCCGGGTGGAGAAGGTGGTGAA	22	2	
mne|miR-197|2mut|as|	GC[C-g]GGGTGGAGAAGGT[G-c]GTGAA	22	1	
ptr|miR-198|nat|as|	CCTATCTCCCCTCTGGACC	19	2	
ptr|miR-198|2mut|as|	CCTAT[C-g]TCCCCTC[T-a]GGACC	19	1	
age|miR-198|nat|as|	CCTAGCTCCCCTCTGGACC	19	2	
age|miR-198|2mut|as|	CCTAG[C-g]TCCCCTCT[G-c]GACC	19	1	
mne|miR-198|nat|as|	CCTATTTCCCCTCTGGACC	19	2	
mne|miR-198|2mut|as|	CCTATT[T-a]CCC[C-g]TCTGGACC	19	1	
sla|miR-198|nat|as|	TCGAGCTCCCCTCTGGACC	19	2	
sla|miR-198|2mut|as|	TCGA[G-c]CTCCC[C-g]TCTGGACC	19	1	
lla|miR-198|nat|as|	CCTAGCTCCCTTCTGGACC	19	2	
lla|miR-198|2mut|as|	CCTAG[C-g]TCCCTTCTG[G-c]ACC	19	1	
ptr|miR-27a|nat|as|	GGCGGAACTTAGCCACTGTGAA	22	2	
ptr|miR-27a|2mut|as|	GGCGGAA[C-g]TTAG[C-g]CACTGTGAA	22	1	
ptr|miR-93|nat|as|	CTACCTGCACGAACAGCACTTT	22	2	
ptr|miR-93|2mut|as|	CTAC[C-g]TGCACGAACAGCA[C-g]TTT	22	1	
ptr|miR-25|nat|as|	TCAGCCGAGACAAGTGCAATG	21	2	
ptr|miR-25|2mut|as|	TCAG[C-g]CGAG[A-t]CAAGTGCAATG	21	1	
ptr|miR-96|nat|as|	GCAAAAATGTGCTAGTGCCAAA	22	2	
ptr|miR-96|2mut|as|	GCAAAAATGTG[C-g]TAGTG[C-g]CAAA	22	1	
hsa|miR-488|nat|as|	GACCAAGAAATAGCCTTTCAA	21	1	
hsa|miR-488|2mut|as|	GA[C-g]CAAGAAATAGCCT[T-a]TCAA	21	1	
hsa|miR-489|nat|as|	GCTGCCGTATATGTGATGTCAC	22	2	
hsa|miR-489|2mut|as|	GCTGC[C-g]GTATATGTG[A-t]TGTCAC	22	1	
hsa|miR-490-5p|nat|as|	ACCCACCTGGAGATCCATGG	20	1	
hsa|miR-490-5p|2mut|as|	ACCCA[C-g]CTGGAGATCCA[T-a]GG	20	1	
hsa|miR-490-3p|nat|as|	CAGCATGGAGTCCTCCAGGTTG	22	2	
hsa|miR-490-3p|2mut|as|	CAGCAT[G-c]GAGTCCTC[C-g]AGGTTG	22	1	

hsa|miR-491-5p|nat|as|	CCTCATGGAAGGGTTCCCCACT	22	2	
hsa|miR-491-5p|2mut|as|	CCT[C-g]ATGGAAGGG[T-a]TCCCCACT	22	1	
hsa|miR-491-3p|nat|as|	GTAGAAGGGAATCTTGCATAAG	22	1	
hsa|miR-491-3p|2mut|as|	GTAGAAGGGAA[T-a]CTTG[C-g]ATAAG	22	1	
hsa|miR-511|nat|as|	TGACTGCAGAGCAAAAGACAC	21	2	
hsa|miR-511|2mut|as|	TGA[C-g]TGCAGAGCAAAAG[A-t]CAC	21	1	
hsa|miR-146b-5p|nat|as|	AGCCTATGGAATTCAGTTCTCA	22	2	
hsa|miR-146b-5p|2mut|as|	AG[C-g]CTATGGAA[T-a]TCAGTTCTCA	22	1	
hsa|miR-146b-3p|nat|as|	CCAGAACTGAGTCCACAGGGCA	22	1	
hsa|miR-146b-3p|2mut|as|	CCAGAACT[G-c]AGTCCA[C-g]AGGGCA	22	1	
hsa|miR-202|nat|as|	TTCCCATGCCCTATACCTCT	20	2	
hsa|miR-202|2mut|as|	TTCCCATG[C-g]CCTATACC[T-a]CT	20	1	
hsa|miR-492|nat|as|	AAGAATCTTGTCCCGCAGGTCCT	23	2	
hsa|miR-492|2mut|as|	AAGAATCTTGT[C-g]CCGCAGG[T-a]CCT	23	1	
hsa|miR-493|nat|as|	CCTGGCACACAGTAGACCTTCA	22	1	
hsa|miR-493|2mut|as|	CCTGGCACAC[A-t]GTAGA[C-g]CTTCA	22	1	
hsa|miR-494|nat|as|	GAGGTTTCCCGTGTATGTTTCA	22	2	
hsa|miR-494|2mut|as|	GAGGTTT[C-g]CCG[T-a]GTATGTTTCA	22	1	
hsa|miR-495|nat|as|	AAGAAGTGCACCATGTTTGTTT	22	2	
hsa|miR-495|2mut|as|	AAGAAGTGCA[C-g]CATGTT[T-a]GTTT	22	1	
hsa|miR-496|nat|as|	GAGATTGGCCATGTAATACTCA	22	2	
hsa|miR-496|2mut|as|	GAGATTGGC[C-g]ATGT[A-t]ATACTCA	22	1	
hsa|miR-193b|nat|as|	AGCGGGACTTTGAGGGCCAGTT	22	2	
hsa|miR-193b|2mut|as|	AGCGGGA[C-g]TTTGAGGGCC[A-t]GTT	22	1	
hsa|miR-497|nat|as|	ACAAACCACAGTGTGCTGCTG	21	1	
hsa|miR-497|2mut|as|	ACAAAC[C-g]ACAGTGT[G-c]CTGCTG	21	1	
hsa|miR-181d|nat|as|	ACCCACCGACAACAATGAATGTT	23	1	
hsa|miR-181d|2mut|as|	ACC[C-g]ACCG[A-t]CAACAATGAATGTT	23	1	
hsa|miR-512-5p|nat|as|	GAAAGTGCCCTCAAGGCTGAGTG	23	1	
hsa|miR-512-5p|2mut|as|	GA[A-t]AGTGCCCT[C-g]AAGGCTGAGTG	23	1	
hsa|miR-512-3p|nat|as|	GACCTCAGCTATGACAGCACTT	22	1	
hsa|miR-512-3p|2mut|as|	GACC[T-a]CAGCTATGACAGCA[C-g]TT	22	1	
hsa|miR-498|nat|as|	GAAAAACGCCCCCTGGCTTGAAA	23	1	
hsa|miR-498|2mut|as|	GAAAAACGCC[C-g]CCTGGCT[T-a]GAAA	23	1	
hsa|miR-520e|nat|as|	CCCTCAAAAAGGAAGCACTTT	21	1	
hsa|miR-520e|2mut|as|	CCCT[C-g]AAAA[A-t]GGAAGCACTTT	21	1	
hsa|miR-515-5p|nat|as|	CAGAAAGTGCTTTCTTTTGGAGAA	24	1	

hsa|miR-515-5p|2mut|as|	CA[G-c]AAAGTGCTTT[C-g]TTTTGGAGAA	24	1	
hsa|miR-515-3p|nat|as|	AACGCTCCAAAAGAAGGCACTC	22	1	
hsa|miR-515-3p|2mut|as|	AA[C-g]GCTCCAAAA[G-c]AAGGCACTC	22	1	
hsa|miR-519e|nat|as|	AACACTCTAAAAGGAGGCACTT	22	1	
hsa|miR-519e|2mut|as|	AACACTCTAAAAGG[A-t]GGCA[C-g]TT	22	1	
hsa|miR-520f|nat|as|	AACCCTCTAAAAGGAAGCACTT	22	1	
hsa|miR-520f|2mut|as|	AACC[C-g]TCTAAAAGGAAG[C-g]ACTT	22	1	
hsa|miR-519c-5p|nat|as|	CAGAAAGCGCTTCCCTCTAGAG	22	1	
hsa|miR-519c-5p|2mut|as|	CAG[A-t]AAGCGCTTCC[C-g]TCTAGAG	22	1	
hsa|miR-519c-3p|nat|as|	ATCCTCTAAAAAGATGCACTTT	22	1	
hsa|miR-519c-3p|2mut|as|	ATCCT[C-g]TAAAAAGATGCA[C-g]TTT	22	1	
hsa|miR-520a-5p|nat|as|	AGAAAGTACTTCCCTCTGGAG	21	1	
hsa|miR-520a-5p|2mut|as|	AGAAAGTA[C-g]TTCCCTC[T-a]GGAG	21	1	
hsa|miR-520a-3p|nat|as|	ACAGTCCAAAGGGAAGCACTTT	22	1	
hsa|miR-520a-3p|2mut|as|	ACAGTC[C-g]AAAGGGA[A-t]GCACTTT	22	1	
hsa|miR-526b|nat|as|	ACAGAAAGTGCTTCCCTCAAGAG	23	1	
hsa|miR-526b|2mut|as|	ACAGAAAG[T-a]GCTTC[C-g]CTCAAGAG	23	1	
hsa|miR-519b-3p|nat|as|	AACCTCTAAAAGGATGCACTTT	22	1	
hsa|miR-519b-3p|2mut|as|	AACCT[C-g]TAA[A-t]AGGATGCACTTT	22	1	
hsa|miR-525-5p|nat|as|	AGAAAGTGCATCCCTCTGGAG	21	1	
hsa|miR-525-5p|2mut|as|	AGA[A-t]AGTGCATCCCT[C-g]TGGAG	21	1	
hsa|miR-525-3p|nat|as|	CGCTCTAAAGGGAAGCGCCTTC	22	1	
hsa|miR-525-3p|2mut|as|	CG[C-g]TCTAAAGGGAAGC[G-c]CCTTC	22	1	
hsa|miR-523|nat|as|	ACCCTCTATAGGGAAGCGCGTTC	23	1	
hsa|miR-523|2mut|as|	ACCCTCTATAG[G-c]GAAGCG[C-g]GTTC	23	1	
hsa|miR-518f|nat|as|	CCTCTAAAGAGAAGCGCTTTC	21	1	
hsa|miR-518f|2mut|as|	CCTCTAAAGAGA[A-t]GCG[C-g]TTTC	21	1	
hsa|miR-520b|nat|as|	CCCTCTAAAAGGAAGCACTTT	21	1	
hsa|miR-520b|2mut|as|	CCCT[C-g]TAAAAGGAAGC[A-t]CTTT	21	1	
hsa|miR-518b|nat|as|	ACCTCTAAAGGGGAGCGCTTTG	22	1	
hsa|miR-518b|2mut|as|	ACC[T-a]CTAAAGGGGAG[C-g]GCTTTG	22	1	
hsa|miR-526a|nat|as|	CAGAAAGTGCTTCCCTCTAGAG	22	1	
hsa|miR-526a|2mut|as|	CAGAAAGTG[C-g]TTC[C-g]CTCTAGAG	22	1	
hsa|miR-520c-3p|nat|as|	ACCCTCTAAAAGGAAGCACTTT	22	1	
hsa|miR-520c-3p|2mut|as|	AC[C-g]CTCTAAAAGG[A-t]AGCACTTT	22	1	
hsa|miR-518c|nat|as|	ACACTCTAAAGAGAAGCGCTTTG	23	1	
hsa|miR-518c|2mut|as|	ACACTCTAAAGAGA[A-t]GCG[C-g]TTTG	23	1	

hsa|miR-524-5p|nat|as|	GAGAAAGTGCTTCCCTTTGTAG	22	1	
hsa|miR-524-5p|2mut|as|	GAGAAAG[T-a]GCTT[C-g]CCTTTGTAG	22	1	
hsa|miR-524-3p|nat|as|	ACTCCAAAGGGAAGCGCCTTC	21	1	
hsa|miR-524-3p|2mut|as|	ACTCCA[A-t]AGGGAAGCGC[C-g]TTC	21	1	
hsa|miR-517a|nat|as|	ACACTCTAAAGGGATGCACGAT	22	1	
hsa|miR-517a|2mut|as|	ACA[C-g]TCTAAAGGGATGCA[C-g]GAT	22	1	
hsa|miR-519d|nat|as|	CACTCTAAAGGGAGGCACTTTG	22	1	
hsa|miR-519d|2mut|as|	CA[C-g]TCTAAAGGGAGGC[A-t]CTTTG	22	1	
hsa|miR-521|nat|as|	ACACTCTAAAGGGAAGTGCGTT	22	1	
hsa|miR-521|2mut|as|	ACACT[C-g]TAAAGGGAAGTG[C-g]GTT	22	1	
hsa|miR-520d-5p|nat|as|	GAAAGGGCTTCCCTTTGTAG	20	1	
hsa|miR-520d-5p|2mut|as|	GAAAGGG[C-g]TTCCCTTTG[T-a]AG	20	1	
hsa|miR-520d-3p|nat|as|	ACCCACCAAAGAGAAGCACTTT	22	1	
hsa|miR-520d-3p|2mut|as|	AC[C-g]CACC[A-t]AAGAGAAGCACTTT	22	1	
hsa|miR-517b|nat|as|	AACACTCTAAAGGGATGCACGA	22	1	
hsa|miR-517b|2mut|as|	AA[C-g]ACTCTAAA[G-c]GGATGCACGA	22	1	
hsa|miR-520g|nat|as|	ACACTCTAAAGGGAAGCACTTTGT	24	1	
hsa|miR-520g|2mut|as|	ACACT[C-g]TAAAGGGAAG[C-g]ACTTTGT	24	1	
hsa|miR-516b|nat|as|	AAAGTGCTTCTTACCTCCAGAT	22	1	
hsa|miR-516b|2mut|as|	AAAGT[G-c]CTTCTTACCTC[C-g]AGAT	22	1	
hsa|miR-518e|nat|as|	CACTCTGAAGGGAAGCGCTTT	21	1	
hsa|miR-518e|2mut|as|	CACTCTGA[A-t]GGGAAGCG[C-g]TTT	21	1	
hsa|miR-518a-5p|nat|as|	GAAAGGGCTTCCCTTTGCAG	20	1	
hsa|miR-518a-5p|2mut|as|	GAAAGGGC[T-a]TCCCTTTG[C-g]AG	20	1	
hsa|miR-518a-3p|nat|as|	TCCAGCAAAGGGAAGCGCTTTC	22	1	
hsa|miR-518a-3p|2mut|as|	TCCAGCAAA[G-c]GGAAGCG[C-g]TTTC	22	1	
hsa|miR-518d-3p|nat|as|	GCTCCAAAGGGAAGCGCTTTG	21	1	
hsa|miR-518d-3p|2mut|as|	GCTCCAAA[G-c]GGAAGCG[C-g]TTTG	21	1	
hsa|miR-517c|nat|as|	ACACTCTAAAAGGATGCACGAT	22	1	
hsa|miR-517c|2mut|as|	ACACT[C-g]TAAA[A-t]GGATGCACGAT	22	1	
hsa|miR-520h|nat|as|	ACTCTAAAGGGAAGCACTTTGT	22	1	
hsa|miR-520h|2mut|as|	ACTCTAAAGGGA[A-t]GCA[C-g]TTTGT	22	1	
hsa|miR-522|nat|as|	ACACTCTAAAGGGAACCATTTT	22	1	
hsa|miR-522|2mut|as|	ACACTCTAAAGGGAA[C-g]CAT[T-a]TT	22	1	
hsa|miR-519a|nat|as|	ACACTCTAAAAGGATGCACTTT	22	1	
hsa|miR-519a|2mut|as|	ACA[C-g]TCTAAAAGGA[T-a]GCACTTT	22	1	
hsa|miR-516a-5p|nat|as|	GAAAGTGCTTCTTTCCTCGAGAA	23	1	

hsa|miR-516a-5p|2mut|as|	GAAAGTG[C-g]TTCTTTCCTCGA[G-c]AA	23	1	
hsa|miR-516a-3p|nat|as|	ACCCTCTGAAAGGAAGCA	18	1	
hsa|miR-516a-3p|2mut|as|	ACCCT[C-g]TGA[A-t]AGGAAGCA	18	1	
hsa|miR-499-5p|nat|as|	AAACATCACTGCAAGTCTTAA	21	1	
hsa|miR-499-5p|2mut|as|	AAACA[T-a]CACTG[C-g]AAGTCTTAA	21	1	
hsa|miR-499-3p|nat|as|	AGCACAGACTTGCTGTGATGTT	22	1	
hsa|miR-499-3p|2mut|as|	AG[C-g]ACAGACTTGCTGT[G-c]ATGTT	22	1	
hsa|miR-500|nat|as|	TCTCACCCAGGTAGCAAGGATTA	23	1	
hsa|miR-500|2mut|as|	TCT[C-g]ACCCAGGTAGCA[A-t]GGATTA	23	1	
hsa|miR-501-5p|nat|as|	TCTCACCCAGGGACAAAGGATT	22	1	
hsa|miR-501-5p|2mut|as|	TCT[C-g]ACCCAGGGACAA[A-t]GGATT	22	1	
hsa|miR-501-3p|nat|as|	AGAATCCTTGCCCGGGTGCATT	22	1	
hsa|miR-501-3p|2mut|as|	AG[A-t]ATCCTTG[C-g]CCGGGTGCATT	22	1	
hsa|miR-502-5p|nat|as|	TAGCACCCAGATAGCAAGGAT	21	1	
hsa|miR-502-5p|2mut|as|	TAG[C-g]ACCCAGATAGCAA[G-c]GAT	21	1	
hsa|miR-502-3p|nat|as|	TGAATCCTTGCCCAGGTGCATT	22	1	
hsa|miR-502-3p|2mut|as|	TGAATC[C-g]TTG[C-g]CCAGGTGCATT	22	1	
hsa|miR-503|nat|as|	CTGCAGAACTGTTCCCGCTGCTA	23	1	
hsa|miR-503|2mut|as|	CTGCAG[A-t]ACTGTT[C-g]CCGCTGCTA	23	1	
hsa|miR-504|nat|as|	GATAGAGTGCAGACCAGGGTCT	22	1	
hsa|miR-504|2mut|as|	GATAG[A-t]GTG[C-g]AGACCAGGGTCT	22	1	
hsa|miR-505|nat|as|	AGGAAACCAGCAAGTGTTGACG	22	1	
hsa|miR-505|2mut|as|	AGGAAAC[C-g]AGCAAGTGTT[G-c]ACG	22	1	
hsa|miR-513a-5p|nat|as|	ATGACACCTCCCTGTGAA	18	1	
hsa|miR-513a-5p|2mut|as|	ATGACACCTC[C-g]CTG[T-a]GAA	18	1	
hsa|miR-513a-3p|nat|as|	CCTTCTCAGAAAGGTGAAATTTA	23	1	
hsa|miR-513a-3p|2mut|as|	CCTT[C-g]TCAGAAAGGTGAAAT[T-a]TA	23	1	
hsa|miR-506|nat|as|	TCTACTCAGAAGGGTGCCTTA	21	1	
hsa|miR-506|2mut|as|	TCTACTCAGA[A-t]GGGTG[C-g]CTTA	21	1	
hsa|miR-507|nat|as|	TTCACTCCAAAAGGTGCAAAA	21	1	
hsa|miR-507|2mut|as|	TTCACT[C-g]CAAAAGG[T-a]GCAAAA	21	1	
hsa|miR-508-5p|nat|as|	CATGAGTGACGCCCTCTGGAGTA	23	1	
hsa|miR-508-5p|2mut|as|	CATGAGTG[A-t]CGC[C-g]CTCTGGAGTA	23	1	
hsa|miR-508-3p|nat|as|	TCTACTCCAAAAGGCTACAATCA	23	1	
hsa|miR-508-3p|2mut|as|	TCTACTC[C-g]AAAAGG[C-g]TACAATCA	23	1	
hsa|miR-509-5p|nat|as|	TGATTGCCACTGTCTGCAGTA	21	1	
hsa|miR-509-5p|2mut|as|	TGATTG[C-g]CACT[G-c]TCTGCAGTA	21	1	

hsa|miR-509-3p|nat|as|	CTACCCACAGACGTACCAATCA	22	1	
hsa|miR-509-3p|2mut|as|	CTACC[C-g]ACAGAC[G-c]TACCAATCA	22	1	
hsa|miR-510|nat|as|	GTGATTGCCACTCTCCTGAGTA	22	1	
hsa|miR-510|2mut|as|	GTGATTG[C-g]CAC[T-a]CTCCTGAGTA	22	1	
hsa|miR-514|nat|as|	TCTACTCACAGAAGTGTCAAT	21	1	
hsa|miR-514|2mut|as|	TCTA[C-g]TCA[C-g]AGAAGTGTCAAT	21	1	
hsa|miR-532-5p|nat|as|	ACGGTCCTACACTCAAGGCATG	22	1	
hsa|miR-532-5p|2mut|as|	ACGGTC[C-g]TAC[A-t]CTCAAGGCATG	22	1	
hsa|miR-532-3p|nat|as|	TGCAAGCCTTGGGTGTGGGAGG	22	1	
hsa|miR-532-3p|2mut|as|	TG[C-g]AAGCCTT[G-c]GGTGTGGGAGG	22	1	
hsa|miR-455-5p|nat|as|	CGATGTAGTCCAAAGGCACATA	22	1	
hsa|miR-455-5p|2mut|as|	CG[A-t]TGTAGTC[C-g]AAAGGCACATA	22	1	
hsa|miR-455-3p|nat|as|	GTGTATATGCCCATGGACTGC	21	1	
hsa|miR-455-3p|2mut|as|	GTG[T-a]ATATGCC[C-g]ATGGACTGC	21	1	
hsa|miR-539|nat|as|	ACACACCAAGGATAATTTCTCC	22	1	
hsa|miR-539|2mut|as|	ACACA[C-g]CAAGGAT[A-t]ATTTCTCC	22	1	
hsa|miR-544|nat|as|	GAACTTGCTAAAAATGCAGAAT	22	1	
hsa|miR-544|2mut|as|	GAACTTG[C-g]TAAAAATGCAG[A-t]AT	22	1	
hsa|miR-545|nat|as|	GCACACAATAAATGTTTGCTGA	22	1	
hsa|miR-545|2mut|as|	GCACA[C-g]AATAAA[T-a]GTTTGCTGA	22	1	
hsa|miR-543|nat|as|	AAGAAGTGCACCGCGAATGTTT	22	1	
hsa|miR-543|2mut|as|	AAGA[A-t]GTGCACCG[C-g]GAATGTTT	22	1	
hsa|miR-542-3p|nat|as|	TTTCAGTTATCAATCTGTCACA	22	1	
hsa|miR-542-3p|2mut|as|	TTTC[A-t]GTTATCAATCTGT[C-g]ACA	22	1	
hsa|miR-487b|nat|as|	AAGTGGATGACCCTGTACGATT	22	1	
hsa|miR-487b|2mut|as|	AAGTGGATGACCC[T-a]GTA[C-g]GATT	22	1	
hsa|miR-374b|nat|as|	CACTTAGCAGGTTGTATTATAT	22	1	
hsa|miR-374b|2mut|as|	CA[C-g]TTAGCAGG[T-a]TGTATTATAT	22	1	
hsa|miR-551a|nat|as|	TGGAAACCAAGAGTGGGTCGC	21	1	
hsa|miR-551a|2mut|as|	TGGAAAC[C-g]AAGAGT[G-c]GGTCGC	21	1	
hsa|miR-552|nat|as|	TTGTCTAACCAGTCACCTGTT	21	1	
hsa|miR-552|2mut|as|	TTGT[C-g]TAACC[A-t]GTCACCTGTT	21	1	
hsa|miR-553|nat|as|	AAAACAAAATCTCACCGTTTT	21	1	
hsa|miR-553|2mut|as|	AAAAC[A-t]AAAT[C-g]TCACCGTTTT	21	1	
hsa|miR-554|nat|as|	ACTGGCTGAGTCAGGACTAGC	21	1	
hsa|miR-554|2mut|as|	ACT[G-c]GCTGAGT[C-g]AGGACTAGC	21	1	
hsa|miR-555|nat|as|	ATCAGAGGTTCAGCTTACCCT	21	1	

hsa|miR-555|2mut|as|	ATCAGAGG[T-a]TCAGCTTA[C-g]CCT	21	1	
hsa|miR-556-5p|nat|as|	CTCATATTACAATGAGCTCATC	22	1	
hsa|miR-556-5p|2mut|as|	CTCATA[T-a]TACAATGAG[C-g]TCATC	22	1	
hsa|miR-556-3p|nat|as|	AAAGATGAGCTAATGGTAATAT	22	1	
hsa|miR-556-3p|2mut|as|	AAAGATGAG[C-g]TAATGGT[A-t]ATAT	22	1	
hsa|miR-557|nat|as|	AGACAAGGCCCACCCGTGCAAAC	23	1	
hsa|miR-557|2mut|as|	AGACA[A-t]GGCCCAC[C-g]CGTGCAAAC	23	1	
hsa|miR-558|nat|as|	ATTTTGGTACAGCAGCTCA	19	1	
hsa|miR-558|2mut|as|	ATTTTGGTA[C-g]AGCAGC[T-a]CA	19	1	
hsa|miR-559|nat|as|	TTTTGGTGCATATTTACTTTA	21	1	
hsa|miR-559|2mut|as|	TTTTGGTGCATA[T-a]TTA[C-g]TTTA	21	1	
hsa|miR-561|nat|as|	ACTTCAAGGATCTTAAACTTTG	22	1	
hsa|miR-561|2mut|as|	ACT[T-a]CAAGGATCTTAAA[C-g]TTTG	22	1	
hsa|miR-562|nat|as|	GCAAATGGTACAGCTACTTT	20	1	
hsa|miR-562|2mut|as|	GCAAATGGT[A-t]CAGCTA[C-g]TTT	20	1	
hsa|miR-563|nat|as|	GGGAAACGTATGTCAACCT	19	1	
hsa|miR-563|2mut|as|	GGGAA[A-t]CGTATGT[C-g]AACCT	19	1	
hsa|miR-564|nat|as|	GCCTGCTGACACCGTGCCT	19	1	
hsa|miR-564|2mut|as|	GCCTGCTG[A-t]CACCGTG[C-g]CT	19	1	
hsa|miR-566|nat|as|	GTTGGGATCACAGGCGCCC	19	1	
hsa|miR-566|2mut|as|	GTTGG[G-c]ATCACAGGCG[C-g]CC	19	1	
hsa|miR-567|nat|as|	GTTCTGTCCTGGAAGAACATACT	23	1	
hsa|miR-567|2mut|as|	GTTCTGTC[C-g]TGGAAGAAC[A-t]TACT	23	1	
hsa|miR-568|nat|as|	GTGTGTATACATTTATACAT	20	1	
hsa|miR-568|2mut|as|	GTGTGTAT[A-t]CAT[T-a]TATACAT	20	1	
hsa|miR-551b|nat|as|	CTGAAACCAAGTATGGGTCGC	21	1	
hsa|miR-551b|2mut|as|	CTGAAACCA[A-t]GTATGGGT[C-g]GC	21	1	
hsa|miR-569|nat|as|	ACTTTCCAGGATTCATTAACT	21	1	
hsa|miR-569|2mut|as|	ACTTTCCAGGATT[C-g]ATTA[A-t]CT	21	1	
hsa|miR-570|nat|as|	GCAAAGGTAATTGCTGTTTTCG	22	1	
hsa|miR-570|2mut|as|	GCAA[A-t]GGTAATTGCTG[T-a]TTTCG	22	1	
hsa|miR-571|nat|as|	CTCACTCAGATGGCCAACTCA	21	1	
hsa|miR-571|2mut|as|	CTCACTC[A-t]GATGGCCAA[C-g]TCA	21	1	
hsa|miR-572|nat|as|	TGGGCCACCGCCGAGCGGAC	20	1	
hsa|miR-572|2mut|as|	TGGGCCACCG[C-g]CGAGCG[G-c]AC	20	1	
hsa|miR-573|nat|as|	CTGATCAGTTACACATCACTTCAG	24	1	
hsa|miR-573|2mut|as|	CTGAT[C-g]AGTTACAC[A-t]TCACTTCAG	24	1	

hsa|miR-574-5p|nat|as|	ACACACTCACACACACACTCA	23	1	
hsa|miR-574-5p|2mut|as|	ACACACT[C-g]ACACACACAC[A-t]CTCA	23	1	
hsa|miR-574-3p|nat|as|	TGTGGGTGTGTGCATGAGCGTG	22	1	
hsa|miR-574-3p|2mut|as|	TGT[G-c]GGTGTGTGCATGAG[C-g]GTG	22	1	
hsa|miR-575|nat|as|	GCTCCTGTCCAACTGGCTC	19	1	
hsa|miR-575|2mut|as|	GCTCCT[G-c]TCCAA[C-g]TGGCTC	19	1	
hsa|miR-576-5p|nat|as|	AAAGACGTGGAGAAATTAGAAT	22	1	
hsa|miR-576-5p|2mut|as|	AAAGA[C-g]GTGGAGAAATT[A-t]GAAT	22	1	
hsa|miR-576-3p|nat|as|	GATTCCAATTTTTCCACATCTT	22	1	
hsa|miR-576-3p|2mut|as|	GATTC[C-g]AATTTT[T-a]CCACATCTT	22	1	
hsa|miR-577|nat|as|	CAGGTACCAATATTTTATCTA	21	1	
hsa|miR-577|2mut|as|	CAGGTAC[C-g]AATA[T-a]TTTATCTA	21	1	
hsa|miR-578|nat|as|	ACAATCCTAGAGCACAAGAAG	21	1	
hsa|miR-578|2mut|as|	ACAAT[C-g]CTAGAG[C-g]ACAAGAAG	21	1	
hsa|miR-579|nat|as|	AATCGCGGTTTATACCAAATGAA	23	1	
hsa|miR-579|2mut|as|	AATCGCGGTTTATAC[C-g]AAAT[G-c]AA	23	1	
hsa|miR-580|nat|as|	CCTAATGATTCATCATTCTCAA	22	1	
hsa|miR-580|2mut|as|	CCTAATGA[T-a]TCATCATT[C-g]TCAA	22	1	
hsa|miR-581|nat|as|	ACTGATCTAGAGAACACAAGA	21	1	
hsa|miR-581|2mut|as|	ACTGATCTA[G-c]AGAACA[C-g]AAGA	21	1	
hsa|miR-582-5p|nat|as|	AGTAACTGGTTGAACAACTGTAA	23	1	
hsa|miR-582-5p|2mut|as|	AG[T-a]AACTGGTTGAACAA[C-g]TGTAA	23	1	
hsa|miR-582-3p|nat|as|	GGTTCAGTTGTTCAACCAGTTA	22	1	
hsa|miR-582-3p|2mut|as|	GGTTCAGTTGTT[C-g]AAC[C-g]AGTTA	22	1	
hsa|miR-583|nat|as|	GTAATGGGACCTTCCTCTTTG	21	1	
hsa|miR-583|2mut|as|	GTAATGGGAC[C-g]TTCCTCT[T-a]TG	21	1	
hsa|miR-584|nat|as|	CTCAGTCCCAGGCAAACCATAA	22	1	
hsa|miR-584|2mut|as|	CTC[A-t]GTCC[C-g]AGGCAAACCATAA	22	1	
hsa|miR-585|nat|as|	TAGCATACAGATACGCCCA	19	1	
hsa|miR-585|2mut|as|	TAGCATAC[A-t]GATACGC[C-g]CA	19	1	
hsa|miR-548a-3p|nat|as|	GCAAAAGTAATTGCCAGTTTTG	22	1	
hsa|miR-548a-3p|2mut|as|	GCAAAAGTAATTGC[C-g]AGTT[T-a]TG	22	1	
hsa|miR-586|nat|as|	GGACCTAAAAATACAATGCATA	22	1	
hsa|miR-586|2mut|as|	GGACCTAAAAA[T-a]ACAATG[C-g]ATA	22	1	
hsa|miR-587|nat|as|	GTGACTCATCACCTATGGAAA	21	1	
hsa|miR-587|2mut|as|	GTGA[C-g]TCATCACCTATGG[A-t]AA	21	1	
hsa|miR-548b-5p|nat|as|	GGCCAAAACCACAATTACTTTT	22	1	

hsa|miR-548b-5p|2mut|as|	GG[C-g]CAAAACCACAAT[T-a]ACTTTT	22	1	
hsa|miR-548b-3p|nat|as|	ACAAAAGCAACTGAGGTTCTTG	22	1	
hsa|miR-548b-3p|2mut|as|	ACAAAAG[C-g]AACTG[A-t]GGTTCTTG	22	1	
hsa|miR-588|nat|as|	GTTCTAACCCATTGTGGCCAA	21	1	
hsa|miR-588|2mut|as|	GTTCTAA[C-g]CCATTG[T-a]GGCCAA	21	1	
hsa|miR-589|nat|as|	CTCAGAGCAGACGTGGTTCTCA	22	1	
hsa|miR-589|2mut|as|	CTCAGAGCAG[A-t]CGTGGTT[C-g]TCA	22	1	
hsa|miR-550|nat|as|	GGGCTCTTACTCCCTCAGGCACT	23	1	
hsa|miR-550|2mut|as|	GGG[C-g]TCTTA[C-g]TCCCTCAGGCACT	23	1	
hsa|miR-590-5p|nat|as|	CTGCACTTTTATGAATAAGCTC	22	1	
hsa|miR-590-5p|2mut|as|	CTGCACTTTTA[T-a]GAATAAG[C-g]TC	22	1	
hsa|miR-590-3p|nat|as|	ACTAGCTTATACATAAAATTA	21	1	
hsa|miR-590-3p|2mut|as|	ACTAG[C-g]TTA[T-a]ACATAAAATTA	21	1	
hsa|miR-591|nat|as|	ACAATGAGAACCCATGGTCT	20	1	
hsa|miR-591|2mut|as|	AC[A-t]ATGAGAACC[C-g]ATGGTCT	20	1	
hsa|miR-592|nat|as|	ACATCATCGCATATTGACACAA	22	1	
hsa|miR-592|2mut|as|	ACAT[C-g]ATCGCATATTGACA[C-g]AA	22	1	
hsa|miR-593|nat|as|	AGAAACCCCAGCAGAGACA	19	1	
hsa|miR-593|2mut|as|	AGAA[A-t]CCC[C-g]AGCAGAGACA	19	1	
hsa|miR-595|nat|as|	AGACACACCACGGCACACTTC	21	1	
hsa|miR-595|2mut|as|	AGACACACCACGG[C-g]ACAC[T-a]TC	21	1	
hsa|miR-596|nat|as|	CCCGAGGAGCCGGGCAGGCTT	21	1	
hsa|miR-596|2mut|as|	CCCGAG[G-c]AGCCGGGCAGG[C-g]TT	21	1	
hsa|miR-597|nat|as|	ACAGTGGTCATCGAGTGACACA	22	1	
hsa|miR-597|2mut|as|	ACAGTGGTCATC[G-c]AGTGA[C-g]ACA	22	1	
hsa|miR-598|nat|as|	TGACGATGACAACGATGACGTA	22	1	
hsa|miR-598|2mut|as|	TGACGATGACAAC[G-c]ATGA[C-g]GTA	22	1	
hsa|miR-599|nat|as|	GTTTGATAAACTGACACAAC	20	1	
hsa|miR-599|2mut|as|	GTTTG[A-t]TAAACTGA[C-g]ACAAC	20	1	
hsa|miR-548a-5p|nat|as|	GGTAAAACTCGCAATTACTTTT	22	1	
hsa|miR-548a-5p|2mut|as|	GGTAAAACT[C-g]GCAATTAC[T-a]TTT	22	1	
hsa|miR-600|nat|as|	GAGCAAGGCTCTTGTCTGTAAGT	23	1	
hsa|miR-600|2mut|as|	GAGCAAGGCTCTTGT[C-g]TGTA[A-t]GT	23	1	
hsa|miR-601|nat|as|	CTCCTCCAACAATCCTAGACCA	22	1	
hsa|miR-601|2mut|as|	CTCCTCCAACAATC[C-g]TAG[A-t]CCA	22	1	
hsa|miR-602|nat|as|	GGGCCGCAGCTGTCGCCCGTGTC	23	1	
hsa|miR-602|2mut|as|	GGGCCGCAGCTGT[C-g]GCC[C-g]GTGTC	23	1	

hsa|miR-603|nat|as|	GCAAAAGTAATTGCAGTGTGTG	22	1	
hsa|miR-603|2mut|as|	GCAAAAG[T-a]AATTGCAGTGT[G-c]TG	22	1	
hsa|miR-604|nat|as|	GTCCTGAATTCCGCAGCCT	19	1	
hsa|miR-604|2mut|as|	GTCCTGA[A-t]TTC[C-g]GCAGCCT	19	1	
hsa|miR-605|nat|as|	AGGAGAAGGCACCATGGGATTTA	23	1	
hsa|miR-605|2mut|as|	AGGA[G-c]AAGGCA[C-g]CATGGGATTTA	23	1	
hsa|miR-606|nat|as|	ATCTTTGATTTTCAGTAGTTT	21	1	
hsa|miR-606|2mut|as|	AT[C-g]TTTGATTTTC[A-t]GTAGTTT	21	1	
hsa|miR-607|nat|as|	GTTATAGATCTGGATTTGAAC	21	1	
hsa|miR-607|2mut|as|	GTTATAGAT[C-g]TGGAT[T-a]TGAAC	21	1	
hsa|miR-608|nat|as|	ACGGAGCTGTCCCAACACCACCCCT	25	1	
hsa|miR-608|2mut|as|	AC[G-c]GAGCTGTCCCAACACCAC[C-g]CCT	25	1	
hsa|miR-609|nat|as|	AGAGATGAGAGAAACACCCT	20	1	
hsa|miR-609|2mut|as|	AGAGA[T-a]GAGAGAAACA[C-g]CCT	20	1	
hsa|miR-610|nat|as|	TCCCAGCACACATTTAGCTCA	21	1	
hsa|miR-610|2mut|as|	TCCCAGCACA[C-g]ATTT[A-t]GCTCA	21	1	
hsa|miR-611|nat|as|	GTCAGACCCCGAGGGGTCCTCGC	23	1	
hsa|miR-611|2mut|as|	GTCAGACCCCG[A-t]GGGGTCCT[C-g]GC	23	1	
hsa|miR-612|nat|as|	AAGGAGCTCAGAAGCCCTGCCCAGC	25	1	
hsa|miR-612|2mut|as|	AAGGAGCTCAGAAG[C-g]CCTGC[C-g]CAGC	25	1	
hsa|miR-613|nat|as|	GGCAAAGAAGGAACATTCCT	20	1	
hsa|miR-613|2mut|as|	GGCAAA[G-c]AAGGAA[C-g]ATTCCT	20	1	
hsa|miR-614|nat|as|	CCACCTGGCAAGAACAGGCGTTC	23	1	
hsa|miR-614|2mut|as|	CC[A-t]CCTGGCAAGAA[C-g]AGGCGTTC	23	1	
hsa|miR-615-5p|nat|as|	GATCCGAGCACCGGGGACCCCC	22	1	
hsa|miR-615-5p|2mut|as|	GATCCGAG[C-g]ACCGGGGA[C-g]CCCC	22	1	
hsa|miR-615-3p|nat|as|	AAGAGGGAGACCCAGGCTCGGA	22	1	
hsa|miR-615-3p|2mut|as|	AAGAGGGAGA[C-g]CCAGGC[T-a]CGGA	22	1	
hsa|miR-616|nat|as|	CTGCTCAAACCCTCCAATGACT	22	1	
hsa|miR-616|2mut|as|	CTGCTCAAACC[C-g]TCC[A-t]ATGACT	22	1	
hsa|miR-548c-5p|nat|as|	GGCAAAAACCGCAATTACTTTT	22	1	
hsa|miR-548c-5p|2mut|as|	GGCAAAAA[C-g]CGCAATTA[C-g]TTTT	22	1	
hsa|miR-548c-3p|nat|as|	GCAAAAGTAATTGAGATTTTTG	22	1	
hsa|miR-548c-3p|2mut|as|	GCAAAAGT[A-t]ATTGAGA[T-a]TTTTG	22	1	
hsa|miR-617|nat|as|	GCCACCTTCAAATGGGAAGTCT	22	1	
hsa|miR-617|2mut|as|	GCCA[C-g]CTTCAAAT[G-c]GGAAGTCT	22	1	
hsa|miR-618|nat|as|	ACTCAGAAGGACAAGTAGAGTTT	23	1	

hsa|miR-618|2mut|as|	ACTCAGA[A-t]GGA[C-g]AAGTAGAGTTT	23	1	
hsa|miR-619|nat|as|	ACTGGGCACAAACATGTCCAGGTC	24	1	
hsa|miR-619|2mut|as|	ACTGGGCA[C-g]AAAC[A-t]TGTCCAGGTC	24	1	
hsa|miR-620|nat|as|	ATTTCTATATCTATCTCCAT	20	1	
hsa|miR-620|2mut|as|	ATT[T-a]CTATATCTATCT[C-g]CAT	20	1	
hsa|miR-621|nat|as|	AGGTAAGCGCTGTTGCTAGCC	21	1	
hsa|miR-621|2mut|as|	AGGTAAG[C-g]GCTGTTGC[T-a]AGCC	21	1	
hsa|miR-622|nat|as|	GCTCCAACCTCAGCAGACTGT	21	1	
hsa|miR-622|2mut|as|	GCTC[C-g]AACCTCAGC[A-t]GACTGT	21	1	
hsa|miR-623|nat|as|	ACCCAACAGCCCCTGCAAGGGAT	23	1	
hsa|miR-623|2mut|as|	ACC[C-g]AACAGCCC[C-g]TGCAAGGGAT	23	1	
hsa|miR-624|nat|as|	AGGTAATACCAATACCTTGTG	21	1	
hsa|miR-624|2mut|as|	AGGTAATAC[C-g]AATACCTT[G-c]TG	21	1	
hsa|miR-625|nat|as|	GGACTATAGAACTTTCCCCCT	21	1	
hsa|miR-625|2mut|as|	GGACTATAGAACTT[T-a]CCC[C-g]CT	21	1	
hsa|miR-626|nat|as|	AAGACATTTTCAGACAGCT	19	1	
hsa|miR-626|2mut|as|	AAGACATTTT[C-g]AGAC[A-t]GCT	19	1	
hsa|miR-627|nat|as|	TCCTCTTTTCTTAGAGACTCAC	22	1	
hsa|miR-627|2mut|as|	TCCTCTTTT[C-g]TTAGAGA[C-g]TCAC	22	1	
hsa|miR-628-5p|nat|as|	CCTCTAGTAAATATGTCAGCAT	22	1	
hsa|miR-628-5p|2mut|as|	CCT[C-g]TAGTAAATAT[G-c]TCAGCAT	22	1	
hsa|miR-628-3p|nat|as|	TCGACTGCCACTCTTACTAGA	21	1	
hsa|miR-628-3p|2mut|as|	TCG[A-t]CTGC[C-g]ACTCTTACTAGA	21	1	
hsa|miR-629|nat|as|	AGTTCTCCCAACGTAAACCCA	21	1	
hsa|miR-629|2mut|as|	AGTTC[T-a]CCCAA[C-g]GTAAACCCA	21	1	
hsa|miR-630|nat|as|	ACCTTCCCTGGTACAGAATACT	22	1	
hsa|miR-630|2mut|as|	ACCTTCC[C-g]TGGTACAG[A-t]ATACT	22	1	
hsa|miR-631|nat|as|	GCTGAGGTCTGGGCCAGGTCT	21	1	
hsa|miR-631|2mut|as|	GCTGAGGT[C-g]TGGGCC[A-t]GGTCT	21	1	
hsa|miR-33b|nat|as|	GCAATGCAACAGCAATGCAC	20	1	
hsa|miR-33b|2mut|as|	GCAATGCAA[C-g]AGCAA[T-a]GCAC	20	1	
hsa|miR-632|nat|as|	TCCCACAGGAAGCAGACAC	19	1	
hsa|miR-632|2mut|as|	TCC[C-g]ACAGGAAGCAGA[C-g]AC	19	1	
hsa|miR-633|nat|as|	TTTATTGTGGTAGATACTATTAG	23	1	
hsa|miR-633|2mut|as|	TTTATTGTGG[T-a]AGATA[C-g]TATTAG	23	1	
hsa|miR-634|nat|as|	GTCCAAAGTTGGGGTGCTGGTT	22	1	
hsa|miR-634|2mut|as|	GTC[C-g]AAAGTT[G-c]GGGTGCTGGTT	22	1	

hsa|miR-635|nat|as|	GGACATTGTTTCAGTGCCCAAGT	23	1	
hsa|miR-635|2mut|as|	GGA[C-g]ATTGTTT[C-g]AGTGCCCAAGT	23	1	
hsa|miR-636|nat|as|	TGCGGGCGGGACGAGCAAGCACA	23	1	
hsa|miR-636|2mut|as|	TGCGGG[C-g]GGGACGAGCA[A-t]GCACA	23	1	
hsa|miR-637|nat|as|	ACGCAGAGCCCGAAAGCCCCCAGT	24	1	
hsa|miR-637|2mut|as|	ACGCAG[A-t]GCCCGAAAGCCCC[C-g]AGT	24	1	
hsa|miR-638|nat|as|	AGGCCGCCACCCGCCCGCGATCCCT	25	1	
hsa|miR-638|2mut|as|	AGGCCGCCAC[C-g]CGCCCG[C-g]GATCCCT	25	1	
hsa|miR-639|nat|as|	ACAGCGCTCGCAACCGCAGCGAT	23	1	
hsa|miR-639|2mut|as|	ACAGCGCTCGCAACCG[C-g]AGC[G-c]AT	23	1	
hsa|miR-640|nat|as|	AGAGGCAGGTTCCTGGATCAT	21	1	
hsa|miR-640|2mut|as|	AGAGG[C-g]AGGTTCCTGGA[T-a]CAT	21	1	
hsa|miR-641|nat|as|	GAGGTGACTCTATCCTATGTCTTT	24	1	
hsa|miR-641|2mut|as|	GAGGTGA[C-g]TCTATCCTATGT[C-g]TTT	24	1	
hsa|miR-642|nat|as|	CAAGACACATTTGGAGAGGGAC	22	1	
hsa|miR-642|2mut|as|	CAAGACA[C-g]ATTTGGA[G-c]AGGGAC	22	1	
hsa|miR-643|nat|as|	CTACCTGAGCTAGCATACAAGT	22	1	
hsa|miR-643|2mut|as|	CTAC[C-g]TGAGCTAGCATA[C-g]AAGT	22	1	
hsa|miR-644|nat|as|	GCTCTAAGAAAGCCACACT	19	1	
hsa|miR-644|2mut|as|	GCT[C-g]TAAGAAAGCCA[C-g]ACT	19	1	
hsa|miR-645|nat|as|	TCAGCAGTACCAGCCTAGA	19	1	
hsa|miR-645|2mut|as|	TC[A-t]GCAGTACCAG[C-g]CTAGA	19	1	
hsa|miR-646|nat|as|	GCCTCAGAGGCAGCTGCTT	19	1	
hsa|miR-646|2mut|as|	GCCT[C-g]AGAGGC[A-t]GCTGCTT	19	1	
hsa|miR-647|nat|as|	GAAGGAAGTGAGTGCAGCCAC	21	1	
hsa|miR-647|2mut|as|	GAAGGA[A-t]GTGAGTGCAG[C-g]CAC	21	1	
hsa|miR-648|nat|as|	ACCAGTGCCCTGCACACTT	19	1	
hsa|miR-648|2mut|as|	AC[C-g]AGTGCCCTGCACA[C-g]TT	19	1	
hsa|miR-649|nat|as|	GACTCTTGAACAACACAGGTTT	22	1	
hsa|miR-649|2mut|as|	GACTC[T-a]TGAACAACA[C-g]AGGTTT	22	1	
hsa|miR-650|nat|as|	GTCCTGAGAGCGCTGCCTCCT	21	1	
hsa|miR-650|2mut|as|	GT[C-g]CTGAGAG[C-g]GCTGCCTCCT	21	1	
hsa|miR-651|nat|as|	CAAAAGTCAAGCTTATCCTAAA	22	1	
hsa|miR-651|2mut|as|	CAAAAGTCAAG[C-g]TTATCC[T-a]AAA	22	1	
hsa|miR-652|nat|as|	CACAACCCTAGTGGCGCCATT	21	1	
hsa|miR-652|2mut|as|	CACAAC[C-g]CTAG[T-a]GGCGCCATT	21	1	
hsa|miR-548d-5p|nat|as|	GGCAAAAACCACAATTACTTTT	22	1	

hsa|miR-548d-5p|2mut|as|	GG[C-g]AAAAACCACAAT[T-a]ACTTTT	22	1	
hsa|miR-548d-3p|nat|as|	GCAAAAGAAACTGTGGTTTTTG	22	1	
hsa|miR-548d-3p|2mut|as|	GCAAAA[G-c]AAA[C-g]TGTGGTTTTTG	22	1	
hsa|miR-661|nat|as|	ACGCGCAGGCCAGAGACCCAGGCA	24	1	
hsa|miR-661|2mut|as|	ACGCG[C-g]AGGCCAGAGACCCA[G-c]GCA	24	1	
hsa|miR-662|nat|as|	CTGCTGGGCCACAACGTGGGA	21	1	
hsa|miR-662|2mut|as|	CTGC[T-a]GGG[C-g]CACAACGTGGGA	21	1	
hsa|miR-663|nat|as|	GCGGTCCCGCGGCGCCCCGCCT	22	1	
hsa|miR-663|2mut|as|	GCGGTCCCGCGGCG[C-g]CCC[G-c]CCT	22	1	
hsa|miR-449b|nat|as|	GCCAGCTAACAATACACTGCCT	22	1	
hsa|miR-449b|2mut|as|	GCCAGCTAA[C-g]AAT[A-t]CACTGCCT	22	1	
hsa|miR-653|nat|as|	CAGTAGAGATTGTTTCAACAC	21	1	
hsa|miR-653|2mut|as|	CAGTAGAGA[T-a]TGTTTCAA[C-g]AC	21	1	
hsa|miR-654-5p|nat|as|	GCACATGTTCTGCGGCCCACCA	22	1	
hsa|miR-654-5p|2mut|as|	GCACATGT[T-a]CTGCGGCCCA[C-g]CA	22	1	
hsa|miR-654-3p|nat|as|	AAGGTGATGGTCAGCAGACATA	22	1	
hsa|miR-654-3p|2mut|as|	AAGGTGATGG[T-a]CAGCAGA[C-g]ATA	22	1	
hsa|miR-655|nat|as|	AAAGAGGTTAACCATGTATTAT	22	1	
hsa|miR-655|2mut|as|	AAAGAGGTTAA[C-g]CAT[G-c]TATTAT	22	1	
hsa|miR-656|nat|as|	AGAGGTTGACTGTATAATATT	21	1	
hsa|miR-656|2mut|as|	AGAGGTTGA[C-g]TGTAT[A-t]ATATT	21	1	
hsa|miR-549|nat|as|	AGAGCTCATCCATAGTTGTCA	21	1	
hsa|miR-549|2mut|as|	AGAG[C-g]TCATCC[A-t]TAGTTGTCA	21	1	
hsa|miR-657|nat|as|	CCTAGAGAGGGTGAGAACCTGCC	23	1	
hsa|miR-657|2mut|as|	CCTAGAGAGGGT[G-c]AGAA[C-g]CTGCC	23	1	
hsa|miR-658|nat|as|	ACCAACGGACCTACTTCCCTCCGCC	25	1	
hsa|miR-658|2mut|as|	ACCAAC[G-c]GAC[C-g]TACTTCCCTCCGCC	25	1	
hsa|miR-659|nat|as|	TGGGGACCCTCCCTGAACCAAG	22	1	
hsa|miR-659|2mut|as|	TGGGGA[C-g]CCTCCCTGAAC[C-g]AAG	22	1	
hsa|miR-660|nat|as|	CAACTCCGATATGCAATGGGTA	22	1	
hsa|miR-660|2mut|as|	CAACTCCGA[T-a]ATG[C-g]AATGGGTA	22	1	
hsa|miR-421|nat|as|	GCGCCCAATTAATGTCTGTTGAT	23	1	
hsa|miR-421|2mut|as|	GCGCCC[A-t]ATTAATGT[C-g]TGTTGAT	23	1	
hsa|miR-542-5p|nat|as|	TCTCGTGACATGATGATCCCCGA	23	1	
hsa|miR-542-5p|2mut|as|	TCT[C-g]GTGACATGA[T-a]GATCCCCGA	23	1	
hsa|miR-758|nat|as|	GGTTAGTGGACCAGGTCACAAA	22	1	
hsa|miR-758|2mut|as|	GGTTAGTGGA[C-g]CAGG[T-a]CACAAA	22	1	

hsa|miR-1264|nat|as|	AACAGGTGCTCAAATAAGACTTG	23	1	
hsa|miR-1264|2mut|as|	AA[C-g]AGGTGC[T-a]CAAATAAGACTTG	23	1	
hsa|miR-671-5p|nat|as|	CTCCAGCCCCTCCAGGGCTTCCT	23	1	
hsa|miR-671-5p|2mut|as|	CT[C-g]CAGCCCCTCCAGGG[C-g]TTCCT	23	1	
hsa|miR-671-3p|nat|as|	GGTGGAGCCCTGAGAACCGGA	21	1	
hsa|miR-671-3p|2mut|as|	GGTGGAG[C-g]CCTGAGAACC[G-c]GA	21	1	
hsa|miR-668|nat|as|	GTAGTGGGCCGAGCCGAGTGACA	23	1	
hsa|miR-668|2mut|as|	GTAGTGGG[C-g]CGAGCCGAGTG[A-t]CA	23	1	
hsa|miR-767-5p|nat|as|	CATGCTCAGACAACCATGGTGCA	23	1	
hsa|miR-767-5p|2mut|as|	CATGCT[C-g]AGACAACCATGG[T-a]GCA	23	1	
hsa|miR-767-3p|nat|as|	AGAAACCATGGGGTATGAGCAGA	23	1	
hsa|miR-767-3p|2mut|as|	AGAAACCATGGGG[T-a]ATGAG[C-g]AGA	23	1	
hsa|miR-1224-5p|nat|as|	CCACCTCCCGAGTCCTCAC	19	1	
hsa|miR-1224-5p|2mut|as|	CCAC[C-g]TCCC[G-c]AGTCCTCAC	19	1	
hsa|miR-1224-3p|nat|as|	CTGAGGAGAGAGGAGGTGGGG	21	1	
hsa|miR-1224-3p|2mut|as|	CT[G-c]AGGAGAGAGGAGGT[G-c]GGG	21	1	
hsa|miR-320b|nat|as|	TTGCCCTCTCAACCCAGCTTTT	22	1	
hsa|miR-320b|2mut|as|	TT[G-c]CCCTCTCAAC[C-g]CAGCTTTT	22	1	
hsa|miR-320c|nat|as|	ACCCTCTCAACCCAGCTTTT	20	1	
hsa|miR-320c|2mut|as|	AC[C-g]CTCTC[A-t]ACCCAGCTTTT	20	1	
hsa|miR-1296|nat|as|	GGAGATGGAGCCAGGGCCCTAA	22	1	
hsa|miR-1296|2mut|as|	GGAGA[T-a]GGAG[C-g]CAGGGCCCTAA	22	1	
hsa|miR-1468|nat|as|	CAGCGAAACAGGCAAACGGAG	21	1	
hsa|miR-1468|2mut|as|	CAG[C-g]GAAACA[G-c]GCAAACGGAG	21	1	
hsa|miR-1323|nat|as|	AGAAAATGCCCCTCAGTTTTGA	22	1	
hsa|miR-1323|2mut|as|	AGAAAATG[C-g]CCCTCA[G-c]TTTTGA	22	1	
hsa|miR-1271|nat|as|	TGAGTGCTTGCTAGGTGCCAAG	22	1	
hsa|miR-1271|2mut|as|	TGAGTG[C-g]TTGCTAGGTGC[C-g]AAG	22	1	
hsa|miR-1301|nat|as|	GAAGTCACTCCCAGGCAGCTGCAA	24	1	
hsa|miR-1301|2mut|as|	GAAGTCACT[C-g]CCAGGC[A-t]GCTGCAA	24	1	
hsa|miR-454|nat|as|	ACCCTATAAGCAATATTGCACTA	23	1	
hsa|miR-454|2mut|as|	ACCCT[A-t]TAAGCAATATTGCA[C-g]TA	23	1	
hsa|miR-1185|nat|as|	AACATACAAAGGGTATCCTCT	21	1	
hsa|miR-1185|2mut|as|	AACATAC[A-t]AAGGGTATC[C-g]TCT	21	1	
hsa|miR-1283|nat|as|	AGAAAGCGCTTTCCTTTGTAGA	22	1	
hsa|miR-1283|2mut|as|	AGAAAGCG[C-g]TTTCC[T-a]TTGTAGA	22	1	
hsa|miR-769-5p|nat|as|	AGCTCAGAACCCAGAGGTCTCA	22	1	

hsa|miR-769-5p|2mut|as|	AG[C-g]TCAGAACCCAGAGGTC[T-a]CA	22	1	
hsa|miR-769-3p|nat|as|	AACCAAGACCCCGGAGATCCCAG	23	1	
hsa|miR-769-3p|2mut|as|	AACCAAG[A-t]CCCCGGAGATC[C-g]CAG	23	1	
hsa|miR-766|nat|as|	GCTGAGGCTGTGGGGCTGGAGT	22	1	
hsa|miR-766|2mut|as|	GC[T-a]GAGG[C-g]TGTGGGGCTGGAGT	22	1	
hsa|miR-802|nat|as|	ACAAGGATGAATCTTTGTTACTG	23	1	
hsa|miR-802|2mut|as|	ACAAGGAT[G-c]AAT[C-g]TTTGTTACTG	23	1	
hsa|miR-1298|nat|as|	TACATCTGGACAGCCGAATGAA	22	1	
hsa|miR-1298|2mut|as|	TACATCTGGA[C-g]AGCCGAA[T-a]GAA	22	1	
hsa|miR-2113|nat|as|	GTGACAGAGCCAAGCACAAAT	21	1	
hsa|miR-2113|2mut|as|	GTGACAGAG[C-g]CAAGC[A-t]CAAAT	21	1	
hsa|miR-744|nat|as|	TGCTGTTAGCCCTAGCCCCGCA	22	1	
hsa|miR-744|2mut|as|	TGCT[G-c]TTAGCCCTAG[C-g]CCCGCA	22	1	
hsa|miR-216b|nat|as|	TCACATTTGCCTGCAGAGATTT	22	1	
hsa|miR-216b|2mut|as|	TCA[C-g]ATTTGCCTGCAG[A-t]GATTT	22	1	
hsa|miR-760|nat|as|	TCCCCACAGACCCAGAGCCG	20	1	
hsa|miR-760|2mut|as|	TC[C-g]CCACAGACCC[A-t]GAGCCG	20	1	
hsa|miR-708|nat|as|	CCCAGCTAGATTGTAAGCTCCTT	23	1	
hsa|miR-708|2mut|as|	CC[C-g]AGCTAGATTGTAAGCT[C-g]CTT	23	1	
hsa|miR-765|nat|as|	CATCACCTTCCTTCTCCTCCA	21	1	
hsa|miR-765|2mut|as|	CAT[C-g]ACCTTCCTTCTC[C-g]TCCA	21	1	
hsa|miR-770-5p|nat|as|	TGGCCCTGACACGTGGTACTGGA	23	1	
hsa|miR-770-5p|2mut|as|	TGGCCC[T-a]GACA[C-g]GTGGTACTGGA	23	1	
hsa|miR-675|nat|as|	CACTGTGGGCCCTCTCCGCACCA	23	1	
hsa|miR-675|2mut|as|	CACTGTGGG[C-g]CCTCTCCG[C-g]ACCA	23	1	
hsa|miR-190b|nat|as|	AACCCAATATCAAACATATCA	21	1	
hsa|miR-190b|2mut|as|	AACCCAATATCAAA[C-g]ATA[T-a]CA	21	1	
hsa|miR-874|nat|as|	TCGGTCCCTCGGGCCAGGGCAG	22	1	
hsa|miR-874|2mut|as|	TCGGTCCC[T-a]CGGG[C-g]CAGGGCAG	22	1	
hsa|miR-147b|nat|as|	TAGCAGAAGCATTTCCGCACAC	22	1	
hsa|miR-147b|2mut|as|	TAGCAGAAGC[A-t]TTTCCGCA[C-g]AC	22	1	
hsa|miR-298|nat|as|	TGGGAGAACCTCCCTGCTTCTGCT	24	1	
hsa|miR-298|2mut|as|	TGGGA[G-c]AACCTCCCTG[C-g]TTCTGCT	24	1	
hsa|miR-891a|nat|as|	TCAGTGGCTCAGGTTCGTTGCA	22	1	
hsa|miR-891a|2mut|as|	TCAGTGGCTCAGGTT[C-g]GTT[G-c]CA	22	1	
hsa|miR-300|nat|as|	AGAGAGAGTCTGCCCTTGTATA	22	1	
hsa|miR-300|2mut|as|	AGAGAGAGTCTG[C-g]CCTTG[T-a]ATA	22	1	

hsa|miR-886-5p|nat|as|	CCGCTTGAGCTAACTCCGACCCG	23	1	
hsa|miR-886-5p|2mut|as|	CC[G-c]CTTGAGCTAACTCCGAC[C-g]CG	23	1	
hsa|miR-886-3p|nat|as|	AAGGGTCAGTAAGCACCCGCG	21	1	
hsa|miR-886-3p|2mut|as|	AA[G-c]GGTCAGTAAGCACC[C-g]GCG	21	1	
hsa|miR-892a|nat|as|	CTACGCAGAAAGGACACAGTG	21	1	
hsa|miR-892a|2mut|as|	CTACGCA[G-c]AAAGGACA[C-g]AGTG	21	1	
hsa|miR-220b|nat|as|	AAGTGTCAGACACGGTGGTGG	21	1	
hsa|miR-220b|2mut|as|	AAGTGTC[A-t]GACAC[G-c]GTGGTGG	21	1	
hsa|miR-450b-5p|nat|as|	TATTCAGGAACATATTGCAAAA	22	1	
hsa|miR-450b-5p|2mut|as|	TATTCAGGAACAT[A-t]TTG[C-g]AAAA	22	1	
hsa|miR-450b-3p|nat|as|	TATGGATGCAAAATGATCCCAA	22	1	
hsa|miR-450b-3p|2mut|as|	TATGGATGCAA[A-t]ATGATCC[C-g]AA	22	1	
hsa|miR-890|nat|as|	CAACTGATGCCTTTCCAAGTA	21	1	
hsa|miR-890|2mut|as|	CAACTGAT[G-c]CCTTTC[C-g]AAGTA	21	1	
hsa|miR-891b|nat|as|	TCAATGACTCAGGTAAGTTGCA	22	1	
hsa|miR-891b|2mut|as|	TCAATGA[C-g]TCA[G-c]GTAAGTTGCA	22	1	
hsa|miR-220c|nat|as|	AGTCTTCACAACAGCCCTGTGT	22	1	
hsa|miR-220c|2mut|as|	AGTCTT[C-g]ACAACAGCC[C-g]TGTGT	22	1	
hsa|miR-888|nat|as|	TGACTGACAGCTTTTTGAGTA	21	1	
hsa|miR-888|2mut|as|	TGA[C-g]TGACAGCTTTTT[G-c]AGTA	21	1	
hsa|miR-892b|nat|as|	TCTACCCAGAAAGGAGCCAGTG	22	1	
hsa|miR-892b|2mut|as|	TCTA[C-g]CCAGAAAGGAGCC[A-t]GTG	22	1	
hsa|miR-541|nat|as|	AGTCCAGATTCTGTGCCCACCA	22	1	
hsa|miR-541|2mut|as|	AGTCCAGATTCTG[T-a]GCC[C-g]ACCA	22	1	
hsa|miR-889|nat|as|	ACAATGGTTGTCCGATATTAA	21	1	
hsa|miR-889|2mut|as|	ACAA[T-a]GGTTGTC[C-g]GATATTAA	21	1	
hsa|miR-875-5p|nat|as|	CACCTGATAAAACTGAGGTATA	22	1	
hsa|miR-875-5p|2mut|as|	CACCTG[A-t]TAAAA[C-g]TGAGGTATA	22	1	
hsa|miR-875-3p|nat|as|	CACAACCTCAGTGTTTCCAGG	21	1	
hsa|miR-875-3p|2mut|as|	CACA[A-t]CCTCAGTGTTTC[C-g]AGG	21	1	
hsa|miR-876-5p|nat|as|	TGGTGATTCACAAAGAAATCCA	22	1	
hsa|miR-876-5p|2mut|as|	TGGTGA[T-a]TCACAAAGAAAT[C-g]CA	22	1	
hsa|miR-876-3p|nat|as|	TGAATTACTTTGTAAACCACCA	22	1	
hsa|miR-876-3p|2mut|as|	TG[A-t]ATTACTTTGTAAA[C-g]CACCA	22	1	
hsa|miR-873|nat|as|	AGGAGACTCACAAGTTCCTGC	21	1	
hsa|miR-873|2mut|as|	AGGAG[A-t]CTCA[C-g]AAGTTCCTGC	21	1	
hsa|miR-208b|nat|as|	ACAAACCTTTTGTTCGTCTTAT	22	1	

hsa|miR-208b|2mut|as|	ACAAA[C-g]CTTTTGTTCGTC[T-a]TAT	22	1	
hsa|miR-877|nat|as|	CCCTGCGCCATCTCCTCTAC	20	1	
hsa|miR-877|2mut|as|	CCCT[G-c]CGCCATCTC[C-g]TCTAC	20	1	
hsa|miR-885-5p|nat|as|	AGAGGCAGGGTAGTGTAATGGA	22	1	
hsa|miR-885-5p|2mut|as|	AGAGG[C-g]AGGGT[A-t]GTGTAATGGA	22	1	
hsa|miR-885-3p|nat|as|	TATCCACTACACCCCGCTGCCT	22	1	
hsa|miR-885-3p|2mut|as|	TATC[C-g]ACTACACCCCG[C-g]TGCCT	22	1	
hsa|miR-887|nat|as|	CCTCGGGATGGCGCCCGTTCAC	22	1	
hsa|miR-887|2mut|as|	CCTCGGG[A-t]TGG[C-g]GCCCGTTCAC	22	1	
hsa|miR-665|nat|as|	AGGGGCCTCAGCCTCCTGGT	20	1	
hsa|miR-665|2mut|as|	AGGGG[C-g]CTC[A-t]GCCTCCTGGT	20	1	
hsa|miR-301b|nat|as|	GCTTTGACAATATCATTGCACTG	23	1	
hsa|miR-301b|2mut|as|	GCTTTGACA[A-t]TAT[C-g]ATTGCACTG	23	1	
hsa|miR-920|nat|as|	TACTGCTTCCACAGCTCCCC	20	1	
hsa|miR-920|2mut|as|	TACT[G-c]CTTCCACAGCTC[C-g]CC	20	1	
hsa|miR-921|nat|as|	GAATCCTGGTTCTGTCCCTCACTAG	25	1	
hsa|miR-921|2mut|as|	GAATCCT[G-c]GTTCTGT[C-g]CCTCACTAG	25	1	
hsa|miR-922|nat|as|	GACGTAGTCCTATTCTCTGCTGC	23	1	
hsa|miR-922|2mut|as|	GACGTA[G-c]TCCTATTCTCTG[C-g]TGC	23	1	
hsa|miR-924|nat|as|	GCAAGACATCACAAGACTCT	20	1	
hsa|miR-924|2mut|as|	GCAAGACATCA[C-g]AAGAC[T-a]CT	20	1	
hsa|miR-509-3-5p|nat|as|	CATGATTGCCACGTCTGCAGTA	22	1	
hsa|miR-509-3-5p|2mut|as|	CATGATTGC[C-g]ACGT[C-g]TGCAGTA	22	1	
hsa|miR-933|nat|as|	GGGAGAGGTCTCCCTGCGCACA	22	1	
hsa|miR-933|2mut|as|	GGGAG[A-t]GGTCTCCCTG[C-g]GCACA	22	1	
hsa|miR-934|nat|as|	CCAGTGTCTCCAGTAGTAGACA	22	1	
hsa|miR-934|2mut|as|	CCAGTGTCTC[C-g]AGTAG[T-a]AGACA	22	1	
hsa|miR-935|nat|as|	GCGGTAGCGGAAGCGGTAACTGG	23	1	
hsa|miR-935|2mut|as|	GCGGTAGCGGAAGC[G-c]GTAA[C-g]TGG	23	1	
hsa|miR-936|nat|as|	CTGCGATTCCTCCCTCTACTGT	22	1	
hsa|miR-936|2mut|as|	CT[G-c]CGATTC[C-g]TCCCTCTACTGT	22	1	
hsa|miR-937|nat|as|	GGCAGAGAGTCAGAGCGCGGAT	22	1	
hsa|miR-937|2mut|as|	GG[C-g]AGAGAGTCAGAGCGCG[G-c]AT	22	1	
hsa|miR-938|nat|as|	ACTGGGTTCACCTTTAAGGGCA	22	1	
hsa|miR-938|2mut|as|	ACTGGGTTCA[C-g]CTT[T-a]AAGGGCA	22	1	
hsa|miR-939|nat|as|	CACCCCCAGAGCCTCAGCTCCCCA	24	1	
hsa|miR-939|2mut|as|	CA[C-g]CCCCAGAGCCTCAGCTCC[C-g]CA	24	1	

hsa|miR-940|nat|as|	GGGGAGCGGGGGCCCTGCCTT	21	1	
hsa|miR-940|2mut|as|	GGGGAGC[G-c]GGGGC[C-g]CTGCCTT	21	1	
hsa|miR-941|nat|as|	GCACATGTGCACACAGCCGGGTG	23	1	
hsa|miR-941|2mut|as|	GCACATGTG[C-g]ACACAGCC[G-c]GGTG	23	1	
hsa|miR-942|nat|as|	CACATGGCCAAAACAGAGAAGA	22	1	
hsa|miR-942|2mut|as|	CA[C-g]ATGGCCAAAACAGAG[A-t]AGA	22	1	
hsa|miR-943|nat|as|	CTGGAGGACGGCAACAGTCAG	21	1	
hsa|miR-943|2mut|as|	CTGG[A-t]GGACGG[C-g]AACAGTCAG	21	1	
hsa|miR-944|nat|as|	CTCATCCGATGTACAATAATTT	22	1	
hsa|miR-944|2mut|as|	CTCATCCGATGTA[C-g]AAT[A-t]ATTT	22	1	
hsa|miR-297|nat|as|	CATGCACATGCACACATACAT	21	1	
hsa|miR-297|2mut|as|	CATGCA[C-g]ATGCACAC[A-t]TACAT	21	1	
hsa|miR-1178|nat|as|	CTAGGGAAGAACAGTGAGCAA	21	1	
hsa|miR-1178|2mut|as|	CTAGGGA[A-t]GAACAGTGAG[C-g]AA	21	1	
hsa|miR-1179|nat|as|	CCAACCAATGAAAGAATGCTT	21	1	
hsa|miR-1179|2mut|as|	CCAA[C-g]CAATGAAAGAATG[C-g]TT	21	1	
hsa|miR-1180|nat|as|	ACACACCCACGCGAGCCGGAAA	22	1	
hsa|miR-1180|2mut|as|	ACACACCCA[C-g]GCGAGC[C-g]GGAAA	22	1	
hsa|miR-1181|nat|as|	CGGCTCGGGTGGCGGCGACGG	21	1	
hsa|miR-1181|2mut|as|	CGGCT[C-g]GGGTGG[C-g]GGCGACGG	21	1	
hsa|miR-1182|nat|as|	GTCACATCCCTCCCAAGACCCTC	23	1	
hsa|miR-1182|2mut|as|	GTCACATCCCTCC[C-g]AAGACC[C-g]TC	23	1	
hsa|miR-1183|nat|as|	TGCCCACTCTCACCATCACCTACAGTG	27	1	
hsa|miR-1183|2mut|as|	TGCCCACTCTCA[C-g]CATCA[C-g]CTACAGTG	27	1	
hsa|miR-1184|nat|as|	GGAAGCCATCAAGTCGCTGCAGG	23	1	
hsa|miR-1184|2mut|as|	GGAAGC[C-g]ATCAAGT[C-g]GCTGCAGG	23	1	
hsa|miR-1197|nat|as|	AGAAGTAGACCATGTGTCCTA	21	1	
hsa|miR-1197|2mut|as|	AGAAGTAGACCAT[G-c]TGTC[C-g]TA	21	1	
ptr|miR-1224-5p|nat|as|	ACCCTCCACCTCCCGAGTCCTCAC	24	1	
ptr|miR-1224-5p|2mut|as|	ACCC[T-a]CCACCTCC[C-g]GAGTCCTCAC	24	1	
hsa|miR-1225-5p|nat|as|	CCCCCCACTGGGCCGTACCCAC	22	1	
hsa|miR-1225-5p|2mut|as|	CCCC[C-g]CACTGGG[C-g]CGTACCCAC	22	1	
hsa|miR-1225-3p|nat|as|	CTGGGGGCGGCACAGGGGCTCA	22	1	
hsa|miR-1225-3p|2mut|as|	CTGGGGGC[G-c]GCACAGGGG[C-g]TCA	22	1	
mml|miR-1225-5p|nat|as|	CCCCCACTGGGCCGTACCCAC	21	1	
mml|miR-1225-5p|2mut|as|	CCCCCAC[T-a]GGG[C-g]CGTACCCAC	21	1	
mml|miR-1225-3p|nat|as|	CTGGGGGCGGCACAGGGGCTCAG	23	1	

mml|miR-1225-3p|2mut|as|	CTG[G-c]GGGCGGCACAGGGG[C-g]TCAG	23	1	
hsa|miR-1226|nat|as|	CTAGGGAACACAGGGCTGGTGA	22	1	
hsa|miR-1226|2mut|as|	CTAG[G-c]GAACACAGGG[C-g]TGGTGA	22	1	
hsa|miR-1227|nat|as|	CTGGGGAAAAGGGTGGCACG	20	1	
hsa|miR-1227|2mut|as|	CTGGG[G-c]AAAAGGGTGG[C-g]ACG	20	1	
mml|miR-1227|nat|as|	CCACCACCGCCTGGCCCCAC	20	1	
mml|miR-1227|2mut|as|	CCACCA[C-g]CGCC[T-a]GGCCCCAC	20	1	
hsa|miR-1228|nat|as|	GGGGGGCGAGGCAGGTGTGA	20	1	
hsa|miR-1228|2mut|as|	GG[G-c]GGG[C-g]GAGGCAGGTGTGA	20	1	
hsa|miR-1229|nat|as|	CTGTGGGAGGGCAGTGGTGAGAG	23	1	
hsa|miR-1229|2mut|as|	CTGTGG[G-c]AGGG[C-g]AGTGGTGAGAG	23	1	
mml|miR-1230|nat|as|	TCCGAGATGCCCCCACCCAC	20	1	
mml|miR-1230|2mut|as|	TC[C-g]GAGATG[C-g]CCCCACCCAC	20	1	
hsa|miR-1231|nat|as|	GCAGCTGTCCGCCCAGACAC	20	1	
hsa|miR-1231|2mut|as|	GC[A-t]GCTGTCCGCCCAGA[C-g]AC	20	1	
mml|miR-1232|nat|as|	CTGCGGGGTGGTCGGGGTCAG	21	1	
mml|miR-1232|2mut|as|	CTGCGGGGTGGT[C-g]GGGGT[C-g]AG	21	1	
hsa|miR-1233|nat|as|	CTGCGGGAGGACAGGGCTCA	20	1	
hsa|miR-1233|2mut|as|	CTG[C-g]GGGAGGACAG[G-c]GCTCA	20	1	
hsa|miR-1234|nat|as|	GTGGGGTGGGTGGTCAGGCCGA	22	1	
hsa|miR-1234|2mut|as|	GTGGGGTGGGTGGTC[A-t]GGC[C-g]GA	22	1	
mml|miR-1235|nat|as|	CTGGGGGACGGTGCGGTTAGA	21	1	
mml|miR-1235|2mut|as|	CTGGGGGA[C-g]GGTGC[G-c]GTTAGA	21	1	
hsa|miR-1236|nat|as|	CTGGAGAGACAAGGGGAAGAGG	22	1	
hsa|miR-1236|2mut|as|	CT[G-c]GAGAGA[C-g]AAGGGGAAGAGG	22	1	
hsa|miR-1237|nat|as|	CTGGGGGACGGAGCAGAAGGA	21	1	
hsa|miR-1237|2mut|as|	CT[G-c]GGGGA[C-g]GGAGCAGAAGGA	21	1	
hsa|miR-1238|nat|as|	GGGGCAGACAGACGAGGAAG	20	1	
hsa|miR-1238|2mut|as|	GGGG[C-g]AGACAGACGA[G-c]GAAG	20	1	
mml|miR-1239|nat|as|	CTAGGCCAGGCAGAATGGGGAA	22	1	
mml|miR-1239|2mut|as|	CTA[G-c]GCCAGG[C-g]AGAATGGGGAA	22	1	
mml|miR-1240|nat|as|	AGTGGGATCAGGGTCATGGTGA	22	1	
mml|miR-1240|2mut|as|	AGTGGGA[T-a]CAGGGT[C-g]ATGGTGA	22	1	
mml|miR-1241|nat|as|	CTGGAAGGCACAGAGAGGTGAG	22	1	
mml|miR-1241|2mut|as|	CTGGAAGG[C-g]ACAGA[G-c]AGGTGAG	22	1	
hsa|miR-1200|nat|as|	GAGGCTCAGAATGGCTCAGGAG	22	1	
hsa|miR-1200|2mut|as|	GAGGCT[C-g]AGAATGGCT[C-g]AGGAG	22	1	

hsa|miR-1201|nat|as|	TCAGAGCATGTGTTTAATCAGGCT	24	1	
hsa|miR-1201|2mut|as|	TCAGAG[C-g]ATGTGTTTAATCA[G-c]GCT	24	1	
hsa|miR-1202|nat|as|	CTCCCCCACTGCAGCTGGCAC	21	1	
hsa|miR-1202|2mut|as|	CTCC[C-g]CCACTGC[A-t]GCTGGCAC	21	1	
hsa|miR-1203|nat|as|	GAGCTGCATCCTGGCTCCGGG	21	1	
hsa|miR-1203|2mut|as|	GAGCTGCATC[C-g]TGGCTCC[G-c]GG	21	1	
hsa|miR-663b|nat|as|	CCTCAGGCACGGCCGGGCCACC	22	1	
hsa|miR-663b|2mut|as|	CCTCAGGCACGGC[C-g]GGGCC[A-t]CC	22	1	
hsa|miR-1204|nat|as|	ATAATGGAGACCAGGCCACGA	21	1	
hsa|miR-1204|2mut|as|	ATAATGGAGA[C-g]CAGGC[C-g]ACGA	21	1	
hsa|miR-1205|nat|as|	CTCAAAGCAAACCCTGCAGA	20	1	
hsa|miR-1205|2mut|as|	CTCAAAGCA[A-t]ACC[C-g]TGCAGA	20	1	
hsa|miR-1206|nat|as|	GCTTAAACATCTACATGAACA	21	1	
hsa|miR-1206|2mut|as|	GCTTAAA[C-g]ATCT[A-t]CATGAACA	21	1	
hsa|miR-1207-5p|nat|as|	CCCCTCCCAGCCTCCCTGCCA	21	1	
hsa|miR-1207-5p|2mut|as|	CC[C-g]CTCCC[A-t]GCCTCCCTGCCA	21	1	
hsa|miR-1207-3p|nat|as|	GAAATGAGGGCCAGCTGA	18	1	
hsa|miR-1207-3p|2mut|as|	GAAA[T-a]GAGGG[C-g]CAGCTGA	18	1	
hsa|miR-1208|nat|as|	TCCGCCTGTCTGAACAGTGA	20	1	
hsa|miR-1208|2mut|as|	TCCGCCTGT[C-g]TGAACAG[T-a]GA	20	1	
hsa|miR-548e|nat|as|	TGCAAAAGTAGTCTCAGTTTTT	22	1	
hsa|miR-548e|2mut|as|	TG[C-g]AAAAGTAGTCTCAG[T-a]TTTT	22	1	
hsa|miR-548j|nat|as|	ACCAAAGACCGCAATTACTTTT	22	1	
hsa|miR-548j|2mut|as|	ACCAAAGAC[C-g]GCA[A-t]TTACTTTT	22	1	
hsa|miR-1285|nat|as|	AGGTCTCACTTTGTTGCCCAGA	22	1	
hsa|miR-1285|2mut|as|	AGGTCT[C-g]ACTTTGTTGCC[C-g]AGA	22	1	
hsa|miR-1286|nat|as|	AGGGCTCATCTTGGTCCTGCA	21	1	
hsa|miR-1286|2mut|as|	AGGG[C-g]TCATCTTGGTCCT[G-c]CA	21	1	
hsa|miR-1287|nat|as|	GACTCGAACCACTGATCCAGCA	22	1	
hsa|miR-1287|2mut|as|	GA[C-g]TCGAA[C-g]CACTGATCCAGCA	22	1	
hsa|miR-1289|nat|as|	AAAATGCAGATTCCTGGACTCCA	23	1	
hsa|miR-1289|2mut|as|	AAA[A-t]TGCAGATTC[C-g]TGGACTCCA	23	1	
hsa|miR-1290|nat|as|	TCCCTGATCCAAAAATCCA	19	1	
hsa|miR-1290|2mut|as|	TCCCTGATC[C-g]AAAAAT[C-g]CA	19	1	
hsa|miR-1291|nat|as|	ACTGCTGGTCTTCAGTCAGGGCCA	24	1	
hsa|miR-1291|2mut|as|	ACTGCTGGTCT[T-a]CAGT[C-g]AGGGCCA	24	1	
hsa|miR-548k|nat|as|	AGCAAAATCCGCAAGTACTTTT	22	1	

hsa|miR-548k|2mut|as|	AGCAAA[A-t]TCCGCAAGTA[C-g]TTTT	22	1	
hsa|miR-1293|nat|as|	GCACAAATCTCCAGACCACCCA	22	1	
hsa|miR-1293|2mut|as|	GCACAAAT[C-g]TCCAGACC[A-t]CCCA	22	1	
hsa|miR-1294|nat|as|	AGACAACAATGCCAACCTCACA	22	1	
hsa|miR-1294|2mut|as|	AGACAA[C-g]AATGC[C-g]AACCTCACA	22	1	
hsa|miR-1295|nat|as|	TCACCCAGATCTGCGGCCTAA	21	1	
hsa|miR-1295|2mut|as|	TCACCC[A-t]GAT[C-g]TGCGGCCTAA	21	1	
hsa|miR-1297|nat|as|	CACCTGAATTACTTGAA	17	1	
hsa|miR-1297|2mut|as|	CACCTGA[A-t]TTA[C-g]TTGAA	17	1	
hsa|miR-1299|nat|as|	TCCCTCACACAGAATTCCAGAA	22	1	
hsa|miR-1299|2mut|as|	TCCCTCACA[C-g]AGAA[T-a]TCCAGAA	22	1	
hsa|miR-1300|nat|as|	CAGCAGCCTCCTTCTCAA	18	1	
hsa|miR-1300|2mut|as|	CAGC[A-t]GCCTCCTT[C-g]TCAA	18	1	
hsa|miR-548l|nat|as|	GACAAAACCCGCAAATACTTTT	22	1	
hsa|miR-548l|2mut|as|	GAC[A-t]AAA[C-g]CCGCAAATACTTTT	22	1	
hsa|miR-1302|nat|as|	TTTAGCATAAGTATGTCCCAA	21	1	
hsa|miR-1302|2mut|as|	TTTAGCATA[A-t]GTATGTCC[C-g]AA	21	1	
hsa|miR-1303|nat|as|	AGAGCAAGACCCCGTCTCTAAA	22	1	
hsa|miR-1303|2mut|as|	AGAG[C-g]AAGACCCCGTCTCT[A-t]AA	22	1	
hsa|miR-1304|nat|as|	CACATCTCACTGTAGCCTCAAA	22	1	
hsa|miR-1304|2mut|as|	CA[C-g]ATCTCACTGTAGCCTC[A-t]AA	22	1	
hsa|miR-1305|nat|as|	TCTCTCCCATTAGAGTTGAAAA	22	1	
hsa|miR-1305|2mut|as|	TCTCTCC[C-g]ATTAGAGTTGA[A-t]AA	22	1	
hsa|miR-1243|nat|as|	CACTCCTATAATTGATCCAGTT	22	1	
hsa|miR-1243|2mut|as|	CACTC[C-g]TATA[A-t]TTGATCCAGTT	22	1	
hsa|miR-548f|nat|as|	AAAAGTAATTACAGTTTTT	19	1	
hsa|miR-548f|2mut|as|	AAAAGT[A-t]ATTA[C-g]AGTTTTT	19	1	
hsa|miR-1244|nat|as|	AACCATCTCATACAAACCAACTACTT	26	1	
hsa|miR-1244|2mut|as|	AAC[C-g]ATCTCATA[C-g]AAACCAACTACTT	26	1	
hsa|miR-1245|nat|as|	ATGTAGGCCTTTAGATCACTT	21	1	
hsa|miR-1245|2mut|as|	ATGTAGGC[C-g]TTTAGATC[A-t]CTT	21	1	
hsa|miR-1246|nat|as|	CCTGCTCCAAAAATCCATT	19	1	
hsa|miR-1246|2mut|as|	CCTGCTCCAA[A-t]AAT[C-g]CATT	19	1	
hsa|miR-1247|nat|as|	TCCGGGGACGAACGGGACGGGT	22	1	
hsa|miR-1247|2mut|as|	TCCGG[G-c]GACGAA[C-g]GGGACGGGT	22	1	
hsa|miR-1248|nat|as|	TTTAGCACAGTGCTTATACAAGAAGGT	27	1	
hsa|miR-1248|2mut|as|	TTTAGCACAGTGCT[T-a]ATA[C-g]AAGAAGGT	27	1	

hsa|miR-1249|nat|as|	TGAAGAAGGGGGGGAAGGGCGT	22	1	
hsa|miR-1249|2mut|as|	TGAAGAAG[G-c]GGGGGAAGGG[C-g]GT	22	1	
hsa|miR-1250|nat|as|	AAAGGCCACATCCAGCACCGT	21	1	
hsa|miR-1250|2mut|as|	AAAGGCCACA[T-a]CCAGCA[C-g]CGT	21	1	
hsa|miR-1251|nat|as|	AGCGCCTTTGGCAGCTAGAGT	21	1	
hsa|miR-1251|2mut|as|	AGCG[C-g]CTTTGGCAG[C-g]TAGAGT	21	1	
hsa|miR-1253|nat|as|	TGCAGGCTGATCTTCTTCTCT	21	1	
hsa|miR-1253|2mut|as|	TGCAGGCTGAT[C-g]TTCT[T-a]CTCT	21	1	
hsa|miR-1254|nat|as|	ACTGCAGGCTCCAGCTTCCAGGCT	24	1	
hsa|miR-1254|2mut|as|	ACT[G-c]CAGGCTC[C-g]AGCTTCCAGGCT	24	1	
hsa|miR-1255a|nat|as|	AATCTACTTTCTTTGCTCATCCT	23	1	
hsa|miR-1255a|2mut|as|	AATCTA[C-g]TTT[C-g]TTTGCTCATCCT	23	1	
hsa|miR-1256|nat|as|	AGCTAGTGAGAAGTCAATGCCT	22	1	
hsa|miR-1256|2mut|as|	AGCTAGT[G-c]AGAAGTCAATG[C-g]CT	22	1	
hsa|miR-1257|nat|as|	GGTCAGAACCCATCATTCACT	21	1	
hsa|miR-1257|2mut|as|	GG[T-a]CAGAACCCATCATT[C-g]ACT	21	1	
hsa|miR-1258|nat|as|	TTCCACGACCTAATCCTAACT	21	1	
hsa|miR-1258|2mut|as|	TTC[C-g]ACGACCTAA[T-a]CCTAACT	21	1	
hsa|miR-1259|nat|as|	AAAAGCTAAGTCATCATATAT	21	1	
hsa|miR-1259|2mut|as|	AAAAGCTAAGT[C-g]ATC[A-t]TATAT	21	1	
hsa|miR-1260|nat|as|	TGGTGGCAGAGGTGGGAT	18	1	
hsa|miR-1260|2mut|as|	TGGTGG[C-g]AGAGGTGG[G-c]AT	18	1	
hsa|miR-548g|nat|as|	GTACAAAAGTAATTACAGTTTT	22	1	
hsa|miR-548g|2mut|as|	GTA[C-g]AAAAGTAA[T-a]TACAGTTTT	22	1	
hsa|miR-1261|nat|as|	AAGCCAAAGCCTTATCCAT	19	1	
hsa|miR-1261|2mut|as|	AAGC[C-g]AAAGCCTTATC[C-g]AT	19	1	
hsa|miR-1262|nat|as|	ATCCTTCTACAAATTCACCCAT	22	1	
hsa|miR-1262|2mut|as|	ATCCTTCTACAA[A-t]TTCA[C-g]CCAT	22	1	
hsa|miR-1263|nat|as|	ACTCAGTATGCCAGGGTACCAT	22	1	
hsa|miR-1263|2mut|as|	ACTCAGTATGC[C-g]AGGG[T-a]ACCAT	22	1	
hsa|miR-548n|nat|as|	ACAAAATCCACAATTACTTTTG	22	1	
hsa|miR-548n|2mut|as|	ACAAAAT[C-g]CAC[A-t]ATTACTTTTG	22	1	
hsa|miR-548m|nat|as|	CAAAAACCACAAATACCTTTG	21	1	
hsa|miR-548m|2mut|as|	CAAAAA[C-g]CACA[A-t]ATACCTTTG	21	1	
hsa|miR-1265|nat|as|	AACAACACTTGACCACATCCTG	22	1	
hsa|miR-1265|2mut|as|	AACAACACTTGA[C-g]CACATC[C-g]TG	22	1	
hsa|miR-548o|nat|as|	GCAAAAGTAACTGCAGTTTTGG	22	1	

hsa|miR-548o|2mut|as|	GCAAAAG[T-a]AACTG[C-g]AGTTTTGG	22	1	
hsa|miR-1266|nat|as|	AGCCCTGTTCTACAGCCCTGAGG	23	1	
hsa|miR-1266|2mut|as|	AG[C-g]CCTGTTCTACAGCCCT[G-c]AGG	23	1	
hsa|miR-1267|nat|as|	TGGGGATTACACTTCAACAGG	21	1	
hsa|miR-1267|2mut|as|	TGGGG[A-t]TTA[C-g]ACTTCAACAGG	21	1	
hsa|miR-1268|nat|as|	CCCCCACCACCACGCCCG	18	1	
hsa|miR-1268|2mut|as|	CCCCCACC[A-t]CCACG[C-g]CCG	18	1	
hsa|miR-1269|nat|as|	CCAGTAGCACGGCTCAGTCCAG	22	1	
hsa|miR-1269|2mut|as|	CCAG[T-a]AGCACGG[C-g]TCAGTCCAG	22	1	
hsa|miR-1270|nat|as|	ACACAGCTCTTCCATATCTCCAG	23	1	
hsa|miR-1270|2mut|as|	ACACAG[C-g]TCTTCCAT[A-t]TCTCCAG	23	1	
hsa|miR-1272|nat|as|	TTTCAGAATTTGCTGCCATCATCATC	26	1	
hsa|miR-1272|2mut|as|	TTTCAGAAT[T-a]TGCTGCCATCAT[C-g]ATC	26	1	
hsa|miR-1273|nat|as|	AAGAAAGAGTCTTGCTTTGTCGCCC	25	1	
hsa|miR-1273|2mut|as|	AAGAAAGAGT[C-g]TTGCTTTGTCG[C-g]CC	25	1	
hsa|miR-1274a|nat|as|	TGGCGCCTGAACAGGGAC	18	1	
hsa|miR-1274a|2mut|as|	TGGCG[C-g]CTGAA[C-g]AGGGAC	18	1	
hsa|miR-548h|nat|as|	GACAAAAACCGCGATTACTTTT	22	1	
hsa|miR-548h|2mut|as|	GACAAAAA[C-g]CGCGATTAC[T-a]TTT	22	1	
hsa|miR-1275|nat|as|	GACAGCCTCTCCCCCAC	17	1	
hsa|miR-1275|2mut|as|	GACAG[C-g]CTC[T-a]CCCCCAC	17	1	
hsa|miR-1276|nat|as|	TGTCTCCACAGGGCTCTTTA	20	1	
hsa|miR-1276|2mut|as|	TGT[C-g]TCCA[C-g]AGGGCTCTTTA	20	1	
hsa|miR-302e|nat|as|	AAGCATGGAAGCACTTA	17	1	
hsa|miR-302e|2mut|as|	AAGCATGG[A-t]AGCA[C-g]TTA	17	1	
hsa|miR-302f|nat|as|	AAACATGGAAGCAATTA	17	1	
hsa|miR-302f|2mut|as|	AAA[C-g]ATGGA[A-t]GCAATTA	17	1	
hsa|miR-1277|nat|as|	AAAATACATATATATCTACGTA	22	1	
hsa|miR-1277|2mut|as|	AAAATACA[T-a]ATATATCTA[C-g]GTA	22	1	
hsa|miR-548p|nat|as|	AAAGTAACTGCAGTTTTTGCTA	22	1	
hsa|miR-548p|2mut|as|	AAAGTAA[C-g]TGCAGTTTTTG[C-g]TA	22	1	
hsa|miR-548i|nat|as|	GGCAAAATCCGCAATTACTTTT	22	1	
hsa|miR-548i|2mut|as|	GG[C-g]AAAATCCGCAATTAC[T-a]TTT	22	1	
hsa|miR-1278|nat|as|	ATAGATGATATGCACAGTACTA	22	1	
hsa|miR-1278|2mut|as|	ATAGATGATATGCA[C-g]AGT[A-t]CTA	22	1	
hsa|miR-1279|nat|as|	AGAAAGAAGCAATATGA	17	1	
hsa|miR-1279|2mut|as|	AGAAAGAAG[C-g]AAT[A-t]TGA	17	1	

hsa|miR-1274b|nat|as|	TGGCGCCCGAACAGGGA	17	1	
hsa|miR-1274b|2mut|as|	TGGCGC[C-g]CGAA[C-g]AGGGA	17	1	
hsa|miR-1281|nat|as|	GGGAGAGGAGGAGGCGA	17	1	
hsa|miR-1281|2mut|as|	GGGAGAGG[A-t]GGAGG[C-g]GA	17	1	
hsa|miR-1282|nat|as|	AAGCAGAAAAAGGCAAACGA	20	1	
hsa|miR-1282|2mut|as|	AAGCA[G-c]AAAAAGG[C-g]AAACGA	20	1	
hsa|miR-1284|nat|as|	GAAAAGCCAGGGTCTGTATAGA	22	1	
hsa|miR-1284|2mut|as|	GAAAAGC[C-g]AGGGTCT[G-c]TATAGA	22	1	
hsa|miR-1288|nat|as|	TCTCCAGATCAGGGCAGTCCA	21	1	
hsa|miR-1288|2mut|as|	TCT[C-g]CAGATCAGGG[C-g]AGTCCA	21	1	
hsa|miR-1292|nat|as|	CAGCGTCTGCCGGAACCCGTTCCCA	25	1	
hsa|miR-1292|2mut|as|	CAGC[G-c]TCTG[C-g]CGGAACCCGTTCCCA	25	1	
hsa|miR-1252|nat|as|	TAAATGAATTCAATTTCCTTCT	22	1	
hsa|miR-1252|2mut|as|	TAAAT[G-c]AATT[C-g]AATTTCCTTCT	22	1	
hsa|miR-1255b|nat|as|	AACCACTTTCTTTGCTCATCCG	22	1	
hsa|miR-1255b|2mut|as|	AACCA[C-g]TTTCTTTGCT[C-g]ATCCG	22	1	
hsa|miR-1280|nat|as|	GGGTGGCAGCGGTGGGA	17	1	
hsa|miR-1280|2mut|as|	GGGTGGCAG[C-g]GGTG[G-c]GA	17	1	
hsa|miR-1308|nat|as|	CCACTGAACCACCCATGC	18	1	
hsa|miR-1308|2mut|as|	CC[A-t]CTGAA[C-g]CACCCATGC	18	1	
hsa|miR-664|nat|as|	TGTAGGCTGGGGATAAATGAATA	23	1	
hsa|miR-664|2mut|as|	TGTAGG[C-g]TGGGGAT[A-t]AATGAATA	23	1	
hsa|miR-1306|nat|as|	CACCACCAGAGCCAACGT	18	1	
hsa|miR-1306|2mut|as|	CACCACC[A-t]GAGC[C-g]AACGT	18	1	
hsa|miR-1307|nat|as|	CACGACCGACGCCACGCCGAGT	22	1	
hsa|miR-1307|2mut|as|	CACGACCGACG[C-g]CACG[C-g]CGAGT	22	1	
age|miR-506|nat|as|	TCTACTCAGAAGGGCGCCATT	21	1	
age|miR-506|2mut|as|	TCTA[C-g]TCAG[A-t]AGGGCGCCATT	21	1	
age|miR-507|nat|as|	TTCACTCTAAAAAGTGCCAAA	21	1	
age|miR-507|2mut|as|	TTCACT[C-g]TAAA[A-t]AGTGCCAAA	21	1	
age|miR-508|nat|as|	TCTACTCAAAAAGGTGACAATCG	23	1	
age|miR-508|2mut|as|	TCTAC[T-a]CAAAAAGGTGA[C-g]AATCG	23	1	
age|miR-509a|nat|as|	TCTACCTGCAGACGTGTCAATCA	23	1	
age|miR-509a|2mut|as|	TCTA[C-g]CTGCAGACGTG[T-a]CAATCA	23	1	
age|miR-509b|nat|as|	TCTATCTGCAGACGTGTCAATCA	23	1	
age|miR-509b|2mut|as|	TCT[A-t]TCTGCAGA[C-g]GTGTCAATCA	23	1	
age|miR-510|nat|as|	CGTGATTGCTACTCTCTGGAGTA	23	1	

age|miR-510|2mut|as|	CGTGATT[G-c]CTACTCT[C-g]TGGAGTA	23	1	
age|miR-513b|nat|as|	ATGAATGACAGCTCCTTGTGAA	22	1	
age|miR-513b|2mut|as|	ATGAATGACAG[C-g]TCC[T-a]TGTGAA	22	1	
age|miR-513c|nat|as|	ATGAATGACACCTTCTTGAGAA	22	1	
age|miR-513c|2mut|as|	ATGAATG[A-t]CACCTT[C-g]TTGAGAA	22	1	
age|miR-513a|nat|as|	ATGAATGACACCTCCTTGTGAA	22	1	
age|miR-513a|2mut|as|	ATGAATGACAC[C-g]TCCT[T-a]GTGAA	22	1	
age|miR-513d|nat|as|	ATAAATGACACCTCGTTGTGAA	22	1	
age|miR-513d|2mut|as|	ATAAATGA[C-g]ACC[T-a]CGTTGTGAA	22	1	
age|miR-513e|nat|as|	ATGAATGGCACCTTCTTGTAA	21	1	
age|miR-513e|2mut|as|	ATGA[A-t]TGGCACCTT[C-g]TTGTAA	21	1	
age|miR-514|nat|as|	CTACTCACAAAAGTGTCAAT	20	1	
age|miR-514|2mut|as|	CTACTCA[C-g]AAAAGTG[T-a]CAAT	20	1	
ssy|miR-508|nat|as|	TCTACTCAAAAGGGCTACAATCA	23	1	
ssy|miR-508|2mut|as|	TCTA[C-g]TCAAAAGGGCT[A-t]CAATCA	23	1	
ssy|miR-509a|nat|as|	TCTACCCACAGACGTACCAATCA	23	1	
ssy|miR-509a|2mut|as|	TCTACCCA[C-g]AGACGTAC[C-g]AATCA	23	1	
ssy|miR-509b|nat|as|	TCTACCTACAGACGTACCAATCA	23	1	
ssy|miR-509b|2mut|as|	TCT[A-t]CCTA[C-g]AGACGTACCAATCA	23	1	
ssy|miR-510|nat|as|	TGTGATTGCCACTCTCCGGAGTA	23	1	
ssy|miR-510|2mut|as|	TGTGATTGCCA[C-g]TCTCCGG[A-t]GTA	23	1	
ssy|miR-513c|nat|as|	GTAAATGACACCTCCTTGGGAA	22	1	
ssy|miR-513c|2mut|as|	GTAAATGA[C-g]ACCTC[C-g]TTGGGAA	22	1	
hsa|miR-513b|nat|as|	ATAAATGACACCTCCTTGTGAA	22	1	
hsa|miR-513b|2mut|as|	ATAAATGAC[A-t]CCT[C-g]CTTGTGAA	22	1	
ptr|miR-513a|nat|as|	ATAAATGACACCTCCCTGTGAA	22	1	
ptr|miR-513a|2mut|as|	AT[A-t]AATGACACCTCC[C-g]TGTGAA	22	1	
ptr|miR-514|nat|as|	CTACTCACAGAAGTGTCAAT	20	1	
ptr|miR-514|2mut|as|	CTACTCA[C-g]AGAAGTG[T-a]CAAT	20	1	
mml|miR-508|nat|as|	TCTACTCAAAAAGGCGACAATCA	23	1	
mml|miR-508|2mut|as|	TCTA[C-g]TCAAAAAGGCG[A-t]CAATCA	23	1	
mml|miR-509|nat|as|	TCTACCCACAGACATACCAATCA	23	1	
mml|miR-509|2mut|as|	TCTACCCACAG[A-t]CATA[C-g]CAATCA	23	1	
ptr|miR-508|nat|as|	TCTACTCAAAAAGGCTACAATCA	23	1	
ptr|miR-508|2mut|as|	TCTACT[C-g]AAAA[A-t]GGCTACAATCA	23	1	
ptr|miR-509a|nat|as|	TCTATCCACAGACGTACCAATCA	23	1	
ptr|miR-509a|2mut|as|	TCTATC[C-g]ACAGACGTA[C-g]CAATCA	23	1	

ptr|miR-509b|nat|as|	TCTACTCACAGACGTACCAATCA	23	1	
ptr|miR-509b|2mut|as|	TC[T-a]ACTCACAGA[C-g]GTACCAATCA	23	1	
ptr|miR-510|nat|as|	TGTGATTGCCACTCTCCTGGGTA	23	1	
ptr|miR-510|2mut|as|	TGTGATTGCCACT[C-g]TCCT[G-c]GGTA	23	1	
ptr|miR-513b|nat|as|	ATAAATGACATCTCCTTGTGAA	22	1	
ptr|miR-513b|2mut|as|	AT[A-t]AATGACATCTC[C-g]TTGTGAA	22	1	
pbi|miR-508|nat|as|	TCTACTCAAAAAGGTGACAATCA	23	1	
pbi|miR-508|2mut|as|	TCTAC[T-a]CAAAAAGGTGA[C-g]AATCA	23	1	
pbi|miR-509|nat|as|	TCTACCCACAGACGTATCAATCA	23	1	
pbi|miR-509|2mut|as|	TCTACC[C-g]ACAGACGTATCAA[T-a]CA	23	1	
pbi|miR-513c|nat|as|	ACAAATGACACCTCCCTGTGAA	22	1	
pbi|miR-513c|2mut|as|	ACAAATGACA[C-g]CTCCC[T-a]GTGAA	22	1	
hsa|miR-513c|nat|as|	ATAAACGACACCTCCTTGAGAA	22	1	
hsa|miR-513c|2mut|as|	ATA[A-t]ACGACA[C-g]CTCCTTGAGAA	22	1	
hsa|miR-1321|nat|as|	ATCACATTCACCTCCCTG	18	1	
hsa|miR-1321|2mut|as|	ATC[A-t]CATTCACCT[C-g]CCTG	18	1	
hsa|miR-1322|nat|as|	CAGCATCAGCAGCATCATC	19	1	
hsa|miR-1322|2mut|as|	CAGCA[T-a]CAG[C-g]AGCATCATC	19	1	
hsa|miR-720|nat|as|	TGGAGGCCCCAGCGAGA	17	1	
hsa|miR-720|2mut|as|	TG[G-c]AGG[C-g]CCCAGCGAGA	17	1	
hsa|miR-1324|nat|as|	GAAAGTGCATAGAATTCTGTCTGG	24	1	
hsa|miR-1324|2mut|as|	GAAAGT[G-c]CATAGAATTCTGT[C-g]TGG	24	1	
hsa|miR-1469|nat|as|	GGAGCCCGCGCCCCGCGCCGAG	22	1	
hsa|miR-1469|2mut|as|	GGAGCCCGCG[C-g]CCC[G-c]CGCCGAG	22	1	
hsa|miR-1470|nat|as|	CGGGGTGCACGGGCGGAGGGC	21	1	
hsa|miR-1470|2mut|as|	CGG[G-c]GTGCA[C-g]GGGCGGAGGGC	21	1	
hsa|miR-1471|nat|as|	ACACCTGGCTCCACACGCGGGC	22	1	
hsa|miR-1471|2mut|as|	ACACC[T-a]GGCTCCACACG[C-g]GGGC	22	1	
hsa|miR-1537|nat|as|	ACAACTGTAACTAGACGGTTTT	22	1	
hsa|miR-1537|2mut|as|	ACAACTGTAA[C-g]TAGA[C-g]GGTTTT	22	1	
hsa|miR-1538|nat|as|	AGGAACAGCAGCAGCCCGGGCCG	23	1	
hsa|miR-1538|2mut|as|	AGGAACAGCAGCAG[C-g]CCG[G-c]GCCG	23	1	
hsa|miR-1539|nat|as|	GGGCATCTGGGACGCGCAGGA	21	1	
hsa|miR-1539|2mut|as|	GGGCA[T-a]CTGGGACG[C-g]GCAGGA	21	1	
hsa|miR-103-as|nat|as|	AGCAGCATTGTACAGGGCTATGA	23	1	
hsa|miR-103-as|2mut|as|	AGC[A-t]GCATTGTACAGGG[C-g]TATGA	23	1	
mml|miR-129-3p|nat|as|	ATACTTTTTGGGGTAAGGGCTT	22	1	

mml|miR-129-3p|2mut|as|	ATA[C-g]TTTTTGGGGTAAGGG[C-g]TT	22	1	
mml|miR-147a|nat|as|	TAGCAGAAGCATTTCCACACAC	22	1	
mml|miR-147a|2mut|as|	TAGCAGAAGCATT[T-a]CCACA[C-g]AC	22	1	
mml|miR-147b|nat|as|	AGCAGAAGCACTTCCGCACAC	21	1	
mml|miR-147b|2mut|as|	AGCAGAAGC[A-t]CTTCCGCA[C-g]AC	21	1	
mml|miR-212|nat|as|	GGCCCTGACTGGAGACTGTTA	21	1	
mml|miR-212|2mut|as|	GGCCCTGA[C-g]TGGAGACT[G-c]TTA	21	1	
mml|miR-217|nat|as|	TCCAATCAGTTCCTGATGCAGAA	23	1	
mml|miR-217|2mut|as|	TCCAATCAGTT[C-g]CTGAT[G-c]CAGAA	23	1	
mml|miR-220b|nat|as|	AGGTGTCGGACACGGTGGTGG	21	1	
mml|miR-220b|2mut|as|	AGGTG[T-a]CGG[A-t]CACGGTGGTGG	21	1	
mml|miR-220c|nat|as|	AAGGTGTCAGACACAGTGGTGG	22	1	
mml|miR-220c|2mut|as|	AAGGTGTC[A-t]GACACAGT[G-c]GTGG	22	1	
mml|miR-220d|nat|as|	AAGGTGTCAGACACGGTGGTGG	22	1	
mml|miR-220d|2mut|as|	AA[G-c]GTGTCAGACAC[G-c]GTGGTGG	22	1	
mml|miR-297|nat|as|	ATGCACATGCACACATACAT	20	1	
mml|miR-297|2mut|as|	ATGCA[C-g]ATGCACACA[T-a]ACAT	20	1	
mml|miR-298|nat|as|	TGGGAGAACCACCCGGCTTCTGCT	24	1	
mml|miR-298|2mut|as|	TGGGAG[A-t]ACCACCCGGCTT[C-g]TGCT	24	1	
mml|miR-345|nat|as|	GAGCCCTTGACTAGGAGTCAGC	22	1	
mml|miR-345|2mut|as|	GAGCCCTT[G-c]ACTAGGAGT[C-g]AGC	22	1	
mml|miR-371-3p|nat|as|	ACACTCAAAACATGGCGGCACTT	23	1	
mml|miR-371-3p|2mut|as|	ACACTCAAAA[C-g]ATGGCGGCA[C-g]TT	23	1	
mml|miR-380|nat|as|	AAGACGTGGACCATATTACATA	22	1	
mml|miR-380|2mut|as|	AAGA[C-g]GTGGACCA[T-a]ATTACATA	22	1	
mml|miR-422a|nat|as|	GCCTTCTGACCCTGAGTCCAGT	22	1	
mml|miR-422a|2mut|as|	GCCTTCTGA[C-g]CCTGAGTC[C-g]AGT	22	1	
mml|miR-511|nat|as|	TGACTGCAGAGCAAAAGACA	20	1	
mml|miR-511|2mut|as|	TGA[C-g]TGCA[G-c]AGCAAAAGACA	20	1	
mml|miR-512-5p|nat|as|	GAAAGTGCCCCCGAGGCTGAGTG	23	1	
mml|miR-512-5p|2mut|as|	GAAAGT[G-c]CCCC[C-g]GAGGCTGAGTG	23	1	
mml|miR-512-3p|nat|as|	GATCTCAGCAATGACAGCACTT	22	1	
mml|miR-512-3p|2mut|as|	GATCTCAGCAATG[A-t]CAGCA[C-g]TT	22	1	
mml|miR-516a-5p|nat|as|	AAAGTGCTTCTTTCCTCGAGAC	22	1	
mml|miR-516a-5p|2mut|as|	AAAGTG[C-g]TTCTTTCCTCG[A-t]GAC	22	1	
mml|miR-516a-3p|nat|as|	ACCCTCGGGAAGGAAACA	18	1	
mml|miR-516a-3p|2mut|as|	ACCCT[C-g]GGGAAGGAA[A-t]CA	18	1	

mml|miR-517b|nat|as|	AACACTCTAAAAGGATGCACGA	22	1	
mml|miR-517b|2mut|as|	AACACT[C-g]TAA[A-t]AGGATGCACGA	22	1	
mml|miR-518a-3p|nat|as|	CCAGCAAAGAGAAGCACTTTC	21	1	
mml|miR-518a-3p|2mut|as|	CCAGCAA[A-t]GAGAAGCA[C-g]TTTC	21	1	
mml|miR-518b|nat|as|	CCTCTAAAGGGGAGCGCTTTG	21	1	
mml|miR-518b|2mut|as|	CCT[C-g]TAAAGGGGAGCGCT[T-a]TG	21	1	
mml|miR-518c|nat|as|	ACTCTCTAAAGAGAAGCGCTTTG	23	1	
mml|miR-518c|2mut|as|	ACTCTCTAAAGAGA[A-t]GCG[C-g]TTTG	23	1	
mml|miR-518d|nat|as|	TCTCTAAAGAGAAGCGCTTTG	21	1	
mml|miR-518d|2mut|as|	TCTCTAAAGAGA[A-t]GCG[C-g]TTTG	21	1	
mml|miR-518f|nat|as|	TCCTCTGAAGGGAAGCGCTTT	21	1	
mml|miR-518f|2mut|as|	TCCT[C-g]TGAAGGG[A-t]AGCGCTTT	21	1	
mml|miR-519a|nat|as|	GTAACCCTCTAAAAGGAAGCACTTT	25	1	
mml|miR-519a|2mut|as|	GTAACCCT[C-g]TAAAAGG[A-t]AGCACTTT	25	1	
mml|miR-519b|nat|as|	AACCCTCTAAAGGGATGCACGTT	23	1	
mml|miR-519b|2mut|as|	AACCCT[C-g]TAAAGGGATG[C-g]ACGTT	23	1	
mml|miR-519c|nat|as|	ATCCTCTAAAATGATGCACTTT	22	1	
mml|miR-519c|2mut|as|	AT[C-g]CTCTAAA[A-t]TGATGCACTTT	22	1	
mml|miR-519d|nat|as|	CACTCTAAAAGGAAGCACTTTG	22	1	
mml|miR-519d|2mut|as|	CA[C-g]TCTAAAAGGAAGCA[C-g]TTTG	22	1	
mml|miR-520c|nat|as|	AACCCTCTAAAAGGAAGCACTTT	23	1	
mml|miR-520c|2mut|as|	AACCCTCTAAAA[G-c]GAAGCA[C-g]TTT	23	1	
mml|miR-520d-3p|nat|as|	ACCCAGCAAAGAGAAGCACTTT	22	1	
mml|miR-520d-3p|2mut|as|	ACCCAG[C-g]AAAGAGAAGCAC[T-a]TT	22	1	
mml|miR-520g|nat|as|	ACACTCTGAAGGGAAGCACTTTGT	24	1	
mml|miR-520g|2mut|as|	ACACTCTGAAGG[G-c]AAG[C-g]ACTTTGT	24	1	
mml|miR-520h|nat|as|	ACTCTAAAAGGAAGCACTTTGT	22	1	
mml|miR-520h|2mut|as|	AC[T-a]CTAAAAGGAAGCA[C-g]TTTGT	22	1	
mml|miR-521|nat|as|	ACACTCCAAAGGGAAGTGCGTT	22	1	
mml|miR-521|2mut|as|	ACACT[C-g]CAAAGGGAAGTG[C-g]GTT	22	1	
mml|miR-523a|nat|as|	CCCTCTAAAGGGAAGCGCATT	21	1	
mml|miR-523a|2mut|as|	CCCTC[T-a]AAAGGGAAG[C-g]GCATT	21	1	
mml|miR-523b|nat|as|	CAGAAAGCGCTTCGCTCTAGAG	22	1	
mml|miR-523b|2mut|as|	CAGAAAGCG[C-g]TTCGCTCTA[G-c]AG	22	1	
mml|miR-523c|nat|as|	CCCTCTAAAGGGATGCACGTT	21	1	
mml|miR-523c|2mut|as|	CCCT[C-g]TAAAGGGAT[G-c]CACGTT	21	1	
mml|miR-548a|nat|as|	GGAAAAGTAATTGCCAGTATTG	22	1	

mml|miR-548a|2mut|as|	GG[A-t]AAAGTAATTGC[C-g]AGTATTG	22	1	
mml|miR-548b|nat|as|	ACAAAAGCAATTGAGGTTTTTG	22	1	
mml|miR-548b|2mut|as|	ACAAAAG[C-g]AATTGA[G-c]GTTTTTG	22	1	
mml|miR-548c|nat|as|	GCAGAAGTAATTGCCGGTTTTG	22	1	
mml|miR-548c|2mut|as|	GCAG[A-t]AGTAATTGC[C-g]GGTTTTG	22	1	
mml|miR-548d-5p|nat|as|	AAAAGAAATTGTGGTTTTTGCC	22	1	
mml|miR-548d-5p|2mut|as|	AAA[A-t]GAA[A-t]TTGTGGTTTTTGCC	22	1	
mml|miR-548d-3p|nat|as|	GCAAAAGAAATTGTGGTTTTTG	22	1	
mml|miR-548d-3p|2mut|as|	GCAAAAGAA[A-t]TTG[T-a]GGTTTTTG	22	1	
mml|miR-548e|nat|as|	GCAAAAGTAACTGCCGGTTTTG	22	1	
mml|miR-548e|2mut|as|	GCAAAAGT[A-t]ACTG[C-g]CGGTTTTG	22	1	
mml|miR-548f|nat|as|	GCAAAAGGAACTGTGGTTTTG	21	1	
mml|miR-548f|2mut|as|	GCAAAAGG[A-t]ACTGT[G-c]GTTTTG	21	1	
mml|miR-549|nat|as|	TGACAACTATGGATGAGCTCT	21	1	
mml|miR-549|2mut|as|	TGACAA[C-g]TATGGATG[A-t]GCTCT	21	1	
mml|miR-552|nat|as|	TTGTCTAACCAGTCACCCGTT	21	1	
mml|miR-552|2mut|as|	TTGTCTAA[C-g]CAGTCACC[C-g]GTT	21	1	
mml|miR-553|nat|as|	AAAACAAAACCTCACCTTTTT	21	1	
mml|miR-553|2mut|as|	AAAACAAA[A-t]CCTCA[C-g]CTTTTT	21	1	
mml|miR-556-5p|nat|as|	CTCATATTACAATGAGTTCATC	22	1	
mml|miR-556-5p|2mut|as|	CT[C-g]ATATTACAAT[G-c]AGTTCATC	22	1	
mml|miR-556-3p|nat|as|	AAAGATCAGCTAATTGTAATAT	22	1	
mml|miR-556-3p|2mut|as|	AAAGAT[C-g]AGCTAATT[G-c]TAATAT	22	1	
mml|miR-557|nat|as|	AGATAAGGCTCACCCATGCAGAC	23	1	
mml|miR-557|2mut|as|	AGATAAGGCTCACC[C-g]ATG[C-g]AGAC	23	1	
mml|miR-563|nat|as|	GGGAAATGTATGTCAGCCT	19	1	
mml|miR-563|2mut|as|	GGGAAATG[T-a]ATGTCAG[C-g]CT	19	1	
mml|miR-567|nat|as|	GTTCTGTCCTGGAAGAACATAGT	23	1	
mml|miR-567|2mut|as|	GTTCTGTC[C-g]TGG[A-t]AGAACATAGT	23	1	
mml|miR-570|nat|as|	GCAAAGGTAATTGCTACTTTTG	22	1	
mml|miR-570|2mut|as|	GCAAAGG[T-a]AATTGCTA[C-g]TTTTG	22	1	
mml|miR-573|nat|as|	CTGATCGGTTATGCATCACTTCAG	24	1	
mml|miR-573|2mut|as|	CTGAT[C-g]GGTTATGCATC[A-t]CTTCAG	24	1	
mml|miR-576-5p|nat|as|	AAAGATGTGGAGAAATTAGAAT	22	1	
mml|miR-576-5p|2mut|as|	AAAGATG[T-a]GGA[G-c]AAATTAGAAT	22	1	
mml|miR-578|nat|as|	ACAATCCCAGAGCACAAGAAG	21	1	
mml|miR-578|2mut|as|	ACAATCCCAGAG[C-g]ACAA[G-c]AAG	21	1	

mml|miR-579|nat|as|	AATCGCGGTTTGTACCAAATGAA	23	1	
mml|miR-579|2mut|as|	AATCGC[G-c]GTTTGTAC[C-g]AAATGAA	23	1	
mml|miR-580|nat|as|	CCTAATGATTCATCAGACTCAA	22	1	
mml|miR-580|2mut|as|	CCTAATGATT[C-g]ATCAGA[C-g]TCAA	22	1	
mml|miR-581|nat|as|	ACTGATCTACAGAACACAAGA	21	1	
mml|miR-581|2mut|as|	ACTGATCTAC[A-t]GAA[C-g]ACAAGA	21	1	
mml|miR-583|nat|as|	GTACTGGGACCTTCCTCTTTG	21	1	
mml|miR-583|2mut|as|	GTACTGGGA[C-g]CTTCCTC[T-a]TTG	21	1	
mml|miR-586|nat|as|	GGACCTAAAAATACAATATGCATA	24	1	
mml|miR-586|2mut|as|	GGAC[C-g]TAAAAATACA[A-t]TATGCATA	24	1	
mml|miR-587|nat|as|	GTAACTCATCACCTGTGGAAA	21	1	
mml|miR-587|2mut|as|	GTAA[C-g]TCATCA[C-g]CTGTGGAAA	21	1	
mml|miR-590-3p|nat|as|	ACCAGCTTATACATAAAATTA	21	1	
mml|miR-590-3p|2mut|as|	ACCAG[C-g]TTAT[A-t]CATAAAATTA	21	1	
mml|miR-597|nat|as|	ACAGTGGTCGTCAAGTGACACA	22	1	
mml|miR-597|2mut|as|	ACAGT[G-c]GTCGTCAAGTGA[C-g]ACA	22	1	
mml|miR-600|nat|as|	GAGCAAGGCTCTTGTCTGTAACT	23	1	
mml|miR-600|2mut|as|	GAGC[A-t]AGGCTCTTGT[C-g]TGTAACT	23	1	
mml|miR-604|nat|as|	GTCCTGAATCCCGCAGCC	18	1	
mml|miR-604|2mut|as|	GTCCTG[A-t]ATCC[C-g]GCAGCC	18	1	
mml|miR-605|nat|as|	AGGAGAAGGCACCGTGGGATTTA	23	1	
mml|miR-605|2mut|as|	AGGAGAAGGCAC[C-g]GTGGGA[T-a]TTA	23	1	
mml|miR-607|nat|as|	GTTCCAATCCAGATCTATAAC	21	1	
mml|miR-607|2mut|as|	GTTCCA[A-t]TCCAGAT[C-g]TATAAC	21	1	
mml|miR-609|nat|as|	AGAGATGAGAGCAACACCCT	20	1	
mml|miR-609|2mut|as|	AGAGA[T-a]GAGAGCAACA[C-g]CCT	20	1	
mml|miR-612|nat|as|	AGGAGCTCAGAAGCCCTCCCCAG	23	1	
mml|miR-612|2mut|as|	AGGAGCTCAGA[A-t]GCCCTCCC[C-g]AG	23	1	
mml|miR-616|nat|as|	AGTCATTGGAGGGTTT	16	1	
mml|miR-616|2mut|as|	AGT[C-g]ATTGGAGGG[T-a]TT	16	1	
mml|miR-619|nat|as|	GGCACAAACATGTCCAGATC	20	1	
mml|miR-619|2mut|as|	GGCA[C-g]AAACATGTC[C-g]AGATC	20	1	
mml|miR-624|nat|as|	AGGTAATACCAGTATCTTGTG	21	1	
mml|miR-624|2mut|as|	AGGTA[A-t]TACCAGTAT[C-g]TTGTG	21	1	
mml|miR-625|nat|as|	AGGGAGAAAGTTCTACAGTCC	21	1	
mml|miR-625|2mut|as|	AGGGAGAA[A-t]GTTCTA[C-g]AGTCC	21	1	
mml|miR-626|nat|as|	AAGACATTTTCGGACAGCT	19	1	

mml|miR-626|2mut|as|	AAGAC[A-t]TTTTCGGA[C-g]AGCT	19	1	
mml|miR-627|nat|as|	GTGAGTCTCTAAGAAAAGAGGA	22	1	
mml|miR-627|2mut|as|	GTGAGT[C-g]TCTAAGA[A-t]AAGAGGA	22	1	
mml|miR-636|nat|as|	TGCAGGCGGGACGAGCAAGCACA	23	1	
mml|miR-636|2mut|as|	TGCA[G-c]GCGGGA[C-g]GAGCAAGCACA	23	1	
mml|miR-638|nat|as|	AGGCCGCCGCCCGCCCGCGATCCCT	25	1	
mml|miR-638|2mut|as|	AGGCCGCCGCCCGC[C-g]CGCGATC[C-g]CT	25	1	
mml|miR-639|nat|as|	AGAGCGCTCGCGACCGCTGCGCT	23	1	
mml|miR-639|2mut|as|	AGAGCGCTCG[C-g]GACCGC[T-a]GCGCT	23	1	
mml|miR-643|nat|as|	CTACCTGAGCTAGAATACAAGT	22	1	
mml|miR-643|2mut|as|	CTAC[C-g]TGAGCTAG[A-t]ATACAAGT	22	1	
mml|miR-644|nat|as|	GCTCTAAGCAAGCCACACT	19	1	
mml|miR-644|2mut|as|	GC[T-a]CTAAGCAAG[C-g]CACACT	19	1	
mml|miR-648|nat|as|	ATCAGTGCCCTGCACACTT	19	1	
mml|miR-648|2mut|as|	AT[C-g]AGTGCCCTGCACA[C-g]TT	19	1	
mml|miR-650b|nat|as|	GTCCCGAGAGCGCTGCCTCCT	21	1	
mml|miR-650b|2mut|as|	GTC[C-g]CGAGAG[C-g]GCTGCCTCCT	21	1	
mml|miR-650c|nat|as|	CTGAGAGCGCTGCCTCCT	18	1	
mml|miR-650c|2mut|as|	CTGAG[A-t]GCGCTG[C-g]CTCCT	18	1	
mml|miR-650d|nat|as|	GTCCCGACAGCACTGTCTCCT	21	1	
mml|miR-650d|2mut|as|	GT[C-g]CCGA[C-g]AGCACTGTCTCCT	21	1	
mml|miR-651|nat|as|	CAAAAGTCAAGCTTATTCTAAA	22	1	
mml|miR-651|2mut|as|	CAAAA[G-c]TCAAG[C-g]TTATTCTAAA	22	1	
mml|miR-657|nat|as|	CCTAGAGAGGGTGAGGACCTGCC	23	1	
mml|miR-657|2mut|as|	CCTAGAGAGGGT[G-c]AGGAC[C-g]TGCC	23	1	
mml|miR-661|nat|as|	ACGCACGGGCCAGATACCCAGGCA	24	1	
mml|miR-661|2mut|as|	ACGCA[C-g]GGGCCA[G-c]ATACCCAGGCA	24	1	
mml|miR-663|nat|as|	GCGGTCCCGCAGCGCCCCGCCT	22	1	
mml|miR-663|2mut|as|	GCGGTCCCG[C-g]AGCG[C-g]CCCGCCT	22	1	
mml|miR-664|nat|as|	TAGGCTGGGGATAAATGAATA	21	1	
mml|miR-664|2mut|as|	TAGG[C-g]TGGGGAT[A-t]AATGAATA	21	1	
mml|miR-758|nat|as|	GGGTAGTGGACCAGGTCACAAA	22	1	
mml|miR-758|2mut|as|	GGGTAGTGGACC[A-t]GGT[C-g]ACAAA	22	1	
mml|miR-765|nat|as|	CAGCACCTTCCCTCTCCTCCA	21	1	
mml|miR-765|2mut|as|	CAGCA[C-g]CTTCCCTCTCCT[C-g]CA	21	1	
mml|miR-875-3p|nat|as|	CACAACCTCAGTATTTCCAGG	21	1	
mml|miR-875-3p|2mut|as|	CA[C-g]AACCTCAG[T-a]ATTTCCAGG	21	1	

mml|miR-890|nat|as|	AACTGGTGCCTTTCCAAGTA	20	1	
mml|miR-890|2mut|as|	AA[C-g]TGGTGCC[T-a]TTCCAAGTA	20	1	
mml|miR-920|nat|as|	TACCGCTTCTACAGCTCCCC	20	1	
mml|miR-920|2mut|as|	TACCGC[T-a]TCTA[C-g]AGCTCCCC	20	1	
mml|miR-922|nat|as|	GACGTAGTCTCATTCTCTGCTGC	23	1	
mml|miR-922|2mut|as|	GA[C-g]GTA[G-c]TCTCATTCTCTGCTGC	23	1	
mml|miR-924|nat|as|	GCAAGACAACACAAGACTCT	20	1	
mml|miR-924|2mut|as|	GCAAGACAA[C-g]ACAA[G-c]ACTCT	20	1	
mml|miR-934|nat|as|	CAGTGTCTCCAGTAGTAGACA	21	1	
mml|miR-934|2mut|as|	CAGTGTCTC[C-g]AGTAG[T-a]AGACA	21	1	
mml|miR-936|nat|as|	CTGCGATTCCTCCCTCTCCTGT	22	1	
mml|miR-936|2mut|as|	CT[G-c]CGATTCCTCCCTCTC[C-g]TGT	22	1	
mml|miR-937|nat|as|	GGTGGAGAGTCAGAGTGCGGAT	22	1	
mml|miR-937|2mut|as|	GGTGGA[G-c]AGTCAGAGTG[C-g]GGAT	22	1	
mml|miR-938|nat|as|	ACCGGCTTCATCTTTAAGTGCA	22	1	
mml|miR-938|2mut|as|	ACCGG[C-g]TTCATCTTTA[A-t]GTGCA	22	1	
mml|miR-942|nat|as|	CACATGGCCAAAACAGAGAAG	21	1	
mml|miR-942|2mut|as|	CA[C-g]ATGG[C-g]CAAAACAGAGAAG	21	1	
mml|miR-944|nat|as|	CTCATCTGATATACAATAATTT	22	1	
mml|miR-944|2mut|as|	CT[C-g]ATCT[G-c]ATATACAATAATTT	22	1	
hsa|miR-320d|nat|as|	TCCTCTCAACCCAGCTTTT	19	1	
hsa|miR-320d|2mut|as|	TC[C-g]TCTCAACCCAGCT[T-a]TT	19	1	
hsa|miR-1825|nat|as|	GGAGAGGAGGGCACTGGA	18	1	
hsa|miR-1825|2mut|as|	GGAG[A-t]GGAGGGCA[C-g]TGGA	18	1	
hsa|miR-1826|nat|as|	ATTGCGTTCGAAGTGTCGATGATCAAT	27	1	
hsa|miR-1826|2mut|as|	ATTG[C-g]GTTCGAAGTGTCGATGATC[A-t]AT	27	1	
hsa|miR-1827|nat|as|	ATTCAATCTACTGCCTCA	18	1	
hsa|miR-1827|2mut|as|	ATT[C-g]AAT[C-g]TACTGCCTCA	18	1	
hsa|miR-1908|nat|as|	GACCAATCGCCGTCCCCGCCG	21	1	
hsa|miR-1908|2mut|as|	GACCA[A-t]TCGCCGTC[C-g]CCGCCG	21	1	
hsa|miR-1909|nat|as|	CGGTGAGCACCCGGCCCCTGCG	22	1	
hsa|miR-1909|2mut|as|	CGGTGAGCACCCGG[C-g]CCCT[G-c]CG	22	1	
hsa|miR-1910|nat|as|	AGGCGGCAGGCACAGGACTGG	21	1	
hsa|miR-1910|2mut|as|	AGGC[G-c]GCAGGCACAGGA[C-g]TGG	21	1	
hsa|miR-1911|nat|as|	CCCAACAGACATGGCGGTACTCA	23	1	
hsa|miR-1911|2mut|as|	CCCAA[C-g]AGACATGGCGGT[A-t]CTCA	23	1	
hsa|miR-1912|nat|as|	TTCACACTGCATGCTCTGGGTA	22	1	

hsa|miR-1912|2mut|as|	TTCACACTGCATG[C-g]TCTG[G-c]GTA	22	1	
hsa|miR-1913|nat|as|	TGGCAGCAGCGGAGGGGGCAGA	22	1	
hsa|miR-1913|2mut|as|	TGGCAGCAGCG[G-c]AGGGGG[C-g]AGA	22	1	
hsa|miR-1914|nat|as|	CAGAAGTGGGCCGGGCACAGGG	22	1	
hsa|miR-1914|2mut|as|	CAGAAGTGGG[C-g]CGGG[C-g]ACAGGG	22	1	
hsa|miR-1915|nat|as|	CCCGCCGCGTCGCCCTGGGG	20	1	
hsa|miR-1915|2mut|as|	CCCGCCGCG[T-a]CGCC[C-g]TGGGG	20	1	
ptr|miR-1225|nat|as|	TGGGGGCGGCACAGGGGCTCA	21	1	
ptr|miR-1225|2mut|as|	TGGGGGCGGCACA[G-c]GGG[C-g]TCA	21	1	
ptr|miR-1227|nat|as|	TGGGGAAAAGGGTGGCACG	19	1	
ptr|miR-1227|2mut|as|	TGGG[G-c]AAAAGGGTGG[C-g]ACG	19	1	
ptr|miR-1236|nat|as|	TGGAGAGACAAGGGGAAGAGG	21	1	
ptr|miR-1236|2mut|as|	TGGAGAGA[C-g]AAGGGGAA[G-c]AGG	21	1	
ptr|miR-1278|nat|as|	AGATGATATGCACAGTACTA	20	1	
ptr|miR-1278|2mut|as|	AGATG[A-t]TATGCA[C-g]AGTACTA	20	1	
ptr|miR-1299|nat|as|	CCCTCACACAGAATTCCAGAA	21	1	
ptr|miR-1299|2mut|as|	CCCTC[A-t]CACAGAATTC[C-g]AGAA	21	1	
ptr|miR-1300b|nat|as|	AAGCAGCCTCCTTCTCAA	18	1	
ptr|miR-1300b|2mut|as|	AAG[C-g]AGCCT[C-g]CTTCTCAA	18	1	
ptr|miR-1827|nat|as|	ATTCAATCGACTGCCTCA	18	1	
ptr|miR-1827|2mut|as|	ATTCAATC[G-c]ACTG[C-g]CTCA	18	1	
ptr|miR-320d|nat|as|	CCTCTCAACCCAGCTTTT	18	1	
ptr|miR-320d|2mut|as|	CCTCT[C-g]AACCC[A-t]GCTTTT	18	1	
ptr|miR-339|nat|as|	GGCTCTGTCGTCGAGGCGCTCA	22	1	
ptr|miR-339|2mut|as|	GGCTCTGT[C-g]GTCG[A-t]GGCGCTCA	22	1	
ptr|miR-449a|nat|as|	ACGAGCTAACAATACACTGCCA	22	1	
ptr|miR-449a|2mut|as|	ACGAGCT[A-t]ACAATA[C-g]ACTGCCA	22	1	
ptr|miR-492|nat|as|	AGAATCTTGTCCCGCAGGTCCT	22	1	
ptr|miR-492|2mut|as|	AGAAT[C-g]TTGTCCC[G-c]CAGGTCCT	22	1	
ptr|miR-517b|nat|as|	AGACAGTGCTTCCATCTAGAGG	22	1	
ptr|miR-517b|2mut|as|	AGACAG[T-a]GCTT[C-g]CATCTAGAGG	22	1	
ptr|miR-520c|nat|as|	ACAGAAAGTGCTTCCCTCTAGA	22	1	
ptr|miR-520c|2mut|as|	AC[A-t]GAAAGTG[C-g]TTCCCTCTAGA	22	1	
ptr|miR-548j|nat|as|	CAAAGACCGCAATTACTTTT	20	1	
ptr|miR-548j|2mut|as|	CAAAGA[C-g]CGCAAT[T-a]ACTTTT	20	1	
ptr|miR-561|nat|as|	AACTTCAAGGATCTTAAACTTT	22	1	
ptr|miR-561|2mut|as|	AAC[T-a]TCAAGGATCTTAAA[C-g]TTT	22	1	

ptr|miR-582|nat|as|	TAGTAACTGGTTGAACAACTGTA	23	1	
ptr|miR-582|2mut|as|	TAG[T-a]AACTGGTTGAA[C-g]AACTGTA	23	1	
ptr|miR-586|nat|as|	GGGACCTAAAAATACAATGCATA	23	1	
ptr|miR-586|2mut|as|	GGGA[C-g]CTA[A-t]AAATACAATGCATA	23	1	
ptr|miR-633|nat|as|	TTTTATTGTGGTAGATACTATTA	23	1	
ptr|miR-633|2mut|as|	TT[T-a]TATTGTGGTAGATA[C-g]TATTA	23	1	
ptr|miR-641|nat|as|	GGTGACTCTATCCTATGTCTTT	22	1	
ptr|miR-641|2mut|as|	GGTGA[C-g]TCTA[T-a]CCTATGTCTTT	22	1	
ptr|miR-658|nat|as|	CCAACGGACCTACTTCCCTCCGCC	24	1	
ptr|miR-658|2mut|as|	CCA[A-t]CGGACCTACTT[C-g]CCTCCGCC	24	1	
ptr|miR-891a|nat|as|	TGGCTCAGGTTCGTTGCA	18	1	
ptr|miR-891a|2mut|as|	TGGCT[C-g]AGG[T-a]TCGTTGCA	18	1	
ptr|miR-922|nat|as|	TAGTCCTATTCTCTGCTGC	19	1	
ptr|miR-922|2mut|as|	TAGT[C-g]CTATTCTCTG[C-g]TGC	19	1	
hsa|miR-1972|nat|as|	TGAGCCACTGTGCCTGGCCTGA	22	1	
hsa|miR-1972|2mut|as|	TGAGCCACT[G-c]TGC[C-g]TGGCCTGA	22	1	
hsa|miR-1973|nat|as|	TATGCTACCTTTGCACGGT	19	1	
hsa|miR-1973|2mut|as|	TAT[G-c]CTAC[C-g]TTTGCACGGT	19	1	
hsa|miR-1974|nat|as|	TATTCTCGCACGGACTACAACCA	23	1	
hsa|miR-1974|2mut|as|	TATTC[T-a]CGCACGGA[C-g]TACAACCA	23	1	
hsa|miR-1975|nat|as|	AGCTAGTCAAGCGCGGTTGTGGGGG	25	1	
hsa|miR-1975|2mut|as|	AG[C-g]TAGTCAAGCGC[G-c]GTTGTGGGGG	25	1	
hsa|miR-1976|nat|as|	ACAGCAAGGAGGGCAGGAGG	20	1	
hsa|miR-1976|2mut|as|	ACAG[C-g]AAGGA[G-c]GGCAGGAGG	20	1	
hsa|miR-1977|nat|as|	TTAACAGCTAAGCACCCTAATC	22	1	
hsa|miR-1977|2mut|as|	TTAACAGCT[A-t]AGCACC[C-g]TAATC	22	1	
hsa|miR-1978|nat|as|	TAGAAAGGCTAGGACCAAACC	21	1	
hsa|miR-1978|2mut|as|	TA[G-c]AAAGG[C-g]TAGGACCAAACC	21	1	
hsa|miR-1979|nat|as|	TAGTCAAGTGAAGCAGTGGGAG	22	1	
hsa|miR-1979|2mut|as|	TAGT[C-g]AAGTGAAGCAG[T-a]GGGAG	22	1	
hsa|miR-2052|nat|as|	ACATTACTGTTATCAAAACA	20	1	
hsa|miR-2052|2mut|as|	ACATTA[C-g]TGTTA[T-a]CAAAACA	20	1	
hsa|miR-2053|nat|as|	GTAAATAGAGGTTTAATTAACAC	23	1	
hsa|miR-2053|2mut|as|	GTAAATAG[A-t]GGTTTAATTAA[C-g]AC	23	1	
hsa|miR-2054|nat|as|	AATAAATTAAATTTATATTACAG	23	1	
hsa|miR-2054|2mut|as|	AATAAATTAAATTTAT[A-t]TTA[C-g]AG	23	1	
hsa|miR-2110|nat|as|	CACTCAGCGGCCGTTTCCCCAA	22	1	

hsa|miR-2110|2mut|as|	CAC[T-a]CAG[C-g]GGCCGTTTCCCCAA	22	1	