

NGS-MatureAUUUGGGACUGAUCUUGAUGUC..... 5
NGS-MatureGGGACUGAUCUUGAUGUCUGC..... 4
NGS-StarACAUCAAGAUCAGUCCCAAA..... 3
NGS-StarGACAUCAAGAUAGUCCCAAAU..... 3
NGS-StarGACAUCAAGAUCAGUCCCAAA..... 3
NGS-StarAGCAUCAAGAUCAGUCCCAAAU..... 2
NGS-StarGACAUCAAGAUCAGUCCCAAAU..... 2
NGS-StarCAGACAUCAAGAUCAGUCC..... 1
NGS-StarUGGCAGACAUCAAGAUCAGU..... 1
NGS-StarGCAGACAUCAAGAUCAGUCC..... 1
NGS-StarAGCAUCAAGAUCAGUCC..... 1

hsa-mir-3913-2 MI0016418 UGUCUAUAAUAAACUGAAUAAUUGGGACUGAUCUUGAUGUCUGCCAAAGGUUUUGGCAGACAUCAAGAUCAGUCCCAAAUUAUUCAGUUUAAUAAACA
(((.....)))

hsa-miR-3913 MIMAT0018187UUUGGGACUGAUCUUGAUGUC.....
NGS-MatureUGGGACUGAUCUUGAUGUCU..... 21
NGS-MatureUUUGGGACUGAUCUUGAUGUCU..... 20
NGS-MatureUGGGACUGAUCUUGAUGUCUGC..... 12
NGS-MatureUUGGGACUGAUCUUGAUGUCU..... 11
NGS-MatureUGGGACUGAUCUUGAUGUC..... 10
NGS-MatureUUUGGGACUGAUCUUGAUGUC..... 7
NGS-StarACAUCAAGAUCAGUCCCAAAU..... 6
NGS-MatureUUGGGACUGAUCUUGAUGUC..... 6
NGS-MatureUUGGGACUGAUCUUGAUGUCUG..... 5
NGS-MatureAUUUGGGACUGAUCUUGAUGUC..... 5
NGS-MatureGGGACUGAUCUUGAUGUCUGC..... 4
NGS-StarACAUCAAGAUCAGUCCCAAA..... 3
NGS-StarGACAUCAAGAUCAGUCCCAAAU..... 3
NGS-StarGACAUCAAGAUCAGUCCCAA..... 3
NGS-StarAGACAUCAAGAUCAGUCCCAAAU..... 2
NGS-StarGACAUCAAGAUCAGUCCCAAAU..... 2
NGS-StarUGGCAGACAUCAAGAUCAGU..... 1
NGS-StarCAGACAUCAAGAUCAGUCCCA..... 1
NGS-StarAGACAUCAAGAUCAGUCC..... 1
NGS-StarCAGACAUCAAGAUCAGUCC..... 1

hsa-mir-374c MI0016684 ACACGGACAAGUAUAUACAACCGUCUAAGUCUAGGACACUUAGCAGGUUGUAUUUAUCAUCCAGGAGU

hsa-miR-374c MIMAT0018443AUAAUACAACCGUCUAGAGUC.....
NGS-MatureAUAAUACAACCGUCUAGAGU..... 180
NGS-MatureAUAAUACAACCGUCUAGAU..... 61
NGS-StarACUUAGCAGGUUGUAUUU..... 20
NGS-MatureAAUACAACCGUCUAGAGU..... 18
NGS-StarCUUAGCAGGUUGUAUUU..... 12
NGS-MatureUAAUACAACCGUCUAGAU..... 11
NGS-MatureAUAAUACAACCGUCUAGAGUC..... 8
NGS-MatureUAAUACAACCGUCUAGAGU..... 7
NGS-StarCUUAGCAGGUUGUAUUUA..... 6
NGS-StarACCUUAGCAGGUUGUAUU..... 6
NGS-MatureAAUACAACCGUCUAGAU..... 5
NGS-MatureACAACCGUCUAGAGU..... 5
NGS-MatureAAUACAACCGUCUAGAGUC..... 5
NGS-MatureAUACAACCGUCUAGAGU..... 3
NGS-StarCACUUAGCAGGUUGUAUUU..... 3
NGS-StarACUUAGCAGGUUGUAUUU..... 2
NGS-StarACUUAGCAGGUUGUAUUUA..... 1
NGS-StarCACUUAGCAGGUUGUAUUU..... 1

hsa-mir-3691 MI0016092 UUGAGGCACUGGGUAGUGGAUGAUGGAGACUCGGUACCCACUGUGAGGGUGGGACCAAGUCUGCGUCAUCCUCUCCUAGUGCCUCAA
(((.....)))

hsa-miR-3691 MIMAT0018120AGUGGAUGAUGGAGACUCGGUAC.....
NGS-MatureUAGUGGAUGAUGGAGACUCGGU..... 38
NGS-MatureUAGUGGAUGAUGGAGACUCGG..... 36
NGS-MatureUAGUGGAUGAUGGAGACUCGGU..... 24
NGS-MatureAGUGGAUGAUGGAGACUCGGUAC..... 20
NGS-MatureAGUGGAUGAUGGAGACUCGGUA..... 15
NGS-MatureAGUGGAUGAUGGAGACUCGGU..... 11
NGS-MatureUGGAUGAUGGAGACUCGGUA..... 9
NGS-StarACCAAGUCUGCGUCAUCCUC..... 9
NGS-StarUGGGACCAAGUCUGCGUCAU..... 8
NGS-MatureAGUGGAUGAUGGAGACUCGG..... 8
NGS-MatureUAGUGGAUGAUGGAGACUCGG..... 8
NGS-StarACCAAGUCUGCGUCAUCCUC..... 7
NGS-MatureGUGGAUGAUGGAGACUCGGUACCC..... 7
NGS-StarACCAAGUCUGCGUCAUCCUC..... 4
NGS-StarCCAAGUCUGCGUCAUCCUC..... 4
NGS-StarCCAAGUCUGCGUCAUCCUC..... 2
NGS-StarGACCAAGUCUGCGUCAUCCUC..... 2
NGS-StarCCAAGUCUGCGUCAUCCUC..... 2
NGS-StarCAAGUCUGCGUCAUCCUC..... 2

```

NGS-Star ..... CCAAGUCUGCGUCAUCCUCC ..... 1

hsa-mir-3664 MI0016065 CUGUAAACUUGAAGGUAGGGAACUCUGUCUUCACUCUUGAGUACCUCCAACACGAGCUCUCAGGAGUAAAGACAGAGUCCCUACCUUCAUGUGGAU
..... (((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
AACUCUGUCUUCACUCAUGAGU ..... UCUCAGGAGUAAAGACAGAGUU ..... 336
NGS-Star ..... CAGGAGUAAAGACAGAGUU ..... 121
NGS-Star ..... UCAGGAGUAAAGACAGAGUU ..... 119
NGS-Star ..... UCUCAGGAGUAAAGACAGAG ..... 106
NGS-Star ..... UCUCAGGAGUAAAGACAGA ..... 94
NGS-Star ..... UCUCAGGAGUAAAGACAG ..... 55
NGS-Star ..... UCUCAGGAGUAAAGACAGAGU ..... 49
NGS-Star ..... UCUCAGGAGUAAAGACAGAGUUC ..... 43
NGS-Mature ..... AACUCUGUCUUCACUCAUGAGU ..... 34
NGS-Star ..... CAGGAGUAAAGACAGAGUUC ..... 32
NGS-Star ..... CAGGAGUAAAGACAGAGUUC ..... 32
NGS-Mature ..... AACUCUGUCUUCACUCAUGAG ..... 8
NGS-Mature ..... AACUCUGUCUUCACUCAUGA ..... 5
NGS-Mature ..... ACUCUGUCUUCACUCAUGAGUA ..... 1
NGS-Mature ..... ACUCUGUCUUCACUCAUGAGU ..... 1
NGS-Mature ..... ACUCUGUCUUCACUCAUGAG ..... 1
NGS-Mature ..... AGGUAGGGAACUCUGUCU ..... 1
NGS-Mature ..... UCUGUCUUCACUCAUGAGUAC ..... 1

hsa-mir-3934 MI0016590 CACAGCCCUUCCUGUCCAGUUUCAGGUGGAAACUGAGGCGAGGAGGUAAGUAACUUGCUCAGGUUGCACAGCUGGGAAGUGGAGCAGGGAUUUGAAUCC
..... (((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
UCAGGUGGGAACUGAGGCGAG ..... 710
NGS-Mature ..... UCAGGUGGGAACUGAGGCGAG ..... 684
NGS-Mature ..... UCAGGUGGGAACUGAGGCGAG ..... 400
NGS-Mature ..... UCAGGUGGGAACUGAGGCGAG ..... 113
NGS-Star ..... UGCUCAGGUUGCACAGCUGGGA ..... 19
NGS-Mature ..... UCAGGUGGGAACUGAGG ..... 13
NGS-Mature ..... AGGUGGGAACUGAGGCGAG ..... 11
NGS-Mature ..... UCAGGUGGGAACUGAGGCG ..... 10
NGS-Mature ..... UUUCAGGUGGGAACUGAGGCA ..... 9
NGS-Mature ..... UCAGGUGGGAACUGAGGCGAG ..... 6
NGS-Mature ..... AGGUGGGAACUGAGGCGAG ..... 6
NGS-Star ..... UGCUCAGGUUGCACAGCUGG ..... 2
NGS-Star ..... UGCUCAGGUUGCACAGCUGG ..... 2
NGS-Star ..... UGCUCAGGUUGCACAGCUGGGA ..... 1

hsa-mir-3942 MI0016599 UCUUCAGUAUGACACCUCUAAAGAAGCAUACUGUUACCCUAGAAUAGGCGGCAAGUAUACAGUAUUUACAGUAUUACAUUUUAGUGUCAUUAUUCACUGAC
..... (((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
AAGCAUACUGUUACCUGAAA ..... 62
NGS-Mature ..... AGCAUACUGUUACCUGAAA ..... 58
NGS-Mature ..... AGCAUACUGUUACCUGAAA ..... 41
NGS-Star ..... UUCAGUAUACAGUAUUAUAC ..... 18
NGS-Mature ..... AGCAUACUGUUACCUGAAA ..... 13
NGS-Star ..... UUUCAGUAUACAGUAUUAUAC ..... 11
NGS-Mature ..... AAGCAUACUGUUACCUGAAA ..... 8
NGS-Mature ..... AGCAUACUGUUACCUGAAA ..... 5
NGS-Mature ..... AAGCAUACUGUUACCUGAAA ..... 5
NGS-Mature ..... AGCAUACUGUUACCUGAAA ..... 2
NGS-Mature ..... AGCAUACUGUUACCUGAAA ..... 1
NGS-Mature ..... CAUACUGUUACCUGAAA ..... 1
NGS-Star ..... UUCAGUAUACAGUAUUAUAC ..... 1
NGS-Star ..... UUUCAGUAUACAGUAUUAUAC ..... 1

hsa-mir-3617 MI0016007 AGGUCUAUAGAAAGACAUAGUUGCAAGAUUGGGAUUGAAACCAUAGUCUCAUCAGCACCCUAUGUCCUUUCUCUGCCCU
..... (((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
AAAGCAUAGUUGCAAGAUUGG ..... 43
NGS-Mature ..... AAAGCAUAGUUGCAAGAUUGG ..... 46
NGS-Mature ..... AAAGCAUAGUUGCAAGAUUG ..... 5
NGS-Mature ..... AAAGCAUAGUUGCAAGAUUG ..... 4
NGS-Star ..... CAUCAGCACCCUAUGUCCUUUC ..... 2
NGS-Mature ..... AAAGCAUAGUUGCAAGA ..... 1
NGS-Mature ..... AGCAUAGUUGCAAGAUUGG ..... 1
NGS-Star ..... CAUCAGCACCCUAUGUCCUUUC ..... 1
NGS-Mature ..... AAAGCAUAGUUGCAAGAU ..... 1
NGS-Mature ..... ACAUAGUUGCAAGAUUGG ..... 1
NGS-Star ..... UCAUCAGCACCCUAUGUCCUUU ..... 1

hsa-mir-3619 MI0016009 ACGGCAUCUUUGCACUCAGCAGGCAGGCGUGGUCAGCCCGUGGUGGGGACCAUCCUGCCUGCUGGGGUAAAGACGGCGUGU
..... (((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
UCAGCAGGCAGGCGUGGUCAG ..... 27
NGS-Mature ..... UCAGCAGGCAGGCGUGGUCAG ..... 19
NGS-Mature ..... UCAGCAGGCAGGCGUGGUCAG ..... 19

```

NGS-Mature	UCAGCAGGCAGCGUGGUCAGC	12
NGS-Mature	UCAGCAGGCAGCGUGGUCAGCC	12
NGS-Mature	UCAGCAGGCAGCGUGGUC	10
NGS-Mature	UCAGCAGGCAGCGUGGUCAGCC	9
NGS-Star	GGGACCAUCCUGCCUGUGG	7
NGS-Star	GGGACCAUCCUGCCUGUGGG	5
NGS-Star	GACCAUCCUGCCUGUGGGU	2
NGS-Star	GGGACCAUCCUGCCUGUG	1
NGS-Star	GGGACCAUCCUGCCUGCU	1
NGS-Star	GGGACCAUCCUGCCUGUG	1
NGS-Star	CCAUCCUGCCUGUGGG	1
NGS-Mature	CAGCAGGCAGCGUGGUC	1
NGS-Mature	ACUCAGCAGGCAGCGUGGUC	1
hsa-mir-3918 MI0016424	AGGCGGUUAAAGCCAUGGGACAGGGCCGCAGAUAGGAGACUCUCAAGGUCAAAGGGGUUCCAGCUGGGACCUCAGCCUGGUUCGAGCCCU	
hsa-miR-3918 MIMAT0018192	ACAGGGCCGCAGAUAGGAGACU	
NGS-Mature	ACAGGGCCGCAGAUAGGAGACU	89
NGS-Mature	ACAGGGCCGCAGAUAGGAGAC	14
NGS-Mature	GACAGGGCCGCAGAUAGGAGACU	11
NGS-Mature	ACAGGGCCGCAGAUAGGAGA	7
NGS-Star	UCUCCAGCUGGGACCUCGA	6
NGS-Mature	GACAGGGCCGCAGAUAGGAGAC	4
NGS-Mature	GACAGGGCCGCAGAUAGGAGA	3
NGS-Mature	ACAGGGCCGCAGAUAGGAGACUC	1
NGS-Mature	ACAGGGCCGCAGAUAGGAGACUC	1
hsa-mir-3945 MI0016602	GAUGUUGAUGCACGUGACGGGGAGGGCAUAGGAGAGGGUUAUUAUAAAUGCAAUUACAGCCUCUUAUGCUUCCAAGUGGGGAUGAUUCAUGAU	
hsa-miR-3945 MIMAT0018361	AGGGCAUAGGAGAGGGUUAUUA	
NGS-Star	UACAGCCUUAUGCUUCCA	6
NGS-Mature	AGGGCAUAGGAGAGGGUUAUUA	3
NGS-Mature	AGGGCAUAGGAGAGGGUUAUUA	1
NGS-Mature	AGGGCAUAGGAGAGGGUUAUUA	1
NGS-Mature	AGGGCAUAGGAGAGGGUUAUUA	1
NGS-Mature	CACGUGACGGGGAGGGCAUA	1
NGS-Star	ACAGCCUUAUGCUUCCA	1
NGS-Star	UACAGCCUUAUGCUUU	1
NGS-Star	UACAGCCUUAUGCUUUC	1
NGS-Star	UACAGCCUUAUGCUUCC	1
NGS-Mature	GGGCAUAGGAGAGGGUUAUUA	1
NGS-Star	UACAGCCUUAUGCUUCCA	1
hsa-mir-3943 MI0016600	CACACAGACGGCAGCUGCGGCCUAGCCCCAGGCCUUCACUUGCGGUGGACAACUUGCUAAGUAAAGUGGGGGUGGGCCACGGCUGGCCUCCUACCCUGGAC	
hsa-miR-3943 MIMAT0018359	UAGCCCCAGGCCUUCACUUGGCG	
NGS-Mature	UAGCCCCAGGCCUUCACUUGGCG	58
NGS-Mature	UAGCCCCAGGCCUUCACUUGGCGU	14
NGS-Star	UAAGUAAAGUGGGGGUGGG	4
NGS-Mature	ACAGACGGCAGCUGCGGCC	2
NGS-Mature	UAGCCCCAGGCCUUCACUUG	2
NGS-Mature	UAGCCCCAGGCCUUCACUUGGC	2
NGS-Star	UAAGUAAAGUGGGGGUGG	1
NGS-Star	CUAAGUAAAGUGGGGGUGGC	1
NGS-Mature	UAGCCCCAGGCCUUCACUU	1
hsa-mir-3612 MI0016002	GGGACUGGGGAUGAGGAGGAUCUUGAGAAUUGGAAGGAAUGGGAUUACUCCAGUUCACUAGAGGCGUCCUGACACCCUAGCUC	
hsa-miR-3612 MIMAT0017989	AGGAGGCAUCUUGAGAAUUGGA	
NGS-Mature	AGGAGGCAUCUUGAGAAUUGGA	16
NGS-Mature	AGGAGGCAUCUUGAGAAUUGG	13
NGS-Star	AGUUCACUAGAGGCGUCCUGACA	7
NGS-Mature	AGGAGGCAUCUUGAGAAUUGGA	7
NGS-Star	AGUUCACUAGAGGCGUCCUGAC	4
NGS-Star	CAGUUCACUAGAGGCGUCCUGA	3
NGS-Star	CAGUUCACUAGAGGCGUCCU	1
NGS-Star	AGUUCACUAGAGGCGUCCU	1
NGS-Star	AGUUCACUAGAGGCGUCCUGA	1
hsa-let-7c MI0000064	GCAUCCGGUUGAGGUAGUAGGUUGUUAUGGUUAUAGGUUACACCCUGGGAGUUAACUGUACAACCUUUCUAGCUUCCUUGGAGC	
hsa-let-7c* MIMAT0004483	UAGAGUUAACCCUGGGAGUUA	
hsa-let-7c MIMAT0000064	UGAGGUAGUAGGUUGUUAUGGUU	
NGS-Mature	UGAGGUAGUAGGUUGUUAUGGUU	4673736
NGS-Mature	UGAGGUAGUAGGUUGUUAUGGUU	529122
NGS-Mature	UGAGGUAGUAGGUUGUUAUGGUUU	489784
NGS-Mature	UGAGGUAGUAGGUUGUUAU	188757
NGS-Mature	UGAGGUAGUAGGUUGUUAUGG	99004
NGS-Mature	UGAGGUAGUAGGUUGUUAUG	41931
NGS-Mature	GAGGUAGUAGGUUGUUAUGGUU	12801

NGS-Mature	.....UUGAGGUAGUAGGUUGUAUGGUU.....	10284
NGS-Mature	.....UGAGGUAGUAGGUUGUAUGGUUUA.....	9108
NGS-Mature	.....UUGAGGUAGUAGGUUGUAUGGU.....	6406
NGS-Star	.....CUGUACAACCUUCUAGCUUUC.....	61
NGS-Star	.....CUGUACAACCUUCUAGCUUUC.....	12
NGS-Star	.....CUGUACAACCUUCUAGCUUU.....	10
NGS-Star	.....UUAACUGUACAACCUUCUAGCUUUC.....	3
NGS-Star	.....CUGUACAACCUUCUAGCUUUCU.....	3
NGS-Star	.....CUGUACAACCUUCUAGCUU.....	3
NGS-Star	.....AACUGUACAACCUUCUAGCUUUC.....	3
NGS-Star	.....UACACCCUGGGAGUUAACU.....	2
NGS-Star	.....CUGUACAACCUUCUAGCU.....	2
NGS-Star	.....GUUAACUGUACAACCUUCUAGC.....	1

hsa-mir-194-1 MI000488	AUGGUGUUAUCAAGUGUAACAGCAACUCCAUUGGAGCUGUGUACCAUUUCCAGUGGAGAGUCUGUUAUUUGAUGGUUACCAA	
hsa-miR-194 MIMAT000460	.....UGUAAACAGCAACUCCAUUGGGA.....	
NGS-Mature	.....UGUAAACAGCAACUCCAUUGGGA.....	46188
NGS-Mature	.....UGUAAACAGCAACUCCAUUGG.....	16186
NGS-Mature	.....UGUAAACAGCAACUCCAUUGG.....	779
NGS-Mature	.....UGUAAACAGCAACUCCAUUGGAC.....	719
NGS-Mature	.....GUAACAGCAACUCCAUUGGGA.....	369
NGS-Mature	.....UGUAAACAGCAACUCCAUUG.....	361
NGS-Mature	.....UGUAAACAGCAACUCCAUUG.....	192
NGS-Mature	.....GUAACAGCAACUCCAUUGGG.....	117
NGS-Mature	.....UGUAAACAGCAACUCCAUUGGACU.....	74
NGS-Mature	.....UGUAAACAGCAACUCCA.....	67
NGS-Star	.....CCAGUGGAGAGUCUGUUAC.....	3
NGS-Star	.....CAGUGGAGAGUCUGUUACUU.....	2
NGS-Star	.....CCAGUGGAGAGUCUGUUACUU.....	2
NGS-Star	.....CAGUGGAGAGUCUGUUACUU.....	1
NGS-Star	.....CCAGUGGAGAGUCUGUUACUU.....	1
NGS-Star	.....CAGUGGAGAGUCUGUUACUUU.....	1

hsa-mir-345 MI000825	ACCCAAACCCUAGGUCUGCAGACUCCUAGUCCAGGGCUCUGUAGGCGUGGGCCCGAACAGAGGGGUCUGGAGGCCUGGGUUUGAAUUCGACAGC	
hsa-miR-345 MIMAT000772	.....GCUGACUCCUAGUCCAGGGCUC.....	
NGS-Mature	.....GCUGACUCCUAGUCCAGGGCUC.....	5391
NGS-Mature	.....GCUGACUCCUAGUCCAGGGCUC.....	3627
NGS-Mature	.....GCUGACUCCUAGUCCAGG.....	1261
NGS-Mature	.....GCUGACUCCUAGUCCAGGGC.....	1086
NGS-Mature	.....GCUGACUCCUAGUCCAGGG.....	945
NGS-Star	.....GCCUGAACGAGGGGUCUGGAG.....	91
NGS-Mature	.....GCUGACUCCUAGUCCAGGGCUCG.....	88
NGS-Star	.....CCUGAACGAGGGGUCUGGAG.....	50
NGS-Mature	.....GCUGACUCCUAGUCCAGGGCUCGU.....	49
NGS-Mature	.....UGACUCCUAGUCCAGGGCUC.....	29
NGS-Star	.....GCCUGAACGAGGGGUCUGGA.....	28
NGS-Mature	.....UGACUCCUAGUCCAGGGCUC.....	18
NGS-Star	.....GCCUGAACGAGGGGUCUGG.....	13
NGS-Mature	.....CUGACUCCUAGUCCAGGGCUC.....	11
NGS-Star	.....GCCUGAACGAGGGGUCUG.....	10
NGS-Star	.....CCUGAACGAGGGGUCUGGAG.....	3
NGS-Star	.....GCCUGAACGAGGGGUCU.....	3
NGS-Star	.....CCUGAACGAGGGGUCUGG.....	3
NGS-Star	.....CCUGAACGAGGGGUCUGGA.....	2
NGS-Star	.....GCCUGUUUGAAUUCGACA.....	1

hsa-mir-7-3 MI000265	AGAUAAGAGUGGUCUGGUCUAGUGUCUGUGUGGAAGACUAGUGAUUUUGUUGUUCUAGUACUACGACAACAGUCACAGCCGCCUCAUAGCGCAGACUCCUUGGC	
hsa-miR-7 MIMAT000252	.....UGGAAGACUAGUGAUUUUGUUGU.....	
NGS-Mature	.....UGGAAGACUAGUGAUUUUGUUGU.....	339301
NGS-Mature	.....UGGAAGACUAGUGAUUUUGUUGU.....	111131
NGS-Mature	.....UGGAAGACUAGUGAUUUUGUUG.....	12367
NGS-Mature	.....ACUAGUGAUUUUGUUGU.....	10129
NGS-Mature	.....AGACUAGUGAUUUUGUUGU.....	7096
NGS-Mature	.....UGGAAGACUAGUGAUUUUGUUGU.....	5679
NGS-Mature	.....UGGAAGACUAGUGAUUUUGU.....	5483
NGS-Mature	.....UGGAAGACUAGUGAUUUUG.....	2442
NGS-Mature	.....AGACUAGUGAUUUUGUUGU.....	2436
NGS-Mature	.....GACUAGUGAUUUUGUUGU.....	1777
NGS-Star	.....CAACAAGUCAAGCCGGCCUCA.....	364
NGS-Star	.....CAACAAGUCAAGCCGGCCUC.....	28
NGS-Star	.....CAACAAGUCAAGCCGGCCUCA.....	22
NGS-Star	.....AAACAAGUCAAGCCGGCCUCA.....	14
NGS-Star	.....CAACAAGUCAAGCCGGCCUC.....	10
NGS-Star	.....CAACAAGUCAAGCCGGCC.....	9
NGS-Star	.....AAACAAGUCAAGCCGGCCUC.....	2
NGS-Star	.....AAACAAGUCAAGCCGGCCUCA.....	2
NGS-Star	.....CUGAUGUACUACGACAACAAGU.....	1

```

NGS-Star .....UAGCGCAGACUCCUUCGAC 1

hsa-mir-181b-2 MI000683 CUGAUGGCUGCACUCAACAUAUUGCUGUCGGUGGGUUUAGUCUGAAUCAACUCACUGAUAUUGAAUGCAAACUGCGGACCAACA
...((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-181b MIMAT000257 AACAUUCAUUGCUGUCGGUGGGU
NGS-Mature AACAUUCAUUGCUGUCGGUGGU 118381
NGS-Mature AACAUUCAUUGCUGUCGGUGGG 46722
NGS-Mature AACAUUCAUUGCUGUCGGUGGU 35542
NGS-Mature AACAUUCAUUGCUGUCGGUG 29066
NGS-Mature AACAUUCAUUGCUGUCGGUGGGU 26435
NGS-Mature AACAUUCAUUGCUGUCGGU 20714
NGS-Mature AACAUUCAUUGCUGUCGGUGG 4365
NGS-Mature ACAUUCAUUGCUGUCGGUGGU 1949
NGS-Mature CAACAUAUCAUUGCUGUCGGUG 1521
NGS-Mature ACAUUCAUUGCUGUCGGUGGU 893
NGS-Star CUCACUGAUAUUGAAUGCA 57
NGS-Star CUCACUGAUAUUGAAUGCAA 45
NGS-Star CUCACUGAUAUUGAAUGCAA 37
NGS-Star ACUCACUGAUAUUGAAUGCA 33
NGS-Star ACUCACUGAUAUUGAAUGCAA 17
NGS-Star CUCACUGAUAUUGAAUGC 11
NGS-Star ACUCACUGAUAUUGAAU 4
NGS-Star ACUCACUGAUAUUGAAUGC 4
NGS-Star AACUCACUGAUAUUGAAUGCA 3
NGS-Star ACUCACUGAUAUUGAAUG 2

hsa-mir-196a-1 MI000238 GUGAAUUGAGUAGUUCAUGUUGUUGGGCCUGGGUUUCUGAACACAACAUAUAAACCACCCGAUUCAC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-196a MIMAT000226 UAGGUAGUUUCAUGUUGUUGGG
NGS-Mature UAGGUAGUUUCAUGUUGUUGGG 19707
NGS-Mature UAGGUAGUUUCAUGUUGUUGG 3969
NGS-Mature UAGGUAGUUUCAUGUUGU 1628
NGS-Mature UAGGUAGUUUCAUGUUGU 683
NGS-Mature UAGGUAGUUUCAUGUUGUU 469
NGS-Mature AGGUAGUUUCAUGUUGUUGGG 397
NGS-Mature AGGUAGUUUCAUGUUGUUGGC 130
NGS-Mature GGUAGUUUCAUGUUGUUGGG 81
NGS-Mature AGGUAGUUUCAUGUUGUUGG 75
NGS-Mature UAGGUAGUUUCAUGUUGUUGGC 74
NGS-Star CAACAACAUAUAAACCACCCGA 37
NGS-Star ACAACAACAUAUAAACCACCCGA 33
NGS-Star CAACAACAUAUAAACCACCCGAU 25
NGS-Star ACAACAACAUAUAAACCACCCG 4
NGS-Star ACAACAACAUAUAAACCACCCGAU 1

hsa-mir-503 MI0003188 UGCCUAGCAGCGGGAACAGUUCGUCAGUGAGCGAUCGGGUCUCUGGGUAUUGUUUCCGUCGCCGGGUA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-503 MIMAT0002874 UAGCAGCGGGAACAGUUCGUCAG
NGS-Mature UAGCAGCGGGAACAGUUCGUCAG 11230
NGS-Mature UAGCAGCGGGAACAGUUCU 7499
NGS-Mature UAGCAGCGGGAACAGUUC 6284
NGS-Mature UAGCAGCGGGAACAGUUCGCA 3489
NGS-Mature UAGCAGCGGGAACAGUUCG 1978
NGS-Mature AGCGGGAACAGUUCGUCAG 898
NGS-Mature UAGCAGCGGGAACAGUUCGUCAGU 784
NGS-Mature UAGCAGCGGGAACAGUUCGUC 606
NGS-Mature AGCAGCGGGAACAGUUCGUCAG 263
NGS-Mature GCAGCGGGAACAGUUCGUCAG 241
NGS-Star GGGUAUUGUUUCCGUCGCCAGG 168
NGS-Star GGGUAUUGUUUCCGUCGCCAGG 23
NGS-Star GGGUAUUGUUUCCGUCGCCAG 12
NGS-Star GGGUAUUGUUUCCGUCGCCA 10
NGS-Star GGGUAUUGUUUCCGUCGCC 4
NGS-Star GUGAGCGAUCGGUCUCUGGGUUAU 4
NGS-Star UGGGUAUUGUUUCCGUCGCCA 3
NGS-Star GGGUAUUGUUUCCGUCGCCAG 3
NGS-Star GGGUAUUGUUUCCGUCGC 2
NGS-Star UGUUCCGUCGCCAGG 2
NGS-Star AUUGUUUCCGUCGCCAGG 1

hsa-mir-660 MI0003684 CUGCUCUUCUCCAUACCAUUGCAUAUCGGAGUUGGAAUUCUAAAACACCUCUGUGUGCAUGGAUACAGGAGGGUGACCCUUGUCAUCUG
...((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-660 MIMAT0003338 UACCCAUGCAUAUCGGAGUUG
NGS-Mature UACCCAUGCAUAUCGGAGUUG 8757
NGS-Mature UACCCAUGCAUAUCGGAGUUG 6663
NGS-Mature UACCCAUGCAUAUCGGAGUU 3515
NGS-Mature UACCCAUGCAUAUCGGAGU 462
NGS-Mature UACCCAUGCAUAUCGGAG 431
NGS-Star ACCUCUGUGUGCAUGGAUA 283
NGS-Star ACCUCUGUGUGCAUGGAUAC 276

```

NGS-Star	.....ACCUCUGUGUGCAUGGAUU.....	247
NGS-Mature	.....UACCAUUGCAUUCGGGA.....	139
NGS-Star	.....ACCUCUGUGUGCAUGGAUACA.....	113
NGS-Mature	.....ACCAUUGCAUUCGGAGUUGU.....	106
NGS-Star	.....ACCUCUGUGUGCAUGGAU.....	69
NGS-Mature	.....ACCAUUGCAUUCGGAGUUG.....	66
NGS-Mature	.....ACCAUUGCAUUCGGAGUUG.....	26
NGS-Mature	.....UACCAUUGCAUUCGGAGUUG.....	26
NGS-Star	.....ACCUCUGUGUGCAUGGA.....	13
NGS-Star	.....CCUCUGUGUGCAUGGAUUA.....	7
NGS-Star	.....CCUCUGUGUGCAUGGAUUAACA.....	7
NGS-Star	.....CCUCUGUGUGCAUGGAUUAAC.....	7
NGS-Star	.....CCUCUGUGUGCAUGGAUU.....	4
hsa-mir-1271 MI0003814	CACCCAGAUCAGUGCUUGGCACCUAGCAGCACUCAGUAAAUAUUUUGUAGUGCCUCUAUGGCCAGGCAUUGUGCUGAGGGCU	
hsa-miR-1271 MIMAT0005796	..(((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....)))))))))))))))))))))).....	
NGS-Mature	.....CUUGGCACCUAGCAAGCACUCA.....	3477
NGS-Mature	.....CUUGGCACCUAGCAAGCACUC.....	814
NGS-Mature	.....CUUGGCACCUAGCAAGCACUC.....	723
NGS-Mature	.....CUUGGCACCUAGCAAGCAC.....	433
NGS-Star	.....AGUGCCUCUAUGGCCAGGCA.....	123
NGS-Star	.....AGUGCCUCUAUGGCCAGG.....	79
NGS-Star	.....AGUGCCUCUAUGGCCAG.....	61
NGS-Mature	.....CUUGGCACCUAGCAAGCA.....	59
NGS-Star	.....AGUGCCUCUAUGGCCA.....	51
NGS-Star	.....AGUGCCUCUAUGGCCAGGC.....	46
NGS-Mature	.....UUGGCACCUAGCAAGCACUCA.....	40
NGS-Star	.....AGUGCCUCUAUGGCCAGGCAUU.....	19
NGS-Mature	.....CUUGGCACCUAGCAAGCACUCAG.....	16
NGS-Mature	.....UUGGCACCUAGCAAGCACUC.....	11
NGS-Mature	.....UUGGCACCUAGCAAGCACUC.....	10
NGS-Star	.....AGUGCCUCUAUGGCCAGGCAU.....	7
NGS-Mature	.....UUGGCACCUAGCAAGCAC.....	4
NGS-Star	.....GUGCCUCUAUGGCCAGGCA.....	3
NGS-Star	.....GUGCCUCUAUGGCCAGG.....	1
NGS-Star	.....GUGCCUCUAUGGCCAGG.....	1
hsa-mir-1304 MI0006371	AAACACUUGAGCCCAGCGGUUUGAGGCCUACAGUGAGAUGUGAUCCUGCCACUCACUGUAGCCUCGAACCCUGGGCUAAGUGAUUCA	
hsa-miR-1304 MIMAT0005892	..(((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....)))))))))))))))))))))).....	
NGS-Mature	.....UUUGAGGCCUACAGUGAGUUG.....	1104
NGS-Mature	.....CGGUUUGAGGCCUACAGUGAGU.....	141
NGS-Mature	.....CGGUUUGAGGCCUACAGUGAGA.....	141
NGS-Mature	.....UUUGAGGCCUACAGUGAGUUG.....	101
NGS-Mature	.....UUUGAGGCCUACAGUGAGUUG.....	50
NGS-Mature	.....GGUUUGAGGCCUACAGUGAGU.....	45
NGS-Mature	.....UUUGAGGCCUACAGUGAGUUG.....	38
NGS-Mature	.....CGGUUUGAGGCCUACAGUGAG.....	33
NGS-Mature	.....GGUUUGAGGCCUACAGUGAGU.....	26
NGS-Star	.....UCUCACUGUAGCCUCGAACCCC.....	15
NGS-Mature	.....CGGUUUGAGGCCUACAGUG.....	12
NGS-Mature	.....CGGUUUGAGGCCUACAGUGAGU.....	12
NGS-Star	.....UCUCACUGUAGCCUCGAAC.....	7
NGS-Star	.....CUCACUGUAGCCUCGAACCCCU.....	6
NGS-Star	.....UCUCACUGUAGCCUCGAACCC.....	6
NGS-Star	.....UCUCACUGUAGCCUCGAACCC.....	4
NGS-Star	.....AUCUCACUGUAGCCUCGAACCCC.....	3
NGS-Star	.....CUCACUGUAGCCUCGAACCCC.....	2
NGS-Star	.....UCUCACUGUAGCCUCGAACCCCU.....	2
NGS-Star	.....UCACUGUAGCCUCGAACCCCU.....	1
NGS-Star	.....CCUGGCCUCAAGUGAUUC.....	1
hsa-mir-190 MI0000486	UGCAGGCCUCUGUGUAUUGUUUAUUAUUUAGGUUUGUUUUUAUCCAACUAUUAUCAAACAUAUUCUACAGUGUCUUUGCC	
hsa-miR-190 MIMAT0000458	..(((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....)))))))))))))))))))))).....	
NGS-Mature	.....UGAUUUGUUUAUUAUUUAGGU.....	2416
NGS-Mature	.....UGAUUUGUUUAUUAUUUAGGU.....	678
NGS-Mature	.....UGAUUUGUUUAUUAUUUAGGU.....	419
NGS-Mature	.....UGAUUUGUUUAUUAUUUAGG.....	402
NGS-Mature	.....UGAUUUGUUUAUUAUUUA.....	151
NGS-Star	.....ACUAUUAUCAAACAUAUUCU.....	99
NGS-Mature	.....UGAUUUGUUUAUUAUUUAGGU.....	85
NGS-Mature	.....GAUUAUUGUUUAUUAUUUAGGU.....	33
NGS-Mature	.....UGAUUUGUUUAUUAUU.....	21
NGS-Star	.....CUAUUAUCAAACAUAUUCU.....	17
NGS-Mature	.....GAUUAUUGUUUAUUAUUAGGU.....	8
NGS-Mature	.....GAUUAUUGUUUAUUAUUUA.....	7
NGS-Star	.....CUAUUAUCAAACAUAUUCU.....	7
NGS-Star	.....ACUAUUAUCAAACAUAUUCU.....	6
NGS-Star	.....ACUAUUAUCAAACAUAUUC.....	3

NGS-Star	.....ACUAUAUAUCAAAUCAUAUU.....	2
NGS-Star	.....ACUAUAUAUCAAAUCAUAUU.....	2
NGS-Star	.....CUAUAUAUCAAAUCAUAUCC.....	1
hsa-mir-450a-2 MI0003187	CCAAAGAAAGAUUCUAAACUAUUUUUGCGAUGUGUUCUAAUAUGUAUUAAUAAUGUAUUUGGGACAUUUUGCAUUCUAGUUUUUAUCAUAAUAUUGG(((((((.....(((((((.....)))))))))))))).....	2
hsa-miR-450a MIMAT0001545	.....UUUUGCGAUGUGUCCUAUAUU.....	2087
NGS-Mature	.....UUUUGCGAUGUGUCCUAUAUU.....	700
NGS-Mature	.....UUUUGCGAUGUGUCCUAUAUU.....	650
NGS-Star	.....UUUUGCGAUGUGUCCUAUAUU.....	495
NGS-Star	.....UUUUGCGAUGUGUCCUAUAUU.....	475
NGS-Mature	.....UUUUGCGAUGUGUCCUAUU.....	420
NGS-Mature	.....UUUUGCGAUGUGUCCUAUU.....	161
NGS-Star	.....UUUUGCGAUGUGUCCUAUU.....	127
NGS-Star	.....UUUUGCGAUGUGUCCUAUU.....	79
NGS-Mature	.....UUUUGCGAUGUGUCCUAUAUU.....	37
NGS-Star	.....UUUUGCGAUGUGUCCUAUAUU.....	35
NGS-Mature	.....UUUUGCGAUGUGUCCUAUAUU.....	30
NGS-Mature	.....UUUUGCGAUGUGUCCUAUAUU.....	23
NGS-Star	.....UUUUGCGAUGUGUCCUAUU.....	21
NGS-Star	.....UUUUGCGAUGUGUCCUAUU.....	19
NGS-Mature	.....UUUUGCGAUGUGUCCUAUU.....	17
NGS-Star	.....UUUUGCGAUGUGUCCUAUU.....	14
NGS-Mature	.....UUUUGCGAUGUGUCCUAUU.....	14
NGS-Star	.....UUUUGCGAUGUGUCCUAUU.....	11
NGS-Star	.....UUUUGCGAUGUGUCCUAUU.....	11
hsa-mir-584 MI0003591	UAGGGUGACCAGCCAUUAUGGUUUUGCCUGGGACUGAGGAAUUUGCUGGGAAUAGUCAGUUCAGGCCAACCAGGCGUGGUUGGUCUCCCGAAGCAAC (((((((.....(((((((.....)))))))))))))).....	15880
hsa-miR-584 MIMAT0003249	.....UUAUGGUUUUGCCUGGGACUGAG.....	873
NGS-Mature	.....UUAUGGUUUUGCCUGGGACUGA.....	633
NGS-Mature	.....UUAUGGUUUUGCCUGGGACUG.....	402
NGS-Mature	.....UUAUGGUUUUGCCUGGGACUG.....	262
NGS-Mature	.....UUAUGGUUUUGCCUGGGAC.....	218
NGS-Star	.....UUAUGGUUUUGCCUGGGAC.....	179
NGS-Mature	.....UUAUGGUUUUGCCUGGGACUGAGG.....	140
NGS-Star	.....UUAUGGUUUUGCCUGGGACUGAG.....	62
NGS-Mature	.....UUAUGGUUUUGCCUGGGACUGA.....	46
NGS-Mature	.....UUAUGGUUUUGCCUGGGACUG.....	39
NGS-Star	.....UUAUGGUUUUGCCUGGGACUG.....	35
NGS-Mature	.....UUAUGGUUUUGCCUGGGACUGA.....	22
NGS-Star	.....UUAUGGUUUUGCCUGGGAC.....	8
NGS-Star	.....UUAUGGUUUUGCCUGGGAC.....	2
NGS-Star	.....UUAUGGUUUUGCCUGGGAC.....	2
NGS-Star	.....UUAUGGUUUUGCCUGGGAC.....	1
hsa-mir-641 MI0003656	UGGGUGAAAGGAAGGAAGACAUAGGAUAGAGUCACCUCUGUCCUCUGUCCUACCUAUAAGAGGUGACUGUCCUAUGUCUUUCCUUAUCCCUUACCCCU (((((((.....(((((((.....)))))))))))))).....	1063
hsa-miR-641 MIMAT0003311	.....AAAGACAUAGGAUAGAGUCACCUC.....	638
NGS-Mature	.....AAAGACAUAGGAUAGAGUCACCUC.....	605
NGS-Mature	.....AAAGACAUAGGAUAGAGUCA.....	473
NGS-Mature	.....AAAGACAUAGGAUAGAGUCACCUC.....	393
NGS-Star	.....AAAGACAUAGGAUAGAGUCACCUC.....	99
NGS-Mature	.....AAAGACAUAGGAUAGAGUCACCUC.....	87
NGS-Mature	.....AAAGACAUAGGAUAGAGUCACCUC.....	63
NGS-Mature	.....GAAAGACAUAGGAUAGAGUCACCUC.....	57
NGS-Mature	.....AAAGACAUAGGAUAGAGUCACCUC.....	57
NGS-Mature	.....AAAGACAUAGGAUAGAGUC.....	54
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	53
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	8
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	6
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	5
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	4
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	4
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	4
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	3
NGS-Star	.....AAAGACAUAGGAUAGAGUC.....	3
hsa-mir-942 MI0005767	AUUAGGAGAUUCUCUCUGUUUUUGGCAUGUGUGUACUCACAGCCCCACACAUAGGCCGAAACAGAGAAGUUAUUUCCUAAU (((((((.....(((((((.....)))))))))))))).....	294
hsa-miR-942 MIMAT0004985	.....UCUUCUCUGUUUUUGGCAUGUG.....	195
NGS-Mature	.....UCUUCUCUGUUUUUGGCAUGUG.....	175
NGS-Mature	.....UCUUCUCUGUUUUUGGCAUGUG.....	156
NGS-Mature	.....UCUUCUCUGUUUUUGGCAUGUG.....	156


```

NGS-Star .....CUCUAGCCACAGAUGCAGUGAUU..... 8
NGS-Mature .....GCUGGAUCAGUGGUUCGAGU..... 5
NGS-Star .....CUAGCCACAGAUGCAGUGAU..... 3
NGS-Mature .....GCUGGAUCAGUGGUUCGAGUCU..... 1
NGS-Mature .....GCUGGAUCAGUGGUUCGA..... 1
NGS-Star .....CUCUAGCCACAGAUGCAGU..... 1

hsa-mir-1296 MI0003780 ACCUACCUAACUGGGUUAGGGCCUGGCUCUCCUUUAGGAAAACCUUCUGUGGGGAGUGGGGUUCGACCCUAACCCAGGUGGGCUGU
.(((((((.....(((((((.....(((((((.....(((((((.....(((((((.....(((((((.....(((((((.....(((((((.....
hsa-miR-1296 MIMAT0005794 .....UUAGGGCCUUGGCUCUCCU.....
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 573
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 201
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 184
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....AGUGGGGUUCGACCCUAACC..... 170
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 162
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 53
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 53
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....AGUGGGGUUCGACCCUAAC..... 46
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....AGUGGGGUUCGACCCUAAC..... 29
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 9
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 9
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....GGAGUGGGGUUCGACCCUAAC..... 7
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 6
NGS-Mature .....UUAGGGCCUUGGCUCUCCU..... 6
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....GAGUGGGGUUCGACCCUAAC..... 4
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....GAGUGGGGUUCGACCCUAAC..... 2
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....AGUGGGGUUCGACCCUAAC..... 2
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....GUGGGGUUCGACCCUAAC..... 1
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....GAGUGGGGUUCGACCCUAAC..... 1
NGS-Star .....UUAGGGCCUUGGCUCUCCU.....GUGGGGUUCGACCCUAAC..... 1

hsa-mir-181d MI0003139 GUCCCCUCCCCUAGGCCACAGCCGAGGUCACAAUAACAUAUCAUUGUUGUGCGGGGUGUUGAGGACUGAGGCCAGACCCACCGGGGAUGAAUGUCACUGUGCCUGGGCCAGACACGGCUAAAGGGGAUAGGGGAC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-181d MIMAT0002821 .....AACAUUCAUUGUUGUCGGUGGU.....
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGU..... 28143
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGU..... 14791
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGU..... 4555
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGU..... 3192
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGU..... 2254
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGU..... 1034
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGUUG..... 209
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGU..... 135
NGS-Mature .....AACAUUCAUUGUUGUCGGUGGUUG..... 128

NGS-Mature .....AACAUUCAUUGUUGUCGG..... 106
NGS-Star .....AACAUUCAUUGUUGUCGG..... 42
NGS-Star .....AACAUUCAUUGUUGUCGG..... 13
NGS-Star .....AACAUUCAUUGUUGUCGG..... 2
NGS-Star .....AACAUUCAUUGUUGUCGG..... 2
NGS-Star .....AACAUUCAUUGUUGUCGG..... 2
NGS-Star .....AACAUUCAUUGUUGUCGG..... 2
NGS-Star .....AACAUUCAUUGUUGUCGG..... 1

hsa-mir-2110 MI0010629 CAGGGGUUUGGGGAAACGGCCGUGAGUGAGGCGUCGGCUGUUGUUCUACCCGGGUCUUUCCUCCACUCUUG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-2110 MIMAT0010133 .....UUGGGGAAACGGCCGUGAGUG.....
NGS-Mature .....UUGGGGAAACGGCCGUGAGUG..... 3811
NGS-Mature .....UUGGGGAAACGGCCGUGAGUG..... 1434
NGS-Mature .....UUGGGGAAACGGCCGUGAGUGAG..... 959
NGS-Mature .....UUGGGGAAACGGCCGUGAGU..... 739
NGS-Mature .....UUGGGGAAACGGCCGUGAG..... 542
NGS-Mature .....UUGGGGAAACGGCCGUGA..... 125
NGS-Mature .....UUGGGGAAACGGCCGUGAGUGA..... 78
NGS-Mature .....UUGGGGAAACGGCCGUG..... 44
NGS-Mature .....UUGGGGAAACGGCCGUGAGUG..... 28
NGS-Star .....UUGGGGAAACGGCCGUGAGUG.....CACCGGGUCUUUCCUCCAC..... 27
NGS-Mature .....UUGGGGAAACGGCCGUGAGUGAG..... 21
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....UCACCGGGUCUUUCCUCCCA..... 15
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....CACCGGGUCUUUCCUCCCA..... 11
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....CACCGGGUCUUUCCUCCACU..... 5
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....UCACCGGGUCUUUCCUCCAC..... 4
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....CACCGGGUCUUUCCUCC..... 3
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....UCACCGGGUCUUUCCUCC..... 2
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....UCACCGGGUCUUUCCUC..... 1
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....UCACCGGGUCUUUCCUC..... 1
NGS-Star .....UUGGGGAAACGGCCGUGAGUGAG.....ACCGGGUCUUUCCUCCAC..... 1

hsa-mir-215 MI0000291 AUCAUUCAGAAAUGGUUAUACAGGAAAUGACCUAUGAAUUGACAGACAAUUAUGCUGAGUUUGUCUGUCAUUUCUUUAGGCCAAUUAUCUGUAUGACUGUGCUACUCAA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-215 MIMAT0000272 .....AUGACCUAUGAAUUGACAGAC.....

```

NGS-Mature	.....UGACCUAUGAAUUGACAG.....	45470
NGS-Mature	.....AUGACCUAUGAAUUGACAGACA.....	1278
NGS-Mature	.....UGACCUAUGAAUUGACAGACA.....	1261
NGS-Mature	.....UGACCUAUGAAUUGACAGACA.....	684
NGS-Mature	.....UGACCUAUGAAUUGACAGAC.....	527
NGS-Mature	.....AUGACCUAUGAAUUGACAGAC.....	455
NGS-Mature	.....AUGACCUAUGAAUUGACAG.....	188
NGS-Mature	.....AUGACCUAUGAAUUGACAGA.....	134
NGS-Mature	.....UGACCUAUGAAUUGACAGACAA.....	42
NGS-Mature	.....AUGACCUAUGAAUUGACA.....	30
NGS-Star	.....UCUGUCAUUUCUUAGGCCAAUA.....	16
NGS-Star	.....UCUGUCAUUUCUUAGGCCAAU.....	3
NGS-Star	.....UCUGUCAUUUCUUAGGCCAAUAU.....	1

hsa-mir-450a-1 MI0001652	AAACGAUACUAAACUGUUUUUGCGAUGUGUUCUAAUUGACACUAUAAAUAUUGGGAACAUUUUGCAUGUUAUAGUUUUGUAUCAUAUA	
hsa-miR-450a MIMAT0001545	.....UUUUGCGAUGUGUUCUAAUAU.....	
NGS-Mature	.....UUUUGCGAUGUGUUCUAAUAU.....	2087
NGS-Mature	.....UUUUGCGAUGUGUUCUAAUAU.....	700
NGS-Mature	.....UUUUGCGAUGUGUUCUAAUA.....	650
NGS-Mature	.....UUUUGCGAUGUGUUCUAA.....	420
NGS-Star	.....AUUGGGAACAUUUUGCAUGUAU.....	165
NGS-Mature	.....UUUUGCGAUGUGUUCUAA.....	161
NGS-Mature	.....UUUUGCGAUGUGUUCUAAUAU.....	37
NGS-Mature	.....UUUUGCGAUGUGUUCUAAUAUG.....	30
NGS-Star	.....AUUGGGAACAUUUUGCAUGUAU.....	30
NGS-Mature	.....UUUGCGAUGUGUUCUAAUAU.....	23
NGS-Star	.....AUUGGGAACAUUUUGCAU.....	20
NGS-Star	.....AUUGGGAACAUUUUGCAUGUA.....	16
NGS-Mature	.....UUUGCGAUGUGUUCUAAU.....	14
NGS-Star	.....AUUGGGAACAUUUUGCAUGU.....	10
NGS-Star	.....UAUUGGGAACAUUUUGCAU.....	6
NGS-Mature	.....UUUGCGAUGUGUUCUAAUA.....	6
NGS-Star	.....AUUGGGAACAUUUUGCAUGU.....	3
NGS-Star	.....AUUGGGAACAUUUUGCAUG.....	2
NGS-Star	.....UAUUGGGAACAUUUUGCAUGU.....	2
NGS-Star	.....UAUUGGGAACAUUUUGCAUGUA.....	2

hsa-mir-663 MI0003672	CCUUCGGCGUCCAGCGGGGGCCCGGGACC GCCCCUGUGUCUGGGCGGGGAUCCCGCGCCGUGUUUCCUGGUGGGCCGGCCAAUG	
hsa-miR-663 MIMAT0003326	.....AGGCGGGGGCCCGGGGACC.....	
NGS-Mature	.....CGGGCGCCCGGGGACGCC.....	26
NGS-Mature	.....CGGGCGCCCGGGGACC.....	18
NGS-Star	.....CGGUGGGAUCCCGGGCC.....	10
NGS-Mature	.....GGGCGCCCGGGGACGCCCCU.....	9
NGS-Mature	.....GGGGGGCCCGGGGACC.....	8
NGS-Mature	.....GGGCGCCCGGGGACGCCCCU.....	8
NGS-Mature	.....CGGGCGCCCGGGGACC.....	8
NGS-Star	.....GGGUGGGAUCCCGGGCCGU.....	7
NGS-Mature	.....CGGGCGCCCGGGGACCG.....	5
NGS-Mature	.....GGGCGCCCGGGGACGCCCCU.....	5
NGS-Star	.....GGGUGGGAUCCCGGGCCG.....	5
NGS-Mature	.....GGGGGGCCCGGGGACGCCCCU.....	4
NGS-Mature	.....GGGGCGCCCGGGGACGCC.....	4
NGS-Star	.....GGGUGGGAUCCCGGGCCGUGUU.....	4
NGS-Star	.....UGGGAUCCCGGGCCGUG.....	3
NGS-Star	.....GGAUCCCGGGCCGUGUUUCCU.....	3
NGS-Star	.....UGGCGGUGGGAUCCCGGGCC.....	3
NGS-Star	.....UGGCGGUGGGAUCCCGGG.....	3
NGS-Star	.....GUGGGAUCCCGGGCCGUGUU.....	3
NGS-Star	.....GUGGCGGUGGGAUCCCGGGCC.....	3

hsa-mir-1273c MI0014171	UGCAGCCUGGGCGACAAAACGAGACCCUGUCUUUUUUUUUUUCUGAGACAGAGUCUCGUUCUGUUGCCCAAGCUGGA	
hsa-miR-1273c MIMAT0015017	.....GGCGACAAAACGAGACCCUGUC.....	
NGS-Mature	.....GGCGACAAAACGAGACCCUGU.....	254
NGS-Mature	.....GGCGACAAAACGAGACCCUGUC.....	82
NGS-Mature	.....GGCGACAAAACGAGACCC.....	82
NGS-Mature	.....GGCGACAAAACGAGACCCU.....	64
NGS-Mature	.....GGCGACAAAACGAGACCCUG.....	60
NGS-Star	.....CAGAGUCUCGUUCUGUUGCCAA.....	21
NGS-Mature	.....GGCGACAAAACGAGACCCUGUC.....	20
NGS-Star	.....CAGAGUCUCGUUCUGUUGCCAA.....	15
NGS-Star	.....CAGAGUCUCGUUCUGUUGCC.....	8
NGS-Star	.....CAGAGUCUCGUUCUGUUGCC.....	8
NGS-Star	.....CAGAGUCUCGUUCUGUUGC.....	8
NGS-Star	.....AGAGUCUCGUUCUGUUGCCAA.....	3
NGS-Mature	.....CGACAAAACGAGACCCUGUCU.....	3
NGS-Star	.....ACAGAGUCUCGUUCUGUUGC.....	3
NGS-Mature	.....GACAAAACGAGACCCUGU.....	3

```

NGS-Star .....CAGAGUCUCGUUCUGUUGCCCAAG..... 2
NGS-Star .....GAGUCUCGUUCUGUUGCCCAA..... 2
NGS-Mature .....CGCACAAAACGAGACCCUG..... 2
NGS-Star .....GAGUCUCGUUCUGUUGCCCAAG..... 1
NGS-Mature .....CGCACAAAACGAGACCCUGUC..... 1

hsa-mir-1292 MI0006433 CCUGGGAACGGGUUCCGGCAGACGCUAGGUUUGCGUUGACGUCGCGCCCCGGCUCCGUUCCAGG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-1292 MIMAT0005943 ..UGGGAACGGGUUCCGGCAGACGCU.....
..UGGGAACGGGUUCCGGCAGACGCU..... 140
NGS-Mature ..UGGGAACGGGUUCCGGCAGACGCU..... 122
NGS-Mature ..UGGGAACGGGUUCCGGCAGACGCUA..... 97
NGS-Mature ..GAACGGGUUCCGGCAGACGCUA..... 80
NGS-Mature ..UGGGAACGGGUUCCGGCAGACGCU..... 58
NGS-Mature ..GGGAACGGGUUCCGGCAGACGCUA..... 51
NGS-Mature ..GGGAACGGGUUCCGGCAGACGCU..... 27
NGS-Mature ..GGGAACGGGUUCCGGCAGACGCU..... 25
NGS-Mature ..UGGGAACGGGUUCCGGCAGACG..... 21
NGS-Mature ..AACGGGUUCCGGCAGACGCUAG..... 19
NGS-Star .....UCGCGCCCCGGCUCCGUUC..... 3

hsa-mir-1908 MI0008329 CGGGAUCCGCGGGGGGACGGCGAUUGGUCCGUUUGUGUGGCCACCGGCCCGCCGCGCCCGCCCGCCCGCC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-1908 MIMAT0007881 .....CGGCGGGGACGGCGAUUGGUC.....
.....CGGCGGGGACGGCGAUUGGUC..... 332
NGS-Mature .....CGGCGGGGACGGCGAUUGGUC..... 132
NGS-Mature .....CGGCGGGGACGGCGAUUGGUC..... 69
NGS-Mature .....CGGCGGGGACGGCGAUUG..... 9
NGS-Star .....ACCGGCCCGCGGCUCCGCC..... 8
NGS-Star .....ACCGGCCCGCGGCUCCGCC..... 8
NGS-Mature .....CGGCGGGGACGGCGAUUGGUC..... 7
NGS-Star .....CCGGCCCGCGGCUCCGCC..... 5
NGS-Mature .....GGCGGGGACGGCGAUUGGUC..... 3
NGS-Mature .....CGGCGGGGACGGCGAUUGGUC..... 3
NGS-Star .....ACCGGCCCGCGGCUCCGCC..... 2
NGS-Star .....CGGCGCGCGGCUCCGCCCGGC..... 2
NGS-Mature .....GGCGGGGACGGCGAUUGGUC..... 2
NGS-Mature .....CGGCGGGGACGGCGAUUG..... 1
NGS-Star .....CCGGCCCGCGGCUCCGCC..... 1
NGS-Star .....CCGGCCCGCGGCUCCGCC..... 1
NGS-Star .....GGCGCGCGGCUCCGCCCGGC..... 1
NGS-Mature .....GGCGGGGACGGCGAUUGG..... 1
NGS-Star .....CGGCGCGCGGCUCCGCC..... 1
NGS-Star .....ACCGGCCCGCGGCUCCGC..... 1

hsa-mir-190b MI0005545 UGCUUCUGUGUGAUUUGUUAUUGGGUUGUUAAUUAGGAACCAACUAAUUGUCAAAACAUUUCUACAGCAGCAG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-190b MIMAT0004929 .....UGAUUUGUUGAUUUGGGUUG.....
.....UGAUUUGUUGAUUUGGGUUG..... 316
NGS-Mature .....UGAUUUGUUGAUUUGGGUUG..... 226
NGS-Mature .....UGAUUUGUUGAUUUGGGUUG..... 22
NGS-Mature .....UGAUUUGUUGAUUUGGGU..... 15
NGS-Mature .....UGAUUUGUUGAUUUGGGUUG..... 4
NGS-Mature .....GAUUAUGUUGAUUUGGGUUG..... 2
NGS-Mature .....UGAUUUGUUGAUUUGG..... 1
NGS-Star .....ACUAAUUGUCAAAACAUUUCU..... 1
NGS-Mature .....UGAUUUGUUGAUUUGGGU..... 1
NGS-Mature .....GAUUAUGUUGAUUUGGGUUG..... 1

hsa-mir-204 MI0000284 GGCUCACAGUCUUCUUCUUGUAGACUCUGGACUUCUCCUUUGUCAUCCUAGCCUGAGAAUAUUGAAGGAGGCUGGGAAGGCAAAGGGACGUUCAUUGUCAUCACUGGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-204 MIMAT0000265 .....UUCUUUUGUCAUCCUAGCCU.....
.....UUCUUUUGUCAUCCUAGCCU..... 9380
NGS-Mature .....UUCUUUUGUCAUCCUAGCCU..... 1639
NGS-Mature .....UUCUUUUGUCAUCCUAGCCUG..... 718
NGS-Star .....GCUGGGAAGGCAAAGGGACGU..... 576
NGS-Mature .....UUCUUUUGUCAUCCUAG..... 429
NGS-Mature .....UUCUUUUGUCAUCCUAGC..... 402
NGS-Mature .....UUCUUUUGUCAUCCUAG..... 213
NGS-Mature .....UCUUCAUGUGACUCUGGGAC..... 130
NGS-Mature .....CUUCAUGUGACUCUGGGAC..... 114
NGS-Mature .....UCCUUUGUCAUCCUAGCCU..... 110
NGS-Star .....GCUGGGAAGGCAAAGGGACG..... 86
NGS-Mature .....UUCUUUUGUCAUCCUAGCCUGA..... 82
NGS-Star .....GCUGGGAAGGCAAAGGGA..... 50
NGS-Star .....GCUGGGAAGGCAAAGGGAC..... 42
NGS-Star .....GCUGGGAAGGCAAAGGGACGU..... 37
NGS-Star .....GCUGGGAAGGCAAAGGGACGU..... 31
NGS-Star .....GCUGGGAAGGCAAAGGGACGUUC..... 5
NGS-Star .....GAGGCUUGGGAAGGCAAAGGGACGU..... 5

```


NGS-Mature 77
NGS-Mature 59
NGS-Star 56
NGS-Mature 45
NGS-Mature 41
NGS-Mature 30
NGS-Star 14
NGS-Star 8
NGS-Star 5
NGS-Star 4
NGS-Star 4
NGS-Star 2
NGS-Star 2
hsa-mir-548k MI0006354
hsa-miR-548k MIMAT0005882
NGS-Mature 3413
NGS-Mature 590
NGS-Mature 284
NGS-Mature 244
NGS-Mature 52
NGS-Mature 47
NGS-Star 24
NGS-Mature 20
NGS-Mature 18
NGS-Mature 15
NGS-Star 7
NGS-Mature 6
NGS-Star 2
NGS-Star 1
NGS-Star 1
NGS-Star 1
hsa-mir-548n MI0006399
hsa-miR-548n MIMAT0005916
NGS-Mature 170
NGS-Mature 57
NGS-Mature 46
NGS-Mature 31
NGS-Mature 28
NGS-Star 16
NGS-Star 16
NGS-Star 13
NGS-Mature 12
NGS-Mature 11
NGS-Star 11
NGS-Star 10
NGS-Mature 9
NGS-Mature 9
NGS-Star 6
NGS-Star 5
NGS-Mature 5
NGS-Star 3
NGS-Star 2
NGS-Star 1
hsa-mir-577 MI0003584
hsa-miR-577 MIMAT0003242
NGS-Mature 1244
NGS-Mature 120
NGS-Mature 80
NGS-Mature 70
NGS-Mature 64
NGS-Mature 47
NGS-Mature 30
NGS-Star 30
NGS-Star 25
NGS-Mature 21
NGS-Mature 14
NGS-Mature 9
NGS-Star 8
NGS-Star 3
NGS-Star 2
NGS-Star 2
NGS-Star 2
NGS-Star 1


```

hsa-mir-3164 MI0014194 CUUGGAAACUGUGACUUUAAGGGAAUUGGGCCAGCAGCAGCCUCCAGCAAUCUGCCUUUUGUCUUAAGUCGCAGUUUCCAGG
(((.((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-3164 MIMAT0015038 . . . . .UGUGACUUUAAGGAAAUGGCC . . . . . 519
NGS-Mature . . . . .UGUGACUUUAAGGAAAUGGCC . . . . . 16
NGS-Mature . . . . .UGUGACUUUAAGGAAAUGG . . . . . 6
NGS-Mature . . . . .UGUGACUUUAAGGAAAUG . . . . . 3
NGS-Mature . . . . .UGUGACUUUAAGGAAAUGGC . . . . . 2
NGS-Mature . . . . .GUGACUUUAAGGAAAUGG . . . . . 2
NGS-Mature . . . . .CUGUGACUUUAAGGAAAUGGC . . . . . 2
NGS-Mature . . . . .CUGUGACUUUAAGGAAAUGGCC . . . . . 2
NGS-Star . . . . .CUGUGACUUUAAGGAAAUGGCC . . . . . 2
NGS-Mature . . . . .UGUGACUUUAAGGAAAUGGCCG . . . . . 2
NGS-Mature . . . . .GUGACUUUAAGGAAAUGGCC . . . . . 1
NGS-Mature . . . . .UGUGACUUUAAGGAAAUGGCCACA . . . . . 1
NGS-Star . . . . .CCGUUUUGCUUGAAGUCGAGU . . . . . 1

hsa-mir-3174 MI0014208 GUUACCUGGUAGUGAGUUAAGAGAUGCAGAGCCUCCAGCAAUCUGGAUCUGCAUUUUAAUUCACAUCAUGCAUGGUAAU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-3174 MIMAT0015051 . . . . .UAGUGAGUUAGAGAUGCAGAGCC . . . . . 75
NGS-Mature . . . . .UAGUGAGUUAGAGAUGCAG . . . . . 70
NGS-Mature . . . . .UAGUGAGUUAGAGAUGCAGGC . . . . . 49
NGS-Mature . . . . .UAGUGAGUUAGAGAUGCAG . . . . . 44
NGS-Mature . . . . .UAGUGAGUUAGAGAUGCAGAGCC . . . . . 41
NGS-Mature . . . . .UAGUGAGUUAGAGAUGCAGAGCC . . . . . 13
NGS-Mature . . . . .UAGUGAGUUAGAGAUGCAG . . . . . 8
NGS-Star . . . . .UAGUGAGUUAGAGAUGCAG . . . . . 3
NGS-Mature . . . . .UAGUGAGUUAGAGAUGCAGAGCCU . . . . . 3
NGS-Mature . . . . .GUGAGUUAGAGAUGCAG . . . . . 1
NGS-Mature . . . . .AGUGAGUUAGAGAUGCAGAGCC . . . . . 1
NGS-Star . . . . .UAGUGAGUUAGAGAUGCAG . . . . . 1
NGS-Star . . . . .AUCUGCAUUUUAAUUCACAU . . . . . 1
NGS-Star . . . . .GAUCUGCAUUUUAAUUCACAU . . . . . 1

hsa-mir-539 MI0003514 AUACUUGAGGAGAAAUAUCCUUGGUGUGUCGUUUUAUUAUGAUAAUCAUAACAAGGACAAUUUCUUUUUGAGUAU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-539 MIMAT0003163 . . . . .GGAGAAAUAUCCUUGGUGUGU . . . . . 48202
NGS-Star . . . . .AUCAUACAAGGACAAUUUCUUU . . . . . 17251
NGS-Star . . . . .AUACAAGGACAAUUUCUUUU . . . . . 9627
NGS-Star . . . . .CAUACAAGGACAAUUUCUUUU . . . . . 3513
NGS-Star . . . . .AUCAUACAAGGACAAUUUCUU . . . . . 3052
NGS-Star . . . . .AUCAUACAAGGACAAUUUCUUUU . . . . . 2170
NGS-Star . . . . .AUACAAGGACAAUUUCUUUU . . . . . 2012
NGS-Star . . . . .AAUCAUACAAGGACAAUUUCUUU . . . . . 1042
NGS-Star . . . . .AUACAAGGACAAUUUCUUUU . . . . . 847
NGS-Star . . . . .CAUACAAGGACAAUUUCUUUU . . . . . 612
NGS-Mature . . . . .GGAGAAAUAUCCUUGGUGUGU . . . . . 250
NGS-Mature . . . . .GGAGAAAUAUCCUUGGUGUGU . . . . . 222

NGS-Mature . . . . .AGAAAUAUCCUUGGUGUGU . . . . . 64
NGS-Mature . . . . .AAUUAUCCUUGGUGUGU . . . . . 33
NGS-Mature . . . . .AAUUAUCCUUGGUGUGU . . . . . 19
NGS-Mature . . . . .AGAAAUAUCCUUGGUGUGU . . . . . 14
NGS-Mature . . . . .GGAGAAAUAUCCUUGGUGUG . . . . . 11
NGS-Mature . . . . .AGAAAUAUCCUUGGUGUGU . . . . . 8
NGS-Mature . . . . .GGAGAAAUAUCCUUGGUGU . . . . . 7
NGS-Mature . . . . .GGAGAAAUAUCCUUGGUG . . . . . 7

hsa-mir-5481 MI0006361 UAUUAGGUUGGUGCAAAGUAUUUGCGGGUUUUGUCGUAAGAAAGUAUUGGCAAAACUGCAGUUACUUGGCACCAACCAAUUGCU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-5481 MIMAT0005889 . . . . .AAAAGUAUUUGCGGGUUUUGUC . . . . . 293
NGS-Mature . . . . .AAAAGUAUUUGCGGGUUUUGUC . . . . . 243
NGS-Mature . . . . .AAAAGUAUUUGCGGGUUUUG . . . . . 74
NGS-Mature . . . . .AAAAGUAUUUGCGGGUUUUGCGUA . . . . . 52
NGS-Mature . . . . .AAAAGUAUUUGCGGGUUUU . . . . . 38
NGS-Star . . . . .AAAAGUAUUUGCGGGUUUU . . . . . 6
NGS-Star . . . . .AAAAGUAUUUGCGGGUUUU . . . . . 5
NGS-Mature . . . . .AAAAGUAUUUGCGGGUUU . . . . . 3
NGS-Mature . . . . .AAAAGUAUUUGCGGGUUUUGU . . . . . 3
NGS-Mature . . . . .AAAAGUAUUUGCGGGUUUUGU . . . . . 1
NGS-Star . . . . .AAAAGUAUUUGCGGGUUUUGU . . . . . 1
NGS-Mature . . . . .AAAAGUAUUUGCGGGUUUUGUC . . . . . 1
NGS-Mature . . . . .AUUAGGUUGGUGCAA . . . . . 1
NGS-Star . . . . .AUUAGGUUGGUGCAA . . . . . 1
NGS-Star . . . . .GGCAAAACUGCAGUUAU . . . . . 1

hsa-mir-548w MI0014222 GGUUGGUGCAAAGUAUACUGCGGGUUUUGCCUUUAACAUAUUGGCAAAACCCCAAUUACUUUUGCCACCAUUC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-548w MIMAT0015060 . . . . .AAAAGUAACUGCGGGUUUUGCCU . . . . .

```



```

NGS-Star .....GAAACUGAGGAUUAGGAAGGU... 1
NGS-Star .....ACAACAGUGCCAACCUCACAG..... 1

hsa-mir-3129 MI0014146
GUACUUGGGCAGUAGUGAGAGAUUGGUUUGCCUGUUAUGAAUUAACUAAUCUCACACUGCGCCCAAGGC
...((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
NGS-Mature .....GCAGUAGUGUAGAGAUUGGUUU..... 103
NGS-Mature .....AGUAGUGUAGAGAUUGGUUUGC..... 75
NGS-Mature .....AGUAGUGUAGAGAUUGGUUUG..... 73
NGS-Mature .....CAGUAGUGUAGAGAUUGGUUU..... 40
NGS-Mature .....CAGUAGUGUAGAGAUUGGUUU..... 15
NGS-Mature .....AGUAGUGUAGAGAUUGGUUU..... 14
NGS-Mature .....GCAGUAGUGUAGAGAUUGGUUU..... 13
NGS-Star .....AAACUAAUCUCUACACUGCGUC..... 6
NGS-Mature .....GCAGUAGUGUAGAGAUUGGU..... 4
NGS-Star .....AAACUAAUCUCUACACUGCGUC..... 3
NGS-Mature .....CAGUAGUGUAGAGAUUGGUU..... 3
NGS-Mature .....GCAGUAGUGUAGAGAUUGGUUUG..... 2
NGS-Star .....AACUAAUCUCUACACUGCGGCC..... 1
NGS-Star .....AACUAAUCUCUACACUGCGCC..... 1
NGS-Star .....CUAAUCUCUACACUGCGUC..... 1
NGS-Star .....CUAAUCUCUACACUGCGCC..... 1
NGS-Star .....AACUAAUCUCUACACUGCGUC..... 1
NGS-Star .....AAACUAAUCUCUACACUGCU..... 1
NGS-Star .....AAACUAAUCUCUACACUG..... 1

hsa-mir-3127 MI0014144
GGCCAGGCCCAUCAGGGCUUGUGGAAUUGGGAAGGAGAGAGGACGCCUUCUCCUUCUGCAGGCCUGCGGGUGUGGU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-3127 MIMAT0014990
.....AUCAGGGCUUGUGGAAUUGGGAAG..... 467
NGS-Mature .....AUCAGGGCUUGUGGAAUUGGGAAG..... 194
NGS-Mature .....AUCAGGGCUUGUGGAAUUGGGA..... 63
NGS-Mature .....AUCAGGGCUUGUGGAAUUGGGAAG..... 17
NGS-Mature .....UCAGGGCUUGUGGAAUUGGGAAG..... 15
NGS-Star .....UCCCUUCUGCAGGCCUGCGUG..... 9
NGS-Mature .....AUCAGGGCUUGUGGAAUUGG..... 7
NGS-Mature .....AUCAGGGCUUGUGGAAUUGGG..... 6
NGS-Mature .....CAUCAGGGCUUGUGGAAUUGGGA..... 5
NGS-Mature .....AGGGCUUGUGGAAUUGGGAAG..... 3
NGS-Mature .....AUCAGGGCUUGUGGAAUUGGGAAGGA..... 3
NGS-Star .....UCCCUUCUGCAGGCCUGCU..... 3
NGS-Star .....UCCCUUCUGCAGGCCUGCUG..... 2
NGS-Star .....UCCCUUCUGCAGGCCUGC..... 1
NGS-Star .....UCCCUUCUGCAGGCCUGCU..... 1

hsa-mir-3194 MI0014239
AGGUGGCAGGGCCAGCCACCAGGAGGGCGUGGCCACCCGGGCAGCUCUGCUCACUGGCAGUGUCACCU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-3194 MIMAT0015078
.....GGCCAGCCACCAGGAGGGCUG..... 36
NGS-Mature .....GGCCAGCCACCAGGAGGGCUGC..... 26
NGS-Star .....AGCUCUGCUGCUCACUGGCAGU..... 12
NGS-Mature .....GGCCAGCCACCAGGAGGGCUG..... 10
NGS-Star .....AGCUCUGCUGCUCACUGGCA..... 9
NGS-Mature .....GGCCAGCCACCAGGAGGG..... 9
NGS-Mature .....GGCCAGCCACCAGGAGGGCU..... 6
NGS-Mature .....GGAGGGCUGCGGCCACCCGGGCAGCUCUGCUG..... 4
NGS-Star .....AGCUCUGCUGCUCACUGGCAG..... 3
NGS-Star .....AGCUCUGCUGCUCACUGGCAGU..... 1
NGS-Star .....AGCUCUGCUGCUCACUGG..... 1
NGS-Mature .....GGCCAGCCACCAGGAGGGC..... 1

hsa-mir-1179 MI0006272
GGCUGGAAAGGAAGAAGCAUUCUUUCAUUGGUUGGUUGUGUAUUGCCUUGUCAACCAAUAAGAGGAUGCCAUUUUACCUUUUCUGACUAGCU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-1179 MIMAT0005824
.....AAGCAUUCUUUCAUUGGUUGG..... 317
NGS-Mature .....AAGCAUUCUUUCAUUGGUUGG..... 39
NGS-Mature .....AGAAGCAUUCUUUCAUUGGUUG..... 26
NGS-Mature .....AAGCAUUCUUUCAUUGGUUGG..... 16
NGS-Mature .....AGAAGCAUUCUUUCAUUGGUU..... 11
NGS-Star .....AAGCAUUCUUUCAUUGGUU..... 8
NGS-Mature .....AAGCAUUCUUUCAUUGGU..... 6
NGS-Star .....CAACCAAUAAGAGGAUGCCAUU..... 3
NGS-Star .....ACCAAUAAGAGGAUGCCAUU..... 3
NGS-Mature .....AUUCUUUCAUUGGUUGGU..... 3
NGS-Mature .....AGCAUUCUUUCAUUGGUUGGU..... 3
NGS-Star .....CAACCAAUAAGAGGAUGCCAUU..... 2
NGS-Mature .....AAGCAUUCUUUCAUUGGUUG..... 2
NGS-Star .....AAGCAUUCUUUCAUUGGUUG..... 2
NGS-Mature .....GAAGCAUUCUUUCAUUGGUU..... 2
NGS-Star .....AAGCAUUCUUUCAUUGGUUG..... 1
NGS-Star .....ACCAAUAAGAGGAUGCCAUU..... 1
NGS-Star .....ACCAAUAAGAGGAUGCCAUUUU..... 1

```


NGS-Star	.....GAAUGUGUAGCAAAGACAGA.....	15
NGS-Star	.....GAAUGUGUAGCAAAGACAGAA.....	12
NGS-Star	.....UGAAUGUGUAGCAAAGACAG.....	10
NGS-Mature	.....GUGUCUUUUGUCUCUGCAGUCAGU.....	8
NGS-Star	.....AUGUGUAGCAAAGACAGAAU.....	7
NGS-Mature	.....GUGUCUUUUGUCUCUGCAGUCAG.....	6
NGS-Mature	.....CGUGUCUUUUGUCUCUGCAGUC.....	3
NGS-Mature	.....GUGUCUUUUGUCUCUGCAGUC.....	3
NGS-Mature	.....GUGUCUUUUGUCUCUGCAGU.....	2
NGS-Mature	.....GUGUCUUUUGUCUCUGCAG.....	1
hsa-mir-548h-1 MI0006411	UCUGUCCAUUAGGUGGUGCAAAGUAUAUCGCGUUUUUGUCAUUUUUAUGGUAAAAACUGGAAUUUUUUUUCACUUGACCUAAUUAUUAAGCCAGAAU	
hsa-miR-548h MIMAT0005928	(((((.....)))))).....	
NGS-Mature	.....AAAAGUAAUCGCGUUUUUGUC.....	378
NGS-Mature	.....AAAAGUAAUCGCGUUUUUGUC.....	190
NGS-Mature	.....AAAAGUAAUCGCGUUUUUGUCA.....	61
NGS-Mature	.....AAAAGUAAUCGCGUUUUUG.....	33
NGS-Mature	.....CAAAGUAAUCGCGUUUUUG.....	30
NGS-Mature	.....AAAAGUAAUCGCGUUUUU.....	17
NGS-Mature	.....AAGUAAUCGCGUUUUUG.....	10
NGS-Mature	.....CAAAGUAAUCGCGUUUUUG.....	7
NGS-Mature	.....AAGUAAUCGCGUUUUUGUC.....	5
NGS-Mature	.....AAGUAAUCGCGUUUUUGUCA.....	4
NGS-Star	.....AAAACUGGAAUUUCUUUGCA.....	1
NGS-Star	.....AAAACUGGAAUUUCUUUU.....	1
NGS-Star	.....AAAACUGGAAUUUCUUU.....	1
hsa-mir-642a MI0003657	AUCUGAGUUGGAGGGGCCUCUCAAAUGUGUCUUGGGUGGGGAUCAAGACACAUUUGGAGAGGGAACUCCCAACUCGGCCUCUGCCAUCUU	
hsa-miR-642a MIMAT0003312	(((((.....)))))).....	
NGS-Star	.....GUCCUCUCAAAUGUGUCUUG.....	519
NGS-Star	.....AGACACAUUUGGAGAGGGAAC.....	139
NGS-Star	.....AGACACAUUUGGAGAGGGAAC.....	61
NGS-Star	.....AGACACAUUUGGAGAGGGAACCU.....	53
NGS-Mature	.....GUCCUCUCAAAUGUGUCUUG.....	40
NGS-Star	.....AGACACAUUUGGAGAGGGA.....	26
NGS-Star	.....AGACACAUUUGGAGAGGG.....	22
NGS-Mature	.....GUCCUCUCAAAUGUGUCUU.....	12
NGS-Star	.....GACACAUUUGGAGAGGGAAC.....	7
NGS-Star	.....GACACAUUUGGAGAGGGAACCU.....	6
NGS-Mature	.....GUCCUCUCAAAUGUGUCU.....	6
NGS-Star	.....ACACAUUUGGAGAGGGAACCU.....	3
NGS-Star	.....GACACAUUUGGAGAGGGA.....	2
NGS-Mature	.....GUCCUCUCAAAUGUGU.....	2
NGS-Mature	.....GUCCUCUCAAAUGUGUC.....	1
NGS-Mature	.....GGUCCUCUCAAAUGUGU.....	1
hsa-mir-1293 MI0006355	AGGUUGUUCUGGGUGGUCUGGAGAUUUGUGCAGCUUGUACCGCACAAAUCUCCGGACCACUUAGUCUUUA	
hsa-miR-1293 MIMAT0005883	(((((.....)))))).....	
NGS-Mature	.....UGGGUGGUCUGGAGAUUUGUC.....	96
NGS-Mature	.....UCUGGGUGGUCUGGAGAUUUGUG.....	65
NGS-Mature	.....GGGUGGUCUGGAGAUUUGUCA.....	31
NGS-Mature	.....CUGGGUGGUCUGGAGAUUUGUG.....	27
NGS-Mature	.....UGGGUGGUCUGGAGAUUUGUC.....	26
NGS-Mature	.....UCUGGAGAUUUGUGCAGCUUGU.....	23
NGS-Mature	.....GGUGGUCUGGAGAUUUGUCA.....	17
NGS-Mature	.....UGGGUGGUCUGGAGAUUUGUCA.....	15
NGS-Mature	.....UCUGGAGAUUUGUGCAGCUUGU.....	13
NGS-Star	.....ACAAAUCUCCGGACCACUAGU.....	12
NGS-Mature	.....GUGGUCUGGAGAUUUGUCAG.....	12
NGS-Star	.....CAAAUCUCCGGACCACUAGUCU.....	8
NGS-Star	.....CAAAUCUCCGGACCACUAGUC.....	6
NGS-Star	.....CAAAUCUCCGGACCACUAGU.....	5
NGS-Star	.....AAUCUCCGGACCACUAGUCU.....	2
NGS-Star	.....CACAAAUCUCCGGACCACUU.....	2
NGS-Star	.....CAAAAUCUCCGGACCACUAG.....	1
NGS-Star	.....GCACAAAUCUCCGGACCACUU.....	1
NGS-Star	.....CACAAAUCUCCGGACCACU.....	1
NGS-Star	.....ACAAAUCUCCGGACCACUAGUC.....	1
hsa-mir-1276 MI0006416	CCCCAGCUAGGUAAGGCCUCUGGAGACACCUGGAUUUCAGAGAAUGUCUCCACUGAGCACUUGGGCCUUGAUGGGCGGU	
hsa-miR-1276 MIMAT0005930	(((((.....)))))).....	
NGS-Mature	.....UAAAGAGCCUCUGGAGACA.....	288
NGS-Mature	.....UAAAGAGCCUCUGGAGACAC.....	130
NGS-Mature	.....UAAAGAGCCUCUGGAGACAC.....	51
NGS-Mature	.....UAAAGAGCCUCUGGAGAC.....	24
NGS-Mature	.....UAAAGAGCCUCUGGAGACACU.....	5

```

NGS-Mature      .....UAAAGAGCCUCUGGAGACACCCUG..... 4
NGS-Star        .....UGUCUCCACUGAGCACUUGGGC..... 3
NGS-Star        .....UCUCCACUGAGCACUUGGGC..... 3
NGS-Mature      .....UAAAGAGCCUCUGGAGA..... 2
NGS-Star        .....UCUCCACUGAGCACUUGGGC..... 2
NGS-Star        .....UCUCCACUGAGCACUUGGGCU..... 2
NGS-Mature      .....AAAGAGCCUCUGGAGACAC..... 1
NGS-Mature      .....AAAGAGCCUCUGGAGACAC..... 1
NGS-Mature      .....AAAGAGCCUCUGGAGACA..... 1

hsa-mir-939 MI0005761 UGUGGGCAGGGCCUCUGGGAGCUGAGGCUCUGGGGUGGGCGGGCUGACCCUGGGCCUCUGCCCCAGUGUCUGACCGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.UGGGGAGCUGAGGCUCUGGGGUG..... 112
NGS-Star        .....CCUUGGGCCUCUGCUCUCCAGU..... 112
NGS-Mature      .....UGGGGAGCUGAGGCUCUGGGGUG..... 25
NGS-Star        .....CCUUGGGCCUCUGCUCUCCAG..... 16
NGS-Mature      .....UGGGGAGCUGAGGCUCUGGGGU..... 6
NGS-Star        .....CUGGGCCUCUGCUCUCCAGU..... 5
NGS-Mature      .....CCUGGGGAGCUGAGGCUCUGGG..... 3
NGS-Mature      .....CCUUGGGGAGCUGAGGCUCUGGG..... 3
NGS-Mature      .....CCUGGGGAGCUGAGGCUCUGGG..... 2
NGS-Mature      .....CUGAGGCUCUGGGGUG..... 2
NGS-Mature      .....GCCUUGGGGAGCUGAGGCUCUGGG..... 2
NGS-Star        .....CUGGGCCUCUGCUCUCCAG..... 2
NGS-Mature      .....UGGGGAGCUGAGGCUCUGGGG..... 2
NGS-Star        .....ACCUGGGCCUCUGCUCUCCAG..... 1
NGS-Mature      .....CCUGGGGAGCUGAGGCUCUGGGGU..... 1
NGS-Star        .....CCUUGGGCCUCUGCUCUCCAG..... 1
NGS-Star        .....CCUUGGGCCUCUGCUCUCC..... 1

hsa-mir-1250 MI0006385 CUGUCCCGCUGGGCCUGGAGGUGACGGGUCUGGAUGUGGCCUUUUUCCUUUUUCAAAGGCCACAUUUCCAGCCAUUCCACCUUCCAGGCCUCUGAAGUGGCCACAGGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.ACGGUGCUGGAUGUGGCCUUU..... 656
NGS-Mature      .....ACGGUGCUGGAUGUGGCCUUU..... 117
NGS-Mature      .....ACGGUGCUGGAUGUGGCCUU..... 92
NGS-Star        .....AGGCCACAUUUCCAGCCCAU..... 20
NGS-Mature      .....ACGGUGCUGGAUGUGGCCU..... 14
NGS-Mature      .....ACGGUGCUGGAUGUGGCC..... 9
NGS-Mature      .....ACGGUGCUGGAUGUGGCCUUUU..... 8
NGS-Star        .....AGGCCACAUUUCCAGCCCAU..... 3
NGS-Mature      .....ACGGUGCUGGAUGUGGCCUUUUU..... 2
NGS-Mature      .....CGGUGCUGGAUGUGGCCUUU..... 2
NGS-Mature      .....CGGUGCUGGAUGUGGCCUUUU..... 1
NGS-Mature      .....GACGGUGCUGGAUGUGGCCU..... 1

hsa-mir-3124 MI0014140 GCGGGCUCUCGCGGGCGAAGGCAAAAGUCGAUUUCCAAAAGUGACUUUCCUCACUCCCGUGAAGUCGGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.UUCGCGGGCGAAGGCAAAAGUC..... 185
NGS-Mature      .....UUCGCGGGCGAAGGCAAAAGUC..... 164
NGS-Mature      .....UUCGCGGGCGAAGGCAAAAGU..... 93
NGS-Mature      .....UUCGCGGGCGAAGGCAAAAG..... 24
NGS-Mature      .....UCGCGGGCGAAGGCAAAAG..... 4
NGS-Mature      .....GCGGGCGAAGGCAAAAGUC..... 3
NGS-Mature      .....UUCGCGGGCGAAGGCAAA..... 2
NGS-Mature      .....CGCGGGCGAAGGCAAAAGUC..... 2
NGS-Star        .....CUUUCUCACUCCCGUGAAGU..... 2
NGS-Mature      GCGGGCUCUCGCGGGCGAAGGCAAAAG..... 1
NGS-Mature      .....GCUUCGCGGGCGAAGGCAAAAGU..... 1
NGS-Star        .....GCUUCGCGGGCGAAGGCAAAAGU..... 1
NGS-Star        .....UUCUCACUCCCGUGAAGUGGC..... 1

hsa-mir-653 MI0003674 UUCAUUCUUCAGUGUUGAAACAUCUCUACUGAACCCAGCUUCAAACAAGUUCACUGAGUUUUUCAAUAUUGCAAGAAUUAAGAUGGAAGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
GUGUUGAAACAUCUCUACUG..... 90
NGS-Star        .....UUCACUGGAGUUUGUUCAAU..... 70
NGS-Star        .....UUCACUGGAGUUUGUUCAAU..... 64
NGS-Mature      .....UUGAAACAUCUCUACUGAAC..... 59
NGS-Mature      .....UUGAAACAUCUCUACUGAAC..... 20
NGS-Star        .....ACUGGAGUUUGUUCAAUAU..... 12
NGS-Mature      .....UUGAAACAUCUCUACUGAA..... 10
NGS-Star        .....UUCACUGGAGUUUGUUCAA..... 5
NGS-Star        .....UUCACUGGAGUUUGUUUC..... 4
NGS-Mature      .....UGUUGAAACAUCUCUACUGA..... 4
NGS-Star        .....UUCACUGGAGUUUGUUCAAUAU..... 4
NGS-Star        .....UUCACUGGAGUUUGUUCA..... 4
NGS-Star        .....ACUGGAGUUUGUUCAAU..... 3
NGS-Star        .....UCACUGGAGUUUGUUCAAU..... 2

```



```

NGS-Star .....AAGGCACUAUGAGAUUUAGAAU..... 1

hsa-mir-216b MI0005569 GCAGACUGGAAAUCUCUGCAGGCAAUGUGAGUCACUGAGGAAAUCACACACUUACCCGUAGAGAUUCACAGUCUGACA
.(((((((.....(((((((.....(((((((.....(((((((.....)))))))))))))))))))))))))))))).....
hsa-miR-216b MIMAT0004959 .....AAAUCUCUGCAGGCAAUGUGA.....
NGS-Mature .....AAAUCUCUGCAGGCAAUGUGA..... 1747
NGS-Mature .....AAAUCUCUGCAGGCAAUGUG..... 693
NGS-Mature .....AAAUCUCUGCAGGCAAUGU..... 244
NGS-Mature .....AAAUCUCUGCAGGCAAUGUGAU..... 208
NGS-Mature .....AAAUCUCUGCAGGCAAUGUG..... 168
NGS-Mature .....AAAUCUCUGCAGGCAAUGU..... 108
NGS-Mature .....AAAUCUCUGCAGGCAAUGUGA..... 36
NGS-Mature .....AAAUCUCUGCAGGCAAUGUGAUG..... 36
NGS-Mature .....AAAUCUCUGCAGGCAAUG..... 16
NGS-Mature .....AAAUCUCUGCAGGCAAUG..... 7
NGS-Star .....CACUUACCCGUAGAGAUUCU..... 2
NGS-Star .....ACACUUACCCGUAGAGAUUC..... 2
NGS-Star .....ACACUUACCCGUAGAGAUUCU..... 1
NGS-Star .....ACACUUACCCGUAGAGAUUCUA..... 1
NGS-Star .....CACACUUACCCGUAGAGAUUC..... 1
NGS-Star .....CACACUUACCCGUAGAGAUUCU..... 1
NGS-Star .....CACUUACCCGUAGAGAUUC..... 1

hsa-mir-581 MI0003588 GUUAUGUGAAGGUAUUCUUGUGUUCUCUAGAUCAGUGCUUUUAGAAAUUUGUGUGAUUCAAGAACAACAAGAAUACCUACACAGAACCCUGC
(((.....(((((((.....(((((((.....(((((((.....)))))))))))))))))))))))))))))).....
hsa-miR-581 MIMAT0003246 .....UCUUGUGUUCUCUAGAUCAGU.....
NGS-Mature .....UCUUGUGUUCUCUAGAUCAGUGC..... 5
NGS-Mature .....CUUGUGUUCUCUAGAUCAGUG..... 4
NGS-Mature .....UCUUGUGUUCUCUAGAUCAGUG..... 2
NGS-Mature .....UCUUGUGUUCUCUAGAUCAGUGC..... 2
NGS-Star .....GUGAUCUAAAGAACAACAAGAAU..... 1
NGS-Star .....GUGUGAUCUAAAGAACAACAAGA..... 1
NGS-Star .....AUCUAAAGAACAACAAGAAUAC..... 1
NGS-Mature .....CUUGUGUUCUCUAGAUCAGUGC..... 1
NGS-Star .....UGUGAUCUAAAGAACAACAAGA..... 1
NGS-Mature .....UCUUGUGUUCUCUAGAUCAGU..... 1
NGS-Star .....GUGAUCUAAAGAACAACAAGA..... 1
NGS-Mature .....CUUGUGUUCUCUAGAUCAGU..... 1
NGS-Mature .....UUGUGUUCUCUAGAUCAGUGCUU..... 1
NGS-Mature .....UUGUGUUCUCUAGAUCAGUGCUUU..... 1

hsa-mir-1247 MI0006382 CCGCUUGCCUCGCCAGGCGAGCCCGGGCGCGACCCGUCCCGUUCGUCGCCGGACGUUGCUCUCUACCCCGGGAACGUCGAGACUGGAGCGCCGAAACUGAGCCACCUUCGCGGACCCCGAGAGCGGGG
(((((((.....(((((((.....(((((((.....(((((((.....)))))))))))))))))))))))))))))).....
hsa-miR-1247 MIMAT0005899 .....ACCCGUCCCGUUCGUCGCCGGA..... 1481
NGS-Mature .....ACCCGUCCCGUUCGUCGCCGGA..... 256
NGS-Mature .....ACCCGUCCCGUUCGUCGCCGG..... 41
NGS-Star .....CGGGAACGUCGAGACUGGAGC..... 26
NGS-Mature .....ACCCGUCCCGUUCGUCGCCG..... 22
NGS-Mature .....ACCCGUCCCGUUCGUCGCC..... 21
NGS-Star .....CGGGAACGUCGAGACUGGAG..... 18
NGS-Mature .....ACCCGUCCCGUUCGUCGCC..... 8
NGS-Star .....CGGGAACGUCGAGACUGGA..... 8
NGS-Mature .....ACCCGUCCCGUUCGUCGCCGGAC..... 7
NGS-Mature .....CCCGUCCCGUUCGUCGCCGGA..... 4
NGS-Mature .....CACCCGUCCCGUUCGUCGCCG..... 2
NGS-Mature .....CACCCGUCCCGUUCGUCGCCGG..... 2
NGS-Star .....CGGGAACGUCGAGACUGG..... 2
NGS-Star .....CCCGGGAACGUCGAGACUGGAG..... 1
NGS-Star .....GGGAACGUCGAGACUGGAGC..... 1

hsa-mir-1270-1 MI0006407 CACAGAGUUAUACUGGAGAUUUGGAAGAGCUGUGUGGGUAUAAGUAACAGGCUUUUCUUUAUCUUCUUAUGUGGCUCUUUGCA
(((.....(((((((.....(((((((.....(((((((.....)))))))))))))))))))))))))))))).....
hsa-miR-1270 MIMAT0005924 .....CUGGAGAUUUGGAAGAGCUGUGU..... 1685
NGS-Mature .....CUGGAGAUUUGGAAGAGCUGUGU..... 285
NGS-Mature .....CUGGAGAUUUGGAAGAGCUGU..... 196
NGS-Mature .....CUGGAGAUUUGGAAGAGCUGUG..... 141
NGS-Mature .....CUGGAGAUUUGGAAGAGCUGUGU..... 132
NGS-Mature .....ACUGGAGAUUUGGAAGAGCUGU..... 119
NGS-Mature .....CUGGAGAUUUGGAAGAGCUG..... 116
NGS-Mature .....CUGGAGAUUUGGAAGAGCU..... 101
NGS-Mature .....ACUGGAGAUUUGGAAGAGCUGUG..... 89
NGS-Mature .....ACUGGAGAUUUGGAAGAGCUG..... 54
NGS-Star .....CAGGCUUUUCUUUAUCUUCUAU..... 4
NGS-Star .....AGGCUUUUCUUUAUCUUCUAUGU..... 2
NGS-Star .....AGGCUUUUCUUUAUCUUCUA..... 1
NGS-Star .....AGGCUUUUCUUUAUCUUCUA..... 1
NGS-Star .....AGGCUUUUCUUUAUCUUCUAUG..... 1

```


NGS-Mature	.....AGAUGUAUGGAAUCUGUAUA.....	22
NGS-Mature	.....AGAUGUAUGGAAUCUGUAUAUA.....	12
NGS-Star	.....UAUAUAGAUUCCAUAUAUA.....	10
NGS-Mature	.....AGAGAUGUAUGGAAUCUGUAU.....	6
NGS-Star	.....UAUAUAGAUUCCAUAUAUA.....	3
NGS-Mature	.....AGAUGUAUGGAAUCUGUA.....	3
NGS-Mature	.....AGAUGUAUGGAAUCUGUAUAUAUCU.....	2
NGS-Mature	.....AGAUGUAUGGAAUCUGUAUAUAUC.....	2
NGS-Star	.....UAUAUAGAUUCCAUAUAUA.....	1
hsa-mir-1251 MI0006386		
	GUGGACUCUAGCUGCCAAAGGCGCUUCUCUCUGAACAGCGCUUUGCUCAGCCAGUGUAGACAUGGC	
	(((((.....)))))).....	
hsa-miR-1251 MIMAT0005903	.....ACUCUAGCUGCCAAAGGCGCU.....	
NGS-Mature	.....ACUCUAGCUGCCAAAGGCGCU.....	61
NGS-Mature	.....ACUCUAGCUGCCAAAGGCGCU.....	12
NGS-Mature	.....ACUCUAGCUGCCAAAGGCGG.....	9
NGS-Mature	.....ACUCUAGCUGCCAAAGGCGC.....	8
NGS-Mature	.....ACUCUAGCUGCCAAAGGCGCUUC.....	3
NGS-Mature	.....ACUCUAGCUGCCAAAGGCGCUUC.....	2
NGS-Star	.....AGGCUUUGCUCAGCCAGUGUAG.....	2
NGS-Star	.....CGCUUUGCUCAGCCAGUGUAG.....	2
NGS-Mature	.....ACUCUAGCUGCCAAAGGC.....	1
hsa-mir-1267 MI0006404		
	CUCCCAAUUCUCCUGUUGAAGUGUAUCCCCACCUCAGCAUUGGGGAUUACAUUUCAACAUGAGAUUUGGAGAGGA	
	(((((.....)))))).....	
hsa-miR-1267 MIMAT0005921	.....CCUGUUGAAGUGUAUCCCA.....	
NGS-Star	.....UGGGGAUUACAUUUCAACAUGA.....	64
NGS-Star	.....UGGGGAUUACAUUUCAACAUG.....	25
NGS-Mature	.....CCUGUUGAAGUGUAUCCCA.....	20
NGS-Mature	.....CCUGUUGAAGUGUAUCCCC.....	6
NGS-Star	.....GGGGAUUACAUUUCAACAUGA.....	2
NGS-Star	.....AGCAUUGGGGAUUACAUU.....	1
NGS-Mature	.....CUGUUGAAGUGUAUCCCCACC.....	1
NGS-Mature	.....CCUGUUGAAGUGUAUCCCC.....	1
NGS-Mature	.....CCUGUUGAAGUGUAUCCCCAC.....	1
NGS-Mature	.....CUGUUGAAGUGUAUCCCCCA.....	1
NGS-Mature	.....CUGUUGAAGUGUAUCCCCAC.....	1
NGS-Star	.....UUGGGGAUUACAUUUCAACA.....	1
hsa-mir-1298 MI0003938		
	AGACGAGGAGUUAAGAGUUAUUCGGCUGUCCAGAUGUAUCCAAGUACCCUGUGUUAUUUGGCAUAAAUAACAUCUGGGCAACUGACUGAACUUUACUUUCAUGACUCA	
	(((((.....)))))).....	
hsa-miR-1298 MIMAT0005800	.....UUCAUUCGGCUGUCCAGAUGUA.....	
NGS-Mature	.....UUCAUUCGGCUGUCCAGAUGUA.....	2404
NGS-Mature	.....UUCAUUCGGCUGUCCAGAUGU.....	792
NGS-Mature	.....UUCAUUCGGCUGUCCAGAUGUA.....	466
NGS-Mature	.....UUCAUUCGGCUGUCCAGAUGUAUC.....	455
NGS-Mature	.....UUCAUUCGGCUGUCCAGAUA.....	306
NGS-Mature	.....UUCAUUCGGCUGUCCAGAUG.....	112
NGS-Star	.....CAUCUGGGCAACUGACUGAACU.....	36
NGS-Mature	.....UUCAUUCGGCUGUCCAGA.....	32
NGS-Star	.....CAUCUGGGCAACUGACUGA.....	22
NGS-Mature	.....UCAUUCGGCUGUCCAGAUGUA.....	20
NGS-Mature	.....UCAUUCGGCUGUCCAGAUGUA.....	15
NGS-Mature	.....UUCAUUCGGCUGUCCAGAUGUAUCC.....	13
NGS-Star	.....CAUCUGGGCAACUGACUGAA.....	12
NGS-Star	.....CAUCUGGGCAACUGACUGAAC.....	11
NGS-Star	.....AUACAUCUGGGCAACUGACUGA.....	5
NGS-Star	.....UACAUCUGGGCAACUGACUGA.....	2
NGS-Star	.....AAUACAUCUGGGCAACUGACUGA.....	1
NGS-Star	.....UGGGCAACUGACUGAACU.....	1
NGS-Star	.....UAAAUAACAUCUGGGCAACUGACUGAA.....	1
NGS-Star	.....UCUGGGCAACUGACUGAACU.....	1
hsa-mir-216a MI0000292		
	GAUGGCUGAGUUGGCUUAAUUCACGUGGCAACUGUGAGUAUUAUCAAUCCUCACAGUGGUCUCUGGGAUUAGCUAAACAGAGCAUUUCCUAGCCUCACGA	
	(((((.....)))))).....	
hsa-miR-216a MIMAT0000273	.....UAUUCUAGCUGGCAACUGUGA.....	
NGS-Mature	.....UAUUCUAGCUGGCAACUGUGA.....	28
NGS-Mature	.....UAUUCUAGCUGGCAACUGUGAG.....	16
NGS-Mature	.....UAUUCUAGCUGGCAACU.....	15
NGS-Mature	.....AAUCUAGCUGGCAACUGUGAG.....	9
NGS-Mature	.....AAUCUAGCUGGCAACUGU.....	9
NGS-Star	.....CACAGUGGUCUCUGGGAUUAG.....	8
NGS-Mature	.....UAUUCUAGCUGGCAACUGU.....	6
NGS-Mature	.....UAUUCUAGCUGGCAACUGUGAGA.....	5
NGS-Mature	.....AAUCUAGCUGGCAACUGUG.....	4
NGS-Star	.....CACAGUGGUCUCUGGGAUU.....	3
NGS-Mature	.....AAUCUAGCUGGCAACUG.....	2
NGS-Star	.....CACAGUGGUCUCUGGGAUU.....	2
NGS-Mature	.....UAUUCUAGCUGGCAACUG.....	2
NGS-Star	.....UCACAGUGGUCUCUGGGAUU.....	2

```

NGS-Star .....CACAGUGGUCUCUGGGAU..... 1
NGS-Star .....ACAGUGGUCUCUGGGAUUAUUGCU..... 1
NGS-Star .....UCACAGUGGUCUCUGGGAUUAU..... 1
NGS-Star .....ACAGUGGUCUCUGGGAUUAU..... 1

hsa-mir-3181 MI0014223 CGGCGACCAUCGGGCCUCGGCGCCGGCCCGUAGUUGCCGGCCGAGCCGGCCGGCCCGGGUUGCCG
(((((((.....(((((((.....(((.....)))))).....)))))).....)))))).....)))))
hsa-miR-3181 MIMAT0015061 .....AUCGGGCCUCGGCGCCGG..... 6
NGS-Mature .....AUCGGGCCUCGGCGCCGCC..... 5
NGS-Mature .....AUCGGGCCUCGGCGCCGG..... 6
NGS-Star .....GCCAGCCGGCCGGCCGCC..... 4
NGS-Mature .....AUCGGGCCUCGGCGCCGCC..... 3
NGS-Mature .....AUCGGGCCUCGGCGCCGCC..... 2
NGS-Star .....CCCAGCCGGCCGGCCGCC..... 1
NGS-Star .....CCCAGCCGGCCGGCCGCCGGG..... 1
NGS-Mature .....AUCGGGCCUCGGCGCCGG..... 1
NGS-Mature .....AUCGGGCCUCGGCGCCCGU..... 1
NGS-Star .....GCCAGCCGGCCGGCCCGGGU..... 1

hsa-mir-211 MI000287 UCACUUGGCCAUGUGACUUGUGGGCUUCCUUGUCAUCCUUGCCUAGGGUCUGAGCAGGGCAGGGACAGCAAAGGGGUGCUCAGUUGUCACUCCACAGCAGGGAG
((.....(((((((.....(((((((.....)))))).....)))))).....)))))).....)))))
hsa-miR-211 MIMAT000268 .....UUCCUUUGUCAUCCUUGCCU..... 26764
NGS-Mature .....UUCCUUUGUCAUCCUUGCCU..... 8260
NGS-Mature .....UUCCUUUGUCAUCCUUGCCU..... 4060
NGS-Mature .....UUCCUUUGUCAUCCUUGCCU..... 797
NGS-Mature .....UUCCUUUGUCAUCCUUGCCU..... 782
NGS-Star .....GCAGGGACAGCAAAGGGGUGC..... 407
NGS-Mature .....UUCCUUUGUCAUCCUUGCCU..... 220
NGS-Star .....GCAGGGACAGCAAAGGGGUG..... 185
NGS-Mature .....GCCAUGUGACUUGUGGGC..... 112
NGS-Mature .....CCUUGUCAUCCUUGCCU..... 96
NGS-Mature .....UUCCUUUGUCAUCCUUG..... 79
NGS-Mature .....CCUUGUCAUCCUUGCCU..... 56
NGS-Star .....GCAGGGACAGCAAAGGGGU..... 38
NGS-Star .....GCAGGGACAGCAAAGGGGUGCU..... 19
NGS-Star .....GCCAGGGACAGCAAAGGGGUGC..... 11
NGS-Star .....CAGGGACAGCAAAGGGGUGC..... 6
NGS-Star .....GCAGGGACAGCAAAGGGG..... 5
NGS-Star .....CAGGGACAGCAAAGGGGUG..... 4
NGS-Star .....GCCAGGGACAGCAAAGGGGUG..... 4
NGS-Star .....GCCAGGGACAGCAAAGGGGU..... 3

hsa-mir-3161 MI0014191 CCUCGAGAGCUGAUAGAAGACAGAGGCCAGAUUGAAGUUGAAUAGUGCGGGCCUUUGUUUUUACCAAGUUCUCCUGG
(((.....(((((((.....(((((((.....)))))).....)))))).....)))))).....)))))
hsa-miR-3161 MIMAT0015035 .....CUGAUAGAAGACAGAGGCCAGAU..... 28
NGS-Mature .....CUGAUAGAAGACAGAGGCCAGA..... 6
NGS-Mature .....CUGAUAGAAGACAGAGGCCAGAU..... 5
NGS-Mature .....CUGAUAGAAGACAGAGGCC..... 2
NGS-Mature .....AGAGGCCAGAUUGAAGUU..... 1
NGS-Mature .....CUGAUAGAAGACAGAGGCC..... 1
NGS-Mature .....GCUGAUAGAAGACAGAGGCCA..... 1
NGS-Mature .....GCUGAUAGAAGACAGAGGCCAGA..... 1
NGS-Mature .....UGAUAGAAGACAGAGGCCAG..... 1
NGS-Star .....UGGCCUUUGUUUUUACCAAGUU..... 1
NGS-Mature .....CUGAUAGAAGACAGAGGCCA..... 1

hsa-mir-498 MI0003142 AACCCUCCUUGGGAAGUGAAGCUCAGGCUGUGAUUUCAAGCCAGGGGGCGUUUUUCAUAACUGGAUAAAAGCACCUCAGAGCUUAGAGCUCACAGUUUAGAGCAAUCGUCUAAAGGAAGUU
(((((((.....(((((((.....(((((((.....)))))).....)))))).....)))))).....)))))
hsa-miR-498 MIMAT0002824 .....UUUCAAGCCAGGGGGCGUUUUUC..... 106
NGS-Mature .....UUUCAAGCCAGGGGGCGUUUUUC..... 45
NGS-Mature .....UUUCAAGCCAGGGGGCGUUUUUC..... 22
NGS-Mature .....UUUCAAGCCAGGGGGCGUUUU..... 13
NGS-Mature .....UUUCAAGCCAGGGGGCGUUU..... 7
NGS-Star .....AAAGCACCUCAGAGCUUAGAGCU..... 5
NGS-Star .....AAAGCACCUCAGAGCUUAGAGCU..... 4
NGS-Star .....AAAGCACCUCAGAGCUUAGAGC..... 3
NGS-Star .....AAAGCACCUCAGAGCUUAGAGCUA..... 2
NGS-Star .....AAAGCACCUCAGAGCUUGA..... 2
NGS-Mature .....UUUCAAGCCAGGGGGCGU..... 2
NGS-Mature .....UUUCAAGCCAGGGGGCGUUUUUC..... 1
NGS-Mature .....UUUCAAGCCAGGGGGCGUUUUUC..... 1
NGS-Mature .....UUUCAAGCCAGGGGGCGUU..... 1
NGS-Mature .....AAGUGAAGCUCAGGCUGUGA..... 1
NGS-Star .....AAAGCACCUCAGAGCUUG..... 1

hsa-mir-510 MI0003197 GUGGUGUCCUACUCAGGAGAGUGGCAUAUCACAUUUUAGGUGUGAUUUAAACCUUAAGAGUGGAGUAACAC
(((((((.....(((((((.....(((((((.....)))))).....)))))).....)))))).....)))))

```

hsa-miR-510	MIMAT0002882	.....UACUCAGGAGAGUGGCAUACAC.....	
NGS-Mature		.....UACUCAGGAGAGUGGCAAUACA.....	244
NGS-Mature		.....UACUCAGGAGAGUGGCAAUACACA.....	194
NGS-Mature		.....UACUCAGGAGAGUGGCAUACAC.....	107
NGS-Mature		.....UACUCAGGAGAGUGGCAAU.....	41
NGS-Star		.....UGAUUGAAACCUCUAAGAGUGGA.....	24
NGS-Mature		.....UACUCAGGAGAGUGGCAAU.....	17
NGS-Star		.....AUUGAAACCUCUAAGAGUGGA.....	14
NGS-Mature		.....UACUCAGGAGAGUGGCAAUACAU.....	6
NGS-Mature		.....UACUCAGGAGAGUGGCAA.....	3
NGS-Star		.....UGAUUGAAACCUCUAAGAGUGG.....	3
NGS-Star		.....UGAUUGAAACCUCUAAGAG.....	2
NGS-Star		.....GAUUGAAACCUCUAAGAGUGGA.....	2
NGS-Mature		.....ACUCAGGAGAGUGGCAAUACA.....	2
NGS-Star		.....AUUGAAACCUCUAAGAGUGG.....	1
hsa-mir-513b	MI0006648	GUGUACAGUGCCUUUACACAAGGAGGUGUCAUUUUUGUGAACUAAAUAUUAAUGUCACCUUUUUGAGAGGAGUAAUGUACAGCA ..(((((((((.....))))))))).....	
hsa-miR-513b	MIMAT0005788	.....UUCACAAGGAGGUGUCAUUUA.....	
NGS-Mature		.....UUCACAAGGAGGUGUCAUUUAU.....	577
NGS-Mature		.....UUCACAAGGAGGUGUCAUUUAUG.....	189
NGS-Mature		.....UUCACAAGGAGGUGUCAUU.....	80
NGS-Mature		.....UUCACAAGGAGGUGUCAUUUA.....	67
NGS-Mature		.....UUCACAAGGAGGUGUCAUU.....	55
NGS-Mature		.....UUCACAAGGAGGUGUCAUUUAUGU.....	21
NGS-Star		.....UAAAUGUCACCUUUUUGAGAGGA.....	13
NGS-Star		.....UAAAUGUCACCUUUUUGAGAGG.....	10
NGS-Mature		.....UUCACAAGGAGGUGUCAU.....	9
NGS-Mature		.....ACAAGGAGGUGUCAUUUAU.....	7
NGS-Mature		.....UCACAAGGAGGUGUCAUUUAU.....	4
NGS-Star		.....AAAUGUCACCUUUUUGAGAGG.....	3
NGS-Mature		.....UCACAAGGAGGUGUCAUUUAUG.....	3
NGS-Star		.....AAAUGUCACCUUUUUGAGAGGA.....	1
hsa-mir-586	MI0003594	AUGGGGUAAAACCAUUUGCAUUGUAUUUUUAGGUCCCAUAUCAUGUGGGCCCUAAAUAUCAUUGCAUAAUGGUUUUCACUCUUUUCUUUUAU ..(((((((((.....))))))))).....	
hsa-miR-586	MIMAT0003252	.....UAUGCAUUGUAUUUUUAGGUCC.....	
NGS-Mature		.....UAUGCAUUGUAUUUUUAGGUCC.....	2
NGS-Star		.....GCCUAAAUAUCAUUGCAUA.....	1
NGS-Mature		.....AUGCAUUGUAUUUUUAGGUCC.....	1
NGS-Mature		.....AUGCAUUGUAUUUUUAGGU.....	1
hsa-mir-890	MI0005533	GGAAUGGCCUACUUGGAAAGGCAUCAGUGCUUAGAUAUCAUGUAACUAUCCCUUUCUGAGUAGAUAGUCUUA (((.....))).....	
hsa-miR-890	MIMAT0004912	.....UACUUGGAAAGGCAUCAGUUG.....	
NGS-Mature		.....UACUUGGAAAGGCAUCAGUUG.....	10
NGS-Star		.....AACUUAUCCCUUUCUGAGUAGA.....	6
NGS-Mature		.....UACUUGGAAAGGCAUCAGUUGC.....	3
NGS-Mature		.....UACUUGGAAAGGCAUCAGUUGCU.....	1
hsa-mir-934	MI0005756	AGAAAUAAGGCUUCUGUCUACUCUGGAGACACUGGUAGUAUAAAACCCAGAGUCUCCAGUAAUGGACGGGAGCCUUUUUUU (((((((((((((.....))))))))).....	
hsa-miR-934	MIMAT0004977	.....UGUCUACUACUGGAGACACUGG.....	
NGS-Mature		.....UGUCUACUACUGGAGACAC.....	28
NGS-Mature		.....UGUCUACUACUGGAGACACU.....	21
NGS-Mature		.....UGUCUACUACUGGAGACACUGG.....	15
NGS-Mature		.....UGUCUACUACUGGAGACACUG.....	7
NGS-Mature		.....UCUGUCUACUACUGGAGACACU.....	6
NGS-Mature		.....UGUCUACUACUGGAGACACUGGU.....	2
NGS-Mature		.....UCUACUACUGGAGACACU.....	1
NGS-Mature		.....UCUGUCUACUACUGGAGACACUG.....	1
NGS-Mature		.....UCUGUCUACUACUGGAGACA.....	1
NGS-Star		.....GAGUCUCCAGUAAUGGACGGGA.....	1
hsa-mir-588	MI0003597	AGCUUAGGUACCAAUUUGGCCACAAGGGUUGAGAACAUUCCAUUUGUUCUUAACCACCAUGGCCAAAAUUGGCCUUAG ..(((((((((.....))))))))).....	
hsa-miR-588	MIMAT0003255	.....UUGGCCCAAUGGGUUAGAAC.....	
NGS-Mature		.....UGGCCCAAUGGGUUAGAACA.....	10
NGS-Mature		.....UGGCCCAAUGGGUUAGAACAC.....	9
NGS-Mature		.....UGGCCCAAUGGGUUAGAAC.....	7
NGS-Star		.....UUCUUAACCACCAUGGCCAAAA.....	6
NGS-Star		.....UUCUUAACCACCAUGGCCAA.....	5
NGS-Star		.....UUCUUAACCACCAUGGCCAAA.....	4
NGS-Star		.....UUCUUAACCACCAUGGCCAAAAU.....	2
NGS-Mature		.....CCCAAUGGGUUAGAACAC.....	1
NGS-Star		.....UCUUAACCACCAUGGCCAAAA.....	1
NGS-Mature		.....UGGCCCAAUGGGUUAGAACACU.....	1
NGS-Star		.....UUCUUAACCACCAUGGCCA.....	1
NGS-Mature		.....UUGGCCCAAUGGGUUAGAAC.....	1

NGS-MatureUUGGCCACA AUGGGUUAACA..... 1

hsa-mir-602 MI0003615 UUCUCACCCCCCGUGACACGGGGCAGCUCGCGCCCCUGUGUUACUCUGGGCCGAGUCGUCUCCUGUCAGGCAAGGGAGAGCAGAGCCCCUCG
..(((.(((.(((((((.(((((((.(((((((.(.....)))))))))))))))))))))).....

hsa-miR-602 MIMAT0003270GACACGGGGCAGCUCGCGGCC.....

NGS-MatureUGACACGGGGCAGCUCGCGGCC..... 4

NGS-MatureUGACACGGGGCAGCUCGCGGCC..... 2

NGS-StarGGCCGAGUCGUCUCCUGUCA..... 1

NGS-MatureGACACGGGGCAGCUCGCGGCC..... 1

NGS-MatureGACACGGGGCAGCUCGCGGCC..... 1

hsa-mir-670 MI0003933 GUUUAGGGGUGACCUGAUGUCCUGAGUGU AUGUGGUAACCGAUAUUUGCCUUGGGUUUCUCAUAUUAUUCAGGAGUGUCAGUUGCCCUUCAC
((..(((.(.((((((.(((((((.(((((((.(.....)))))))))))))))))))))).....

hsa-miR-670 MIMAT0010357GUCCUGAGUGUAUGUGGUG.....

NGS-StarUUUCCUCAUAUUAUUCAGGAGU..... 55

NGS-StarUUUCCUCAUAUUAUUCAGGAG..... 11

NGS-StarUUUCCUCAUAUUAUUCAGGAGUGU..... 10

NGS-StarUUUCCUCAUAUUAUUCAGGAGUG..... 6

NGS-StarUCCUCAUAUUAUUCAGGAGUGU..... 5

NGS-MatureGUCCUGAGUGUAUGUGGUAACC..... 3

NGS-StarCCUCAUAUUAUUCAGGAGUGU..... 3

NGS-StarUUUCCUCAUAUUAUUCAGGA..... 2

NGS-MatureGUCCUGAGUGUAUGUGGUGAA..... 2

NGS-StarUCCUCAUAUUAUUCAGGAGU..... 2

NGS-MatureGUCCUGAGUGUAUGUGGUG..... 1

NGS-MatureGUCCUGAGUGUAUGUGGUGAAC..... 1

NGS-StarUCCUCAUAUUAUUCAGGAGUG..... 1

hsa-mir-802 MI0003906 GUUCUGUUAUUUGCAGUCAGUACAAGAUUAUCCUUGUGUCAUCAUGCAACAGGAGAUCUUUGUCACUUAGUGUAUUAAUAGCUGGAC
..((((((.(((((((.(((((((.(((((((.(.....)))))))))))))))))))))).....

hsa-miR-802 MIMAT0004185CAGUAAACAAGAUAUCCUUGU.....

NGS-StarAGGAGAAUCUUUGUCACUUAGU..... 5

NGS-StarAGGAGAAUCUUUGUCACUUAG..... 3

NGS-MatureUCAGUAAACAAGAUAUCCUUG..... 2

NGS-StarAGGAGAAUCUUUGUCACUU..... 2

NGS-StarAAGGAGAAUCUUUGUCACUUAGU..... 2

NGS-MatureUCAGUAAACAAGAUAUCCU..... 1

NGS-StarAGGAGAAUCUUUGUCACUUA..... 1

hsa-mir-609 MI0003622 UGCUCGGCUGUUCUAGGGUGUUUCUCUCAUCUCUGUCUAUUAUUGGGUUAUUAGUAGAGAGAGGGAACACCCUAGGAACAGCAGGGAACC
..((((((((((((((((((((((((((((((.....)))))))))))))))))))))).....

hsa-miR-609 MIMAT0003277AGGGUGUUUCUCUCAUCUCU.....

NGS-MatureAGGGUGUUUCUCUCAUCUCUG..... 3

NGS-MatureUAGGGUGUUUCUCUCAUCUC..... 1

NGS-MatureUAGGGUGUUUCUCUCAUCUCUG..... 1

NGS-StarUAGAGAUAGGGCAACCCCU..... 1

hsa-mir-548m MI0006400 AUAUUAGGUUGUGCAAAGGUUUUGGUUUUUGUCAUUAAGUAAGCAAAGCCACAAAUACCUUUGCACCACCUAAUAUUA
(((.....)).....

hsa-miR-548m MIMAT0005917CAAAGGUUUUGGUUUUUG.....

NGS-MatureCAAAGGUUUUGGUUUUUGU..... 3

NGS-MatureCAAAGGUUUUGGUUUUUG..... 2

NGS-StarAAAAGCCAAAUACCUUUGCA..... 1

hsa-mir-500b MI0015903 CCCCCUCUAUAUCCUUGCUACCGGGUGAGAGUCUUUCGAAUGCAGUCACCCAGGCAAGGAUUCUGCAAGGGGA
(((.....)).....

hsa-miR-500b MIMAT0016925AAUCCUUGCUACCGGGU.....

hsa-miR-500a MIMAT0004773UAAUCCUUGCUACCGGGUGAGA.....

NGS-MatureUAAUCCUUGCUACCGGGUGAGAGU..... 785

NGS-MatureUAAUCCUUGCUACCGGGUGAGA..... 724

NGS-MatureUAAUCCUUGCUACCGGGUGAGAG..... 247

NGS-MatureUAAUCCUUGCUACCGGGUGAG..... 131

NGS-MatureUAAUCCUUGCUACCGGGUGAGAGUC..... 106

NGS-MatureUAAUCCUUGCUACCGGGUGAGAGU..... 63

NGS-StarAGUCACCCAGGCAAGGAUUCU..... 40

NGS-MatureUAAUCCUUGCUACCGGGU..... 34

NGS-StarAGUCACCCAGGCAAGGAU..... 32

NGS-StarAGUCACCCAGGCAAGGA..... 29

NGS-StarAGUCACCCAGGCAAGGAUUCUG..... 29

NGS-StarGUCACCCAGGCAAGGAU..... 29

NGS-StarUGCACCCAGGCAAGGAUUCUG..... 27

NGS-MatureUAAUCCUUGCUACCGGGUGA..... 26

NGS-MatureUAAUCCUUGCUACCGGG..... 22

NGS-StarGUCACCCAGGCAAGGAUUCUG..... 21

NGS-StarGUCACCCAGGCAAGGAUUCUG..... 17

NGS-StarUGCACCCAGGCAAGGAUUCUG..... 15

NGS-StarUGCACCCAGGCAAGGAU..... 15

NGS-MatureAAUCCUUGCUACCGGGUGAGA..... 11

hsa-mir-527 MI0003179 UCUCAAGCUGUGACUGCAAAGGGAAGCCUUCUUGUGUCUAAAAGAAAAGAAUGUCUUCUCCUUGGGAAUUACGGUUUGAGA


```

hsa-miR-3659 MIMAT0018080      .UGAGUGUUGUCUACGAGGGCA.....
NGS-Mature                    .....UGAGUGUUGUCUACGAGGGCAU..... 37
NGS-Mature                    .....UGAGUGUUGUCUACGAGGGC..... 5
NGS-Mature                    .....UGAGUGUUGUCUACGAGGGCA..... 5
NGS-Mature                    .....UGAGUGUUGUCUACGAGGG..... 4
NGS-Mature                    .....UGAGUGUUGUCUACGAGG..... 1
NGS-Star                      .....AUGCCUUUGUACACACACACGU..... 1

hsa-mir-3150b MI0016426      GAGGGAAAGCAGGCCAACCCUCGAGGAUCUCCCCAGCCUUGCGGUUCAGGUGCUGAGGAGAUUCGCGAGGUUGGCCUUCUCCCCUC
(((.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((.....)))))))))))))))))))))
hsa-miR-3150b MIMAT0018194    .....UGAGGGAUUCGUCGAGGUUGG.....
NGS-Mature                    .....UGAGGGAUUCGUCGAGGUUGG..... 786
NGS-Mature                    .....UGAGGGAUUCGUCGAGGUUGGC..... 676
NGS-Mature                    .....UGAGGGAUUCGUCGAGGUUG..... 656
NGS-Mature                    .....UGAGGGAUUCGUCGAGGUU..... 375
NGS-Mature                    .....CUGAGGGAUUCGUCGAGGUUGG..... 160
NGS-Mature                    .....GAGGGAUUCGUCGAGGUUGGC..... 151
NGS-Mature                    .....GAGGGAUUCGUCGAGGUUGG..... 112
NGS-Mature                    .....CUGAGGGAUUCGUCGAGGUUG..... 96
NGS-Mature                    .....CUGAGGGAUUCGUCGAGGUU..... 86
NGS-Mature                    .....GAGGGAUUCGUCGAGGUUG..... 81
NGS-Star                      .....CAACCUCGAGGAUCUCCCCAG..... 6
NGS-Star                      .....AACCCUCGAGGAUCUCCCCAGC..... 6
NGS-Star                      .....AGGCCAACCCUCGAGGAUCUC..... 4
NGS-Star                      .....AGGCCAACCCUCGAGGAUCU..... 3
NGS-Star                      .....AGGCCAACCCUCGAGGAUCUCC..... 3
NGS-Star                      .....AACCCUCGAGGAUCUCCCCAGCC..... 2

NGS-Star                      .....AGGCCAACCCUCGAGGAUCUCC..... 2
NGS-Star                      .....CAGGCCAACCCUCGAGGAUCUC..... 1
NGS-Star                      .....CCAACCUCGAGGAUCUCCCCA..... 1
NGS-Star                      .....AGGGAAGCAGGCCAACCCUCG..... 1

hsa-mir-3938 MI0016594      AGGAAUUUUUAACCCGAUCACUAGAUUAUCUACAAGGGAUUUUUUUUUUUUUUUAUUUUUAAAAUUCCUUGUAGUAUACCCGGUGGUCAGGUUGGAUUGGCCUCAUG
((((.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((.....)))))))))))))))))))))
hsa-miR-3938 MIMAT0018353    .....AAUUCCCUUGUAGUAUAACCCGG..... 44
NGS-Mature                    .....AAUUCCCUUGUAGUAUAACCCGG..... 15
NGS-Star                      .....AGAUUAUCUACAAGGGAUUUU..... 15
NGS-Mature                    .....AAUUCCCUUGUAGUAUAACCCGGU..... 13
NGS-Mature                    .....AAUUCCCUUGUAGUAUAACCCGG..... 3
NGS-Mature                    .....AAUUCCCUUGUAGUAUAACC..... 2
NGS-Star                      .....AGAUUAUCUACAAGGGAUUUU..... 2
NGS-Mature                    .....AAUUCCCUUGUAGUAUAACCC..... 2
NGS-Star                      .....AGAUUAUCUACAAGGGAUU..... 1
NGS-Mature                    .....AAUUCCCUUGUAGUAUAACCCG..... 1
NGS-Mature                    .....AAUUCCCUUGUAGUAUAACCCGG..... 1
NGS-Mature                    .....AAUUCCCUUGUAGUAUAACCCG..... 1

hsa-mir-3919 MI0016425      CCUGAGCACCACUUUACUGAGUCCUUUUGUUCUACUAGUUUGUAGUAGUUCGUAGCAGAGAACAAAGGACUCAGUAAUUGGUUCUCAGG
((((.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((.....)))))))))))))))))))))
hsa-miR-3919 MIMAT0018193    .....GCAGAGAACAAAGGACUCAGU..... 50
NGS-Mature                    .....GCAGAGAACAAAGGACUCAGU..... 6
NGS-Mature                    .....AGAGAACAAAGGACUCAGUA..... 6
NGS-Star                      .....UACUGAGUCCUUUGUUCUAC..... 6
NGS-Mature                    .....AGCAGAGAACAAAGGACUCAGU..... 4
NGS-Mature                    .....GCAGAGAACAAAGGACUCAGUA..... 3
NGS-Mature                    .....GCAGAGAACAAAGGACUCAGUA..... 2
NGS-Mature                    .....CAGAGAACAAAGGACUCAGUAAA..... 1
NGS-Mature                    .....AGAGAACAAAGGACUCAGU..... 1
NGS-Star                      .....ACUGAGUCCUUUGUUCUACU..... 1
NGS-Star                      .....ACUGAGUCCUUUGUUCUAC..... 1
NGS-Mature                    .....AGAGAACAAAGGACUCAGUA..... 1
NGS-Mature                    .....GCAGAGAACAAAGGACUCA..... 1
NGS-Mature                    .....GCAGAGAACAAAGGACUCAG..... 1
NGS-Star                      .....UACUGAGUCCUUUGUUCUC..... 1
NGS-Star                      .....UACUGAGUCCUUUGUUCUACU..... 1

hsa-mir-3921 MI0016428      CCUAGCCCGAUACAAGGCAUUAUGGUACUCAAGAGACUAGAAAUUCCUUAAGUCUCUGAGUACCAUAUUGCCUUUGUACUGGGCUAGG
((((.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((.....)))))))))))))))))))))
hsa-miR-3921 MIMAT0018196    .....UCUCUGAGUACCAUAUUGCCUUUGU..... 2
NGS-Mature                    .....UCUCUGAGUACCAUAUUGCCUUUG..... 2
NGS-Star                      .....AGGCAUUAUGGUACUCAAGAGACU..... 1

hsa-mir-3937 MI0016593      AGAAGAAUGCCCAACCAGCCUCAGUUCUACAGUCCUUGUUCUAGCAGACACAAACAGGCGGCUAGCAUUGGGGGGUGGAUGGGCAUCUCAAUGGUC
((((.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((.....)))))))))))))))))))))
hsa-miR-3937 MIMAT0018352    .....ACAGGCGGCUAGCAUUGGGG..... 11
NGS-Mature                    .....ACAGGCGGCUAGCAUUGGGG..... 8
NGS-Mature                    .....ACAGGCGGCUAGCAU..... 5
NGS-Mature                    .....CAGGCGGCUAGCAUUGGGG..... 2

```

NGS-MatureCAACAGGGCGGCUAGCAAUGGGG..... 2
 NGS-MatureCAACAGGGCGGCUAGCAAU..... 1
 NGS-MatureACAGGGCGGCUAGCAAUGGG..... 1
 NGS-MatureCAACAGGGCGGCUAGCAAUGGGGGG..... 1
 NGS-MatureACAGGGCGGCUAGCAAUGG..... 1
 NGS-MatureCAACAGGGCGGCUAGCAA..... 1
 NGS-StarCAGUUGCUACAGUCCUGUUG..... 1

hsa-mir-652 MI0003667 ACGAAUAGCCUAUGCACUGCACACCCUAGGAGAGGGUGCCAUUCACUAGACUUAUAUUGAAUGGCCACUAGGGUUGUGCAGUGCACAACCCUACAC
(((((.....CAACAGGGCGGCUAGCAAUGGGG.....)))))).....
 hsa-miR-652 MIMAT0003322AAUGGCCCCACUAGGGUUGU.....
 NGS-MatureAAUGGCCCCACUAGGGUUGU..... 4826
 NGS-MatureAAUGGCCCCACUAGGGUUGU..... 4315
 NGS-MatureAAUGGCCCCACUAGGGUUGU..... 2893
 NGS-MatureAAUGGCCCCACUAGGGUU..... 2386
 NGS-MatureAAUGGCCCCACUAGGGUUG..... 755
 NGS-StarACAACCCUAGGAGAGGGUGCCAU..... 323
 NGS-StarACAACCCUAGGAGAGGGUGCCAUU..... 247
 NGS-StarACAACCCUAGGAGAGGGUGCCA..... 150
 NGS-MatureAAUGGCCCCACUAGGGUUGUGCA..... 132
 NGS-StarACAACCCUAGGAGAGGGUGCCAUUC..... 91
 NGS-StarACAACCCUAGGAGAGGGUGC..... 59
 NGS-MatureAUGGCCCCACUAGGGUUGU..... 57
 NGS-StarACAACCCUAGGAGAGGGUGCCAUUCA..... 53
 NGS-MatureAUGGCCCCACUAGGGUUGUGC..... 46
 NGS-StarCAACCCUAGGAGAGGGUGCCAUU..... 43
 NGS-StarCAACCCUAGGAGAGGGUGCCAUUC..... 39
 NGS-StarCAACCCUAGGAGAGGGUGCCAU..... 38
 NGS-StarCAACCCUAGGAGAGGGUGCCA..... 35
 NGS-MatureUGAAUGGCCCCACUAGGGUUGU..... 34
 NGS-MatureAUGGCCCCACUAGGGUUGU..... 24

hsa-mir-101-2 MI0000739 ACUGUCCUUUUUCGGUUUAUCAUGGUACCGAUGCUGUAUAUCUGAAAGGUACAGUACUGUGAUAACUGAAGAUGGGUGU
 ((.(((.....UACAGUACUGUGAUAACUGAA.....)))))).....
 hsa-miR-101 MIMAT0000099UACAGUACUGUGAUAACUGAA.....
 NGS-MatureUACAGUACUGUGAUAACUGAA..... 1654767
 NGS-MatureUACAGUACUGUGAUAACUGA..... 935708
 NGS-MatureGUACAGUACUGUGAUAACUGAA..... 858615
 NGS-MatureGUACAGUACUGUGAUAACUGA..... 745776
 NGS-MatureUACAGUACUGUGAUAACU..... 304453
 NGS-MatureGUACAGUACUGUGAUAACU..... 280212
 NGS-MatureUACAGUACUGUGAUAACUGAAG..... 179609
 NGS-MatureUACAGUACUGUGAUAACUG..... 63339
 NGS-MatureGUACAGUACUGUGAUAACUG..... 51916
 NGS-MatureUACAGUACUGUGAUAACUGAAGA..... 32385
 NGS-StarUCGGUUUAUCAUGGUACCGAUGC..... 53
 NGS-StarUCGGUUUAUCAUGGUACCGAUCU..... 33
 NGS-StarCGGUUAUCAUGGUACCGAUCU..... 18
 NGS-StarUCGGUUUAUCAUGGUACCGAUG..... 14
 NGS-StarCGGUUAUCAUGGUACCGAUC..... 8
 NGS-StarCGGUUAUCAUGGUACCGAUCUG..... 6
 NGS-StarCGGUUAUCAUGGUACCGA..... 4
 NGS-StarCGGUUAUCAUGGUACCGAU..... 3
 NGS-StarGGUUUAUCAUGGUACCGAUCU..... 2
 NGS-StarCGGUUAUCAUGGUACCGAUG..... 1

hsa-mir-103-1 MI0000109 UACUGCCCUCGGCUUUUACAGUGCGCCUUGUUGCAUUGGAUCAAGCAGCAUUGUACAGGGCUAUGAAGGCAUUG
(((((.....AGCAGCAUUGUACAGGGCUAUGA.....)))))).....
 hsa-miR-103 MIMAT0000101AGCAGCAUUGUACAGGGCUAUGA.....
 NGS-MatureAGCAGCAUUGUACAGGGCUAUGA..... 2346303
 NGS-MatureAGCAGCAUUGUACAGGGCUAU..... 1519226
 NGS-MatureAGCAGCAUUGUACAGGGCUAUG..... 827153
 NGS-MatureAGCAGCAUUGUACAGGGCUA..... 211324
 NGS-MatureAGCAGCAUUGUACAGGGCUAUGAA..... 88707
 NGS-MatureAGCAGCAUUGUACAGGGCU..... 71169
 NGS-MatureAGCAGCAUUGUACAGGGC..... 51938
 NGS-MatureGCAUUGUACAGGGCUAUGA..... 33786
 NGS-MatureGCAGCAUUGUACAGGGCUAUGA..... 10918
 NGS-MatureCAGCAUUGUACAGGGCUAUGA..... 10894
 NGS-StarGGCUUCUUUACAGUGCGUCCUUG..... 86
 NGS-StarGGCUUCUUUACAGUGCGUCCUUGU..... 60
 NGS-StarGGCUUCUUUACAGUGCGUCCUUGU..... 55
 NGS-StarGGCUUCUUUACAGUGCGUCCU..... 25
 NGS-StarGGCUUCUUUACAGUGCGUCCU..... 19
 NGS-StarGGCUUCUUUACAGUGCGUCC..... 10
 NGS-StarGGCUUCUUUACAGUGCGUCC..... 8
 NGS-StarGCUUCUUUACAGUGCGUCCUUGU..... 5
 NGS-StarGGCUUCUUUACAGUGCGUCCUUGU..... 4
 NGS-StarGCUUCUUUACAGUGCGUCCUUG..... 3

NGS-Mature	.....UUGCAGCUGCCUGGGAGUGAC.....	798
NGS-Mature	.....UUGCAGCUGCCUGGGAGUGA.....	639
NGS-Mature	.....UUGCAGCUGCCUGGGAGUGACUUA.....	424
NGS-Mature	.....UUGCAGCUGCCUGGGAGUGACUUC.....	366
NGS-Mature	.....UUGCAGCUGCCUGGGAGUGACUU.....	224
NGS-Mature	.....UUGCAGCUGCCUGGGAGUGACU.....	183
NGS-Star	.....GGGUCGCUCUAGGCACCGCAGC.....	16
NGS-Star	.....GGGUCGCUCUAGGCACCGCAGCA.....	9
NGS-Star	.....GGGUCGCUCUAGGCACCGCAGCA.....	7
NGS-Star	.....GGGUCGCUCUAGGCACCGCAGC.....	7
NGS-Star	.....GGGUCGCUCUAGGCACCGCAG.....	4
NGS-Star	.....GGGUCGCUCUAGGCACCGCAG.....	2
NGS-Star	.....GGGUCGCUCUAGGCACCGCAGCAGCAGUGUGCUGGGAGUGUAGUAGCAGCUGCCUGGGAGUGACUUC.....	1
NGS-Star	.....GGGUCGCUCUAGGCACCGCAGCAGCAG.....	1
hsa-mir-1307 MI0006444	CAUCAAGACCCAGCUGAGUCACUCGACUGCCUACCAAUCUCGACCGGGACCUCGACCGGCCUCGUCUGUGUUGCCAAUCGACUCGGCGUGGCUGCGUGGUAGAUAAGGCGGUAGUACAUACGAAUUUUCAGCUCUUGUUUCUGGUGAC (((((((.....)))))))))..	
hsa-miR-1307 MIMAT0005951	.....ACUCGGCGUGGCUCGGUCUGG.....	
NGS-Star	.....UCGACCGGACCUCCAGCCGCU.....	31801
NGS-Star	.....UCGACCGGACCUCCAGCCGCU.....	30223
NGS-Star	.....UCGACCGGACCUCCAGCCGCU.....	13793
NGS-Mature	.....ACUCGGCGUGGCUCGGUCUGG.....	12419
NGS-Mature	.....ACUCGGCGUGGCUCGGUCUGG.....	8819
NGS-Mature	.....CUCGGCGUGGCUCGGUCUGG.....	5354
NGS-Mature	.....CUCGGCGUGGCUCGGUCUGG.....	5301
NGS-Star	.....UCGACCGGACCUCCAGCCGCG.....	3502
NGS-Mature	.....ACUCGGCGUGGCUCGGUCUGG.....	3144
NGS-Mature	.....ACUCGGCGUGGCUCGGUCUGG.....	2131
NGS-Star	.....UCGACCGGACCUCCAGCCGCU.....	1327
NGS-Mature	.....CUCGGCGUGGCUCGGUCUGG.....	1327
NGS-Mature	.....ACUCGGCGUGGCUCGGUCUGG.....	1269
NGS-Mature	.....CUCGGCGUGGCUCGGUCUGG.....	855
NGS-Mature	.....CUCGGCGUGGCUCGGUCUGG.....	572
NGS-Star	.....UCGACCGGACCUCCAGCCG.....	473
NGS-Star	.....UCGACCGGACCUCCAGCCG.....	448
NGS-Star	.....GACCGGACCUCCAGCCG.....	441
NGS-Star	.....GACCGGACCUCCAGCCG.....	415
NGS-Star	.....CGACCGGACCUCCAGCCG.....	164
hsa-mir-152 MI0000462	UGUCCCCCGGCCAGGUUCUGUGAUACACUCCGACUCGGCCUCUGAGCAGUCAGUGCAUGACAGAAUUGGCCCGGAAGGACC (((((((.....)))))))))..	
hsa-miR-152 MIMAT0000438	.....UCAGUGCAUGACAGAAUUG.....	
NGS-Mature	.....UCAGUGCAUGACAGAAUUG.....	147113
NGS-Mature	.....UCAGUGCAUGACAGAAUUGGG.....	63094
NGS-Mature	.....UCAGUGCAUGACAGAAU.....	12831
NGS-Mature	.....UCAGUGCAUGACAGAAUUG.....	5339
NGS-Mature	.....AGUGCAUGACAGAAUUG.....	3104
NGS-Mature	.....UCAGUGCAUGACAGAAU.....	2381
NGS-Mature	.....AGUGCAUGACAGAAUUGGG.....	1140
NGS-Mature	.....UCAGUGCAUGACAGAAUUGGG.....	480
NGS-Mature	.....AGUGCAUGACAGAAUUG.....	121
NGS-Mature	.....GUCAGUGCAUGACAGAAUUG.....	110
NGS-Star	.....AGGUUCUGUGAUACACUCCGACU.....	70
NGS-Star	.....CAGGUUCUGUGAUACACUCCGACU.....	16
NGS-Star	.....CAGGUUCUGUGAUACACUCCGA.....	15
NGS-Star	.....AGGUUCUGUGAUACACUCCGA.....	10
NGS-Star	.....AGGUUCUGUGAUACACUCCGACU.....	9
NGS-Star	.....AGGUUCUGUGAUACACUCCGAC.....	7
NGS-Star	.....CAGGUUCUGUGAUACACUC.....	7
NGS-Star	.....CAGGUUCUGUGAUACACUCCGAC.....	6
NGS-Star	.....AGGUUCUGUGAUACACUC.....	6
NGS-Star	.....CAGGUUCUGUGAUACACUC.....	4
hsa-mir-210 MI0000286	ACCCGGCAGUCCUCCAGGCGCAGGGCAGCCCCUGCCACCAGCACAGUCGCGUCCCCAGACCCACUCUGGCGUGACAGCGGCCUGAUCUGGCCUGGGCAGCGGCCACCC (((((((.....)))))))))..	
hsa-miR-210 MIMAT0000267	.....CUGUGCGUGUGACAGCGGCU.....	
NGS-Mature	.....CUGUGCGUGUGACAGCGGCU.....	39620
NGS-Mature	.....CUGUGCGUGUGACAGCGGCU.....	6637
NGS-Mature	.....CUGUGCGUGUGACAGCGGCU.....	5315
NGS-Mature	.....CUGUGCGUGUGACAGCGGCU.....	2818
NGS-Mature	.....ACUGUGCGUGUGACAGCGGCU.....	1233
NGS-Mature	.....CUGUGCGUGUGACAGCGGCU.....	1090
NGS-Mature	.....UGUGCGUGUGACAGCGGCU.....	502
NGS-Mature	.....CUGUGCGUGUGACAGCGGCU.....	409
NGS-Mature	.....CUGUGCGUGUGACAGCGGCU.....	381
NGS-Mature	.....ACUGUGCGUGUGACAGCGGCU.....	251
NGS-Star	.....AGCCUCCUGCCACCGCACACU.....	78
NGS-Star	.....AGCCUCCUGCCACCGCACACU.....	43
NGS-Star	.....AGCCUCCUGCCACCGCACACU.....	29
NGS-Star	.....AGCCUCCUGCCACCGCACACU.....	11

hsa-mir-766 MI0003836	GCAUCCUCAGGACCCUGGGCUUGGGUGUAGGAGGAUUGGUGUGUCUUUUAUUUGGAUUUGACUCCAGCCCCACAGCCUCAGCCACCCCAGCCAAUUGUCAUAGGAGC ((((((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....)))..)))..)))..)))..)))..)))..)))..))	
hsa-miR-766 MIMAT0003888	.....ACUCCAGCCCCACAGCCUCAGC.....	
NGS-Star	.....AGGAGGAUUUGGUGUCUGUCUUU.....	2336
NGS-Star	.....AGGAGGAUUUGGUGUCUGUCUUU.....	1783
NGS-Star	.....AGGAGGAUUUGGUGUCUGUCUUU.....	1032
NGS-Mature	.....ACUCCAGCCCCACAGCCUCAG.....	812
NGS-Mature	.....ACUCCAGCCCCACAGCCUCAG.....	753
NGS-Star	.....AGGAGGAUUUGGUGUCUGU.....	689
NGS-Star	.....AGGAGGAUUUGGUGUCUGU.....	443
NGS-Mature	.....ACUCCAGCCCCACAGCCUCA.....	287
NGS-Star	.....AGGAGGAUUUGGUGUCUGUCUUU.....	243
NGS-Star	.....AGGAGGAUUUGGUGUCUGUCUUUCA.....	234
NGS-Star	.....GGAGGAUUUGGUGUCUGUCUUU.....	103
NGS-Star	.....GGAGGAUUUGGUGUCUGUCUUU.....	78
NGS-Mature	.....CUCCAGCCCCACAGCCUCAG.....	47
NGS-Star	.....GGAGGAUUUGGUGUCUGUCUUU.....	33
NGS-Mature	.....ACUCCAGCCCCACAGCCUCAGCC.....	31
NGS-Mature	.....ACUCCAGCCCCACAGCCUC.....	29
NGS-Mature	.....CUCCAGCCCCACAGCCUCAG.....	24
NGS-Mature	.....CUCCAGCCCCACAGCCUCA.....	8
NGS-Mature	.....ACUCCAGCCCCACAGCCU.....	7
NGS-Mature	.....UCCAGCCCCACAGCCUCAG.....	3
hsa-mir-1285-1 MI0006346	UGUAGAGAUAGGAUCUCACUUUGUGGCCAGGUCUGUCUAAACUCCUGGUCUGGGCAACAAAGUGAGACCUUUAUCUCUACAAG (((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....)))..)))..)))..)))..)))..)))..)))..))	
hsa-miR-1285 MIMAT0005876	.....UCUGGGCAACAAGUGAGACCU.....	
NGS-Mature	.....UCUGGGCAACAAGUGAGACCU.....	1375
NGS-Mature	.....UCUGGGCAACAAGUGAGACCUU.....	862
NGS-Mature	.....UCUGGGCAACAAGUGAGAC.....	419
NGS-Mature	.....UCUGGGCAACAAGUGAGACC.....	293
NGS-Mature	.....UCUGGGCAACAAGUGAGACCUUA.....	177
NGS-Mature	.....UCUGGGCAACAAGUGAGA.....	123
NGS-Mature	.....UCUGGGCAACAAGUGAGACCUUUA.....	53
NGS-Mature	.....CUGGGCAACAAGUGAGACCU.....	52
NGS-Star	.....AUCUCACUUUGUUGCCAGCC.....	32
NGS-Star	.....AUCUCACUUUGUUGCCAGG.....	32
NGS-Star	.....AUCUCACUUUGUUGCCAGGU.....	30
NGS-Mature	.....UCUGGGCAACAAGUGAG.....	25
NGS-Mature	.....CUGGGCAACAAGUGAGACCUU.....	15
NGS-Star	.....AUCUCACUUUGUUGCCAG.....	15
NGS-Star	.....CAGCCUGGUCUCAAAUC.....	7
NGS-Star	.....UGUUGCCAGGUCUGUC.....	7
NGS-Star	.....AGCCUGGUCUCAAAUCU.....	7
NGS-Star	.....GUAUCACUUUGUUGCCAG.....	5
NGS-Star	.....UGUUGCCAGGUCUGUC.....	5
NGS-Star	.....AGCCUGGUCUCAAAUCUG.....	4
hsa-mir-1180 MI0006273	GCUGCUGGACCCACCCGGCCGGGAUAGUGCCUUCGUGUUGUUCGCGUCGCGUGGGUGUGUCGGCGGC (((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....)))..)))..)))..)))..)))..)))..)))..))	
hsa-miR-1180 MIMAT0005825	.....UUUCCGGCUCGCGUGGGUGUG.....	
NGS-Mature	.....UUUCCGGCUCGCGUGGGUGUG.....	1638
NGS-Mature	.....UUUCCGGCUCGCGUGGGUGUG.....	409
NGS-Mature	.....UUUCCGGCUCGCGUGGGUGUG.....	196
NGS-Star	.....GGACCCACCCGGCCGGGAU.....	90
NGS-Mature	.....UUUCCGGCUCGCGUGGGUGUG.....	81
NGS-Mature	.....UUUCCGGCUCGCGUGGGUG.....	74
NGS-Mature	.....UUUCCGGCUCGCGUGGGUG.....	60
NGS-Star	.....GGACCCACCCGGCCGGGAUA.....	36
NGS-Mature	.....UUUCCGGCUCGCGUGGGUGUG.....	21
NGS-Mature	.....UUUCCGGCUCGCGUGGGUGUG.....	10
NGS-Mature	.....UUUCCGGCUCGCGUGGGUGUGCG.....	10
NGS-Star	.....GGACCCACCCGGCCGGGA.....	8
NGS-Mature	.....UUUCCGGCUCGCGUGGGUGUGCG.....	4
NGS-Star	.....GACCCACCCGGCCGGGAU.....	2
NGS-Star	.....GGACCCACCCGGCCGGGAUAG.....	2
NGS-Star	.....GGACCCACCCGGCCGGGAUAGUGUC.....	1
NGS-Star	.....ACCCACCCGGCCGGGAUA.....	1
hsa-mir-1306 MI0006443	GUGAGCAGUCUCCACCACCUCUCCUGCAAACGUCAGGUGGUCAGAGGUAAUGGACGUUGGCUCUGGUGGUGAUGGACAGUCCGA (((.....(((.....(((.....(((.....(((.....(((.....(((.....(((.....)))..)))..)))..)))..)))..)))..)))..))	
hsa-miR-1306 MIMAT0005950	.....ACGUUGGCCUCUGGUGGUG.....	
NGS-Star	.....CCACCUCUCCUGCAAACGUCCA.....	733
NGS-Mature	.....ACGUUGGCCUCUGGUGGUGAUG.....	558
NGS-Mature	.....ACGUUGGCCUCUGGUGGUGAU.....	334
NGS-Star	.....CCACCUCUCCUGCAAACGUCC.....	311
NGS-Mature	.....GACGUUGGCCUCUGGUGGUGAU.....	119
NGS-Star	.....CCACCUCUCCUGCAAACGUC.....	96
NGS-Mature	.....GACGUUGGCCUCUGGUGGUGAUG.....	91
NGS-Mature	.....ACGUUGGCCUCUGGUGGUG.....	52

NGS-Mature UGGAUGUAAAAGUAUGUUAUUU..... 299
NGS-Mature GAAUGUAAAAGUAUGUAU..... 146
NGS-Mature GGAAUGUAAAAGUAUGUUAUU..... 47
NGS-Star ACAUACUUCUUUAUGUACCCAUA..... 4
NGS-Star ACAUACUUCUUUAUGUACCCA..... 2

hsa-mir-375 MI0000783 CCCC GCGACGAGCCUUCGCACAACCGGACCUAGGCUUUUGUUCGUUCGGCUCGCGUGAGGC
.(((((((.....(((((.....)))))))).)))).
.....UUUGUUCGUUCGGCUCGCGUGA.....
NGS-MatureUUUGUUCGUUCGGCUCGCGUGA..... 12756
NGS-MatureUUUGUUCGUUCGGCUCGCGUG..... 9381
NGS-MatureUUUGUUCGUUCGGCUCGCGU..... 2750
NGS-MatureUUUGUUCGUUCGGCUCGCG..... 420
NGS-MatureUUUGUUCGUUCGGCUCGCG..... 404
NGS-MatureUUUGUUCGUUCGGCUCGCG..... 235
NGS-MatureUUUGUUCGUUCGGCUCGCGUGA..... 228
NGS-MatureUUUGUUCGUUCGGCUCGCGUG..... 190
NGS-MatureUUUGUUCGUUCGGCUCGCGUGA..... 125
NGS-MatureUUUGUUCGUUCGGCUCGCGU..... 87
NGS-StarCGAGCCUUCGCACAACCG..... 1
NGS-StarGCGACGAGCCUUCGCACAACCG..... 1
NGS-StarGCGACGAGCCUUCGCACAAC..... 1
NGS-StarGCGACGAGCCUUCGCACAAC..... 1

hsa-mir-95 MI0000097 AACACAGUGGGCACUCAAAUAAUGUCUGUUGAAUUGAAUUGCGUUACAUAACGGGUUUUAUUGAGCACCCACUCUGUG
.(((((((.....(((((.....)))))))).)))).
.....UUCAACGGGUUUUAUUGAGCA.....
NGS-MatureUUCAACGGGUUUUAUUGAGCA..... 13768
NGS-MatureUUCAACGGGUUUUAUUGAG..... 4990
NGS-MatureUUCAACGGGUUUUAUUGA..... 3072
NGS-MatureUUCAACGGGUUUUAUUG..... 2978
NGS-MatureUUCAACGGGUUUUAUUGAGC..... 2307
NGS-MatureUCAACGGGUUUUAUUGAGCA..... 461
NGS-MatureAACGGGUUUUAUUGAGCA..... 264
NGS-StarUCAAUAAAUGUCUGUUGAAUU..... 110
NGS-MatureUCAACGGGUUUUAUUGA..... 109
NGS-MatureUCAACGGGUUUUAUUGAG..... 74
NGS-StarCUCAAUAAAUGUCUGUUGAAUU..... 64
NGS-MatureUCAACGGGUUUUAUUGAGC..... 57
NGS-StarCUCAAUAAAUGUCUGUUGAAU..... 26
NGS-StarUCAAUAAAUGUCUGUUGAAU..... 25
NGS-StarACUCAUAAAUGUCUGUUGAA..... 23
NGS-StarACUCAUAAAUGUCUGUUGA..... 12
NGS-StarUCAAUAAAUGUCUGUUGAAUUG..... 8
NGS-StarCUCAAUAAAUGUCUGUUGAA..... 7
NGS-StarACUCAUAAAUGUCUGUUGAAU..... 5
NGS-StarCUCAAUAAAUGUCUGUUGA..... 4

hsa-mir-941-1 MI0005763 CACGGAAGAGGACACACCCGGCUGUGGACAUUGUCCAGGGCCCGGGACAGCGCCACGGGAAGAGGACGACCCCGGUGUGCACAUGGCCAGGGCCCGGGACAGCGCCACGG
.(((((((.....(((((.....)))))))).)))).
.....CACCCGGCUGUGGACAUUGGC..... 7150
NGS-MatureCACCCGGCUGUGGACAUUGGC..... 1522
NGS-MatureCACCCGGCUGUGGACAUUG..... 422
NGS-MatureCACCCGGCUGUGGACAUUG..... 155
NGS-StarACAUGUCCAGGGCCCGGGACAGCG..... 125
NGS-StarCACCCGGCUGUGGACAUUGGC..... 78
NGS-MatureACCCGGCUGUGGACAUUGGC..... 56
NGS-MatureCACCCGGCUGUGGACAU..... 30
NGS-MatureCACCCGGCUGUGGACAUUGGCC..... 25
NGS-StarACAUGUCCAGGGCCCGGGACAGC..... 16
NGS-MatureCACCCGGCUGUGGACAUUGGCC..... 12
NGS-MatureCCACGGAAGAGGACG..... 11
NGS-MatureACCCGGCUGUGGACAUUGGC..... 10
NGS-StarUGUGCCAGGGCCCGGGACAGCG..... 8
NGS-StarCAUGUCCAGGGCCCGGGACAGCG..... 8
NGS-StarCACCCGGCUGUGGACAUUG..... 8
NGS-StarACAUGUCCAGGGCCCGGGGA..... 6
NGS-StarCACCCGGCUGUGGACAUUG..... 6
NGS-StarACAUGUCCAGGGCCCGGGACAG..... 6
NGS-StarACAUGUCCAGGGCCCGGGACA..... 4

hsa-mir-1277 MI0006419 ACCUCCAAAUAUAUAUAUAUGUACGUUGUGUAUAUAAAUGUAUACGUAGAUAUAUAUGUAUUUUUGGUGGGUUU
.(((((((.....(((((.....)))))))).)))).
.....UACGUAGAUAUAUAUGUAUUUU..... 4789
NGS-MatureUACGUAGAUAUAUAUGUAUUUU..... 1160
NGS-StarUAUAUAUAUAUAUGUACGUUAU..... 643
NGS-StarUAUAUAUAUAUAUGUACGUAG..... 602
NGS-MatureUACGUAGAUAUAUAUGUAUU..... 404

NGS-Mature	.....UACGUAGAUUAUUAUGUAU.....	154
NGS-Star	.....UAUAUAUAUAUAUGUACGU.....	131
NGS-Star	.....UAUAUAUAUAUAUGUACGU.....	106
NGS-Mature	.....CGUAGAUUAUAUGUAUUUU.....	105
NGS-Mature	.....UACGUAGAUUAUAUGUAUUUU.....	79
NGS-Star	.....UAUAUAUAUAUAUGUACGUAGUGUA.....	65
NGS-Mature	.....AUACGUAGAUUAUAUGUAUUUU.....	64
NGS-Mature	.....ACGUAGAUUAUAUGUAUUUU.....	53
NGS-Mature	.....CGUAGAUUAUAUGUAUUUU.....	46
NGS-Star	.....UAUAUAUAUAUAUGUACGU.....	45
NGS-Mature	.....UACGUAGAUUAUAUGUA.....	42
NGS-Star	.....UAUAUAUAUAUAUGUACGUAGUGU.....	31
NGS-Star	.....UAUAUAUAUAUGUACGUAG.....	16
NGS-Star	.....UAUAUAUAUAUAUGUACG.....	12
NGS-Star	.....UAUAUAUAUAUGUACGU.....	10

hsa-mir-133a-1 MI0000450	ACAAUGCCUUUGCUAGAGCUGGUAUAAAUGGAACCAAUCCGCCUUCUAAUGGAUUUGGUCCCCUUAACACCAGCUGUAGCUAUGCAUUGA	
hsa-miR-133a MIMAT0000427	.....UUUGGCCUUUAACACCAGCUG.....	
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	276
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	222
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	83
NGS-Star	.....AGCUGGUAUAAAUGGAACCAAU.....	81
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	53
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	40
NGS-Mature	.....UUUGGCCUUUAACACCAGC.....	38
NGS-Mature	.....UGGCCUUUAACACCAGCUG.....	30
NGS-Star	.....AGCUGGUAUAAAUGGAACCAA.....	26
NGS-Star	.....AGCUGGUAUAAAUGGAACCAA.....	23
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	16
NGS-Star	.....GCUGGUAUAAAUGGAACCAAU.....	12
NGS-Mature	.....UUUGGCCUUUAACACCAGC.....	9
NGS-Star	.....AGCUGGUAUAAAUGGAACCAAU.....	9
NGS-Star	.....GCUGGUAUAAAUGGAACCAAU.....	8
NGS-Star	.....AGCUGGUAUAAAUGGAACCAA.....	6
NGS-Mature	.....UUUGGCCUUUAACACCAG.....	6
NGS-Star	.....GAGCUGGUAUAAAUGGAACCAA.....	3
NGS-Star	.....GCUGGUAUAAAUGGAACCAA.....	1
NGS-Star	.....AGCUGGUAUAAAUGGAACCAA.....	1

hsa-mir-133a-2 MI0000451	GGGAGCCAAUUGCUAGAGCUGGUAUAAAUGGAACCAAUCCAGUCCUUAACACCAGCUGUAGCUAUGCAUUGAUGGCCGGC	
hsa-miR-133a MIMAT0000427	.....UUUGGCCUUUAACACCAGCUG.....	
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	276
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	222
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	83
NGS-Star	.....AGCUGGUAUAAAUGGAACCAAU.....	81
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	53
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	40
NGS-Mature	.....UUUGGCCUUUAACACCAGC.....	38
NGS-Mature	.....UGGCCUUUAACACCAGCUG.....	30
NGS-Star	.....AGCUGGUAUAAAUGGAACCAA.....	26
NGS-Star	.....AGCUGGUAUAAAUGGAACCAA.....	23
NGS-Mature	.....UUUGGCCUUUAACACCAGCUG.....	16
NGS-Star	.....GCUGGUAUAAAUGGAACCAAU.....	12
NGS-Mature	.....UUUGGCCUUUAACACCAGC.....	9
NGS-Star	.....AGCUGGUAUAAAUGGAACCAAU.....	9
NGS-Star	.....GCUGGUAUAAAUGGAACCAAU.....	8
NGS-Star	.....AGCUGGUAUAAAUGGAACCAA.....	6
NGS-Mature	.....UUUGGCCUUUAACACCAG.....	6
NGS-Star	.....GAGCUGGUAUAAAUGGAACCAA.....	3
NGS-Star	.....UGGUAUAAAUGGAACCAAU.....	1
NGS-Star	.....UCGACUGUCCAAUGGAUUU.....	1

hsa-mir-203 MI0000283	GUGUUGGGACUCGCGCGCUGGGUCCAGUGGUUCUUAACAGUUAACAGUUCUGUAGCGCAAUUGUAAAUGUUUAGGACCACUAGACCCGGCGCGCGACAGCGA	
hsa-miR-203 MIMAT0000264	.....GUGAAAUGUUUAGGACCACUAG.....	
NGS-Mature	.....GUGAAAUGUUUAGGACCACUAG.....	4806
NGS-Mature	.....UGAAAUGUUUAGGACCACUAG.....	2751
NGS-Mature	.....GUGAAAUGUUUAGGACCACU.....	727
NGS-Mature	.....GUGAAAUGUUUAGGACCACUAGA.....	716
NGS-Mature	.....UGAAAUGUUUAGGACCACUAGA.....	600
NGS-Mature	.....GUGAAAUGUUUAGGACCACUA.....	501
NGS-Mature	.....UGAAAUGUUUAGGACCACU.....	464
NGS-Mature	.....GUGAAAUGUUUAGGACCAC.....	194
NGS-Mature	.....UGAAAUGUUUAGGACCACUA.....	168
NGS-Star	.....AGUGGUUCUUAACAGUUAACA.....	135
NGS-Mature	.....AAUGUUUAGGACCACUAG.....	113
NGS-Star	.....AGUGGUUCUUAACAGUUAACA.....	21
NGS-Star	.....AGUGGUUCUUAACAGUUAACA.....	19

hsa-miR-1249 MIMAT0005901ACGCCCUUCCCCCUUCUUA....
NGS-MatureACGCCCUUCCCCCUUCUUA.... 418
NGS-MatureACGCCCUUCCCCCUUCUUC.... 193
NGS-Star .AGGAGGGAGGAGAUGGGCCAAGUUC..... 126
NGS-Star .AGGAGGGAGGAGAUGGGCCAAGUU..... 119
NGS-MatureACGCCCUUCCCCCUUCUU..... 85
NGS-MatureACGCCCUUCCCCCUUCU..... 68
NGS-Star .AGGAGGGAGGAGAUGGGCCAAG..... 27
NGS-Star .AGGAGGGAGGAGAUGGGCCAAGU..... 21
NGS-MatureACGCCCUUCCCCCUUC..... 17
NGS-Mature .AACGCCCUUCCCCCUUCUUA.... 10
NGS-Star .AGGAGGGAGGAGAUGGGCCAA..... 10
NGS-Star .AGGAGGGAGGAGAUGGGCCA..... 7
NGS-MatureACGCCCUUCCCCCUUCUUCAC... 5
NGS-Star .AGGAGGGAGGAGAUGGGCC..... 4
NGS-Star .AGGAGGGAGGAGAUGGGCCAAGUUC..... 4
NGS-MatureGCCCUUCCCCCUUCUUA.... 4
NGS-Mature .AACGCCCUUCCCCCUUCUU..... 3
NGS-MatureCGCCCUUCCCCCUUCUUA.... 3
NGS-StarAGGAGGAGAUGGGCCAAGUCCUCUGGCUAGAACGCCCUUCCCCCUUC..... 1

hsa-mir-153-1 MI0000463 CUCACAGCUGCCAGUGUCAUUUUUGUGAUCUGCAGCUAGUAUUCUCACUCCAGUUGCAUAGUCACAAAAGUGAUCAUUGGCAGGUGUGGC
(.....((.....)).....)).....).
.....UUGCAUAGUCACAAAAGUGAUC.....
.....UUGCAUAGUCACAAAAGUGAUA..... 1812
.....UUGCAUAGUCACAAAAGUGAUC..... 1311
.....UUGCAUAGUCACAAAAGUGAUCAU..... 1250
.....UUGCAUAGUCACAAAAGUGAU..... 598
.....UUGCAUAGUCACAAAAGUGA..... 362
.....UUGCAUAGUCACAAAAGUG..... 192
.....GUCAUUUUUGUGAUCUGCAGCU..... 82
.....UAGUCACAAAAGUGAUCAU..... 76
.....UGCAUAGUCACAAAAGUGAUCAU..... 50
.....UUGCAUAGUCACAAAAGUGAUCAU..... 40
.....AUAGUCACAAAAGUGAUC..... 36
.....GUCAUUUUUGUGAUCUGCAGC..... 21
.....GUCAUUUUUGUGAUCUGCA..... 3
.....GUCAUUUUUGUGAUCUGCAG..... 2
.....AUUUUUUGUGAUCUGCAGCU..... 1
.....GUCAUUUUUGUGAUCUGCAGCUA..... 1

hsa-mir-153-2 MI0000464 AGCGGUGGCCAGUGUCAUUUUUGUGAUGUUGCAGCUAGUAUUGAGCCAGUUGCAUAGUCACAAAAGUGAUCAUUGGAAACUGUG
(.....((.....)).....)).....).
.....UUGCAUAGUCACAAAAGUGAUC.....
.....UUGCAUAGUCACAAAAGUGAUC..... 1812
.....UUGCAUAGUCACAAAAGUGAUC..... 1311
.....UUGCAUAGUCACAAAAGUGAUCAU..... 1250
.....UUGCAUAGUCACAAAAGUGAU..... 598
.....UUGCAUAGUCACAAAAGUGA..... 362
.....UUGCAUAGUCACAAAAGUG..... 192
.....GUCAUUUUUGUGAUGUUGCAGCU..... 94
.....UAGUCACAAAAGUGAUCAU..... 76
.....UGCAUAGUCACAAAAGUGAUCAU..... 50
.....GUCAUUUUUGUGAUGUUGCAGC..... 44
.....UUGCAUAGUCACAAAAGUGAUCAU..... 40
.....AUAGUCACAAAAGUGAUC..... 36
.....GUCAUUUUUGUGAUGUUGCAG..... 18
.....GUCAUUUUUGUGAUGUUGCA..... 7
.....GUCAUUUUUGUGAUGUUGCAGCUA..... 6
.....GUCAUUUUUGUGAUGUUGC..... 1
.....UUUUUGUGAUGUUGCAGCUAGU..... 1

hsa-mir-494 MI0003134 GAUACUCGAAGGAGAGGUUGUCCGUGUUCUCUCUUUUUUUGAUGAAACUAACCGGGAAACCUCUUUUUUAGUAUC
(.....((.....)).....)).....).
.....UGAAACAUAACCGGGAAACCUC.....
.....UGAAACAUAACCGGGAAACCUC..... 6855
.....UGAAACAUAACCGGGAAACCUC..... 589
.....UGAAACAUAACCGGGAAACCUC..... 392
.....GAAACAUAACCGGGAAACCUC..... 234
.....UGAAACAUAACCGGGAAACCUCU..... 132
.....UGAAACAUAACCGGGAAAC..... 125
.....UGAAACAUAACCGGGAAACC..... 125
.....AAACAUAACCGGGAAACCUC..... 104
.....AAACAUAACCGGGAAACCUCUU..... 60
.....GAAACAUAACCGGGAAACCUC..... 33
.....AGGUUGUCCGUGUUGUCUCUC..... 22
.....AGGUUGUCCGUGUUGUCUCU..... 12
.....AGAGGUUGUCCGUGUUGUCU..... 8
.....AGAGGUUGUCCGUGUUGUCU..... 7
.....AGAGGUUGUCCGUGUUGUCU..... 6

hsa-miR-494 MIMAT0002816UGAAACAUAACCGGGAAACCUC.....
NGS-MatureUGAAACAUAACCGGGAAACCUC..... 6855
NGS-MatureUGAAACAUAACCGGGAAACCUC..... 589
NGS-MatureUGAAACAUAACCGGGAAACCUC..... 392
NGS-MatureGAAACAUAACCGGGAAACCUC..... 234
NGS-MatureUGAAACAUAACCGGGAAACCUCU..... 132
NGS-MatureUGAAACAUAACCGGGAAAC..... 125
NGS-MatureUGAAACAUAACCGGGAAACC..... 125
NGS-MatureAAACAUAACCGGGAAACCUC..... 104
NGS-MatureAAACAUAACCGGGAAACCUCUU..... 60
NGS-MatureGAAACAUAACCGGGAAACCUC..... 33
NGS-StarAGGUUGUCCGUGUUGUCUCUC..... 22
NGS-StarAGGUUGUCCGUGUUGUCUCU..... 12
NGS-StarAGAGGUUGUCCGUGUUGUCU..... 8
NGS-StarAGAGGUUGUCCGUGUUGUCU..... 7
NGS-StarAGAGGUUGUCCGUGUUGUCU..... 6

```

NGS-Star             .....GAGAGUUUCGGUGUUGUCUU..... 3
NGS-Star             .....AGGUUUCGGUGUUGUCUU..... 2
NGS-Star             .....GGUUUCGGUGUUGUCUC..... 2
NGS-Star             .....GAGAGUUUCGGUGUUGUCUU..... 2
NGS-Star             .....AGAGUUUCGGUGUUGUCUU..... 1

hsa-mir-548e MI006344      UUAUUAGGUUGGUACAAAAGCAAUCGCGUUUUUUGCUUAUUACUUUAAAAGGCAAAAACUGAGACUACUUUUGCACCAACCGAUAGAA
(((.....(((.....((.....))).....)).....)).....)).....

hsa-miR-548e MIMAT005874      .....AAAAACUGAGACUACUUUUGCA..... 6121
NGS-Mature           .....AAAAACUGAGACUACUUUUGCA..... 1075
NGS-Mature           .....AAAAACUGAGACUACUUUUGC..... 697
NGS-Mature           .....AAAAACUGAGACUACUUUU..... 171
NGS-Mature           .....AAAAACUGAGACUACUUUUGCA..... 163
NGS-Star             .....CAAAGCAAUCGCGUUUUUUGC..... 119
NGS-Mature           .....CAAACUGAGACUACUUUUGCA..... 108
NGS-Star             .....CAAAGCAAUCGCGUUUUUG..... 101
NGS-Mature           .....CAAACUGAGACUACUUUUGC..... 86
NGS-Mature           .....CAAACUGAGACUACUUUUG..... 63
NGS-Star             .....AAAAGCAAUCGCGUUUUUUG..... 42
NGS-Star             .....CAAAGCAAUCGCGUUUUUU..... 38
NGS-Star             .....AAAAGCAAUCGCGUUUUUGCU..... 30
NGS-Mature           .....AAAACUGAGACUACUUUUGC..... 24
NGS-Star             .....AAAAGCAAUCGCGUUUUUU..... 23
NGS-Star             .....AAAAGCAAUCGCGUUUUU..... 20
NGS-Star             .....CAAAGCAAUCGCGUUUUUGCU..... 16
NGS-Mature           .....AACUGAGACUACUUUUGCACA..... 15
NGS-Star             .....CAAAGCAAUCGCGUUUUU..... 15
NGS-Star             .....AAAAGCAAUCGCGUUUUUUGC..... 10

hsa-mir-579 MI003586      CAUUAUUAGGUUAUUGCAAAAAGUAUUCGCGUUUUUGCCAGUAGCAUUUUAUUAAAUAUUUUUGGUUAUAAAACCGGAUUUUUUUGCAUCAAC
(((.....(((.....((.....))).....)).....)).....)).....)).....)).....)).....)).....)).....)).....)).....

hsa-miR-579 MIMAT003244      .....UUCAUUUUGGUUAUAAAACCGGAUU..... 121
NGS-Mature           .....UUCAUUUUGGUUAUAAAACCGGAUU..... 49
NGS-Star             .....UCGCGUUUUGGCCAGAUGACG..... 43
NGS-Star             .....UCGCGUUUUGGCCAGAUGCAGU..... 41
NGS-Star             .....UCGCGUUUUGGCCAGAUGACGA..... 34
NGS-Star             .....UCGCGUUUUGGCCAGAUGAC..... 22
NGS-Mature           .....UUCAUUUUGGUUAUAAAACCGGAU..... 22
NGS-Star             .....UCGCGUUUUGGCCAGAUGA..... 12
NGS-Star             .....AUCGCGUUUUGGCCAGAUGAC..... 11
NGS-Star             .....AUCGCGUUUUGGCCAGAUGA..... 11
NGS-Star             .....AAUCGCGUUUUGGCCAGAUGA..... 10
NGS-Mature           .....AUUCAUUUGGUUAUAAAACCGGA..... 10
NGS-Mature           .....AUUCAUUUGGUUAUAAAACCGGAU..... 10
NGS-Mature           .....UCAUUUGGUUAUAAAACCGGAUU..... 10
NGS-Mature           .....UCAUUUGGUUAUAAAACCGGAU..... 6
NGS-Star             .....GUAUUCGCGUUUUGGCCAGAU..... 5
NGS-Mature           .....UCAUUUGGUUAUAAAACCG..... 3
NGS-Mature           .....CAUUUGGUUAUAAAACCGGAUU..... 3
NGS-Mature           .....UCAUUUGGUUAUAAAACCGGA..... 3
NGS-Mature           .....UCAUUUGGUUAUAAAACCGC..... 2

hsa-mir-328 MI000804      UGGAGUGGGGGGCGAGGGGCGACAGGAGAAAGUGCAUACAGCCCCUGGCCUCUCUGCCCUUCCGCCUCCCG
((.....(((.....((.....))).....)).....)).....)).....)).....)).....)).....)).....)).....)).....

hsa-miR-328 MIMAT000752      .....CUGGCCUUCUGCCUUCGG..... 1995
NGS-Mature           .....CUGGCCUUCUGCCUUCCG..... 165
NGS-Mature           .....UGGCCUUCUGCCUUCGG..... 63
NGS-Mature           .....CUGGCCUUCUGCCUUC..... 52
NGS-Mature           .....CUGGCCUUCUGCCUUC..... 41
NGS-Mature           .....CUGGCCUUCUGCCUUC..... 21
NGS-Star             .....GGGGGCGAGGGGCGACAGG..... 9
NGS-Mature           .....CUGGCCUUCUGCCUUCCGC..... 7
NGS-Mature           .....AGAAAGUGCAUACAGCCC..... 4
NGS-Star             .....GGGGGCGAGGGGCGACAGG..... 4
NGS-Mature           .....UGGCCUUCUGCCUUC..... 3
NGS-Mature           .....CCUGGCCUUCUGCCUUCGG..... 3
NGS-Mature           .....CCUGGCCUUCUGCCUUC..... 2
NGS-Star             .....GGGGGCGAGGGGCGUCA..... 1
NGS-Star             .....GGGGGCGAGGGGCGUCAG..... 1
NGS-Star             .....GGGGGCGAGGGGCGUCAGG..... 1
NGS-Star             .....GGGGGCGAGGGGCGUCAGG..... 1
NGS-Star             .....GGGGGCGAGGGGCGUCAGG..... 1

hsa-mir-137 MI000454      GGUCUUCUGACUCUCUUCGGUGAGGGGAUUAUUGGGGGAUAUAUCGGAUAUACGUUGUUAUUGCUUAAGAUAUCGCGUAGUCGAGGAGUACCAGCGGA
((.....(((.....((.....))).....)).....)).....)).....)).....)).....)).....)).....)).....)).....

hsa-miR-137 MIMAT000429      .....UUAUUGCUUAAGAAUACGCGUAG.....
NGS-Mature           .....UUAUUGCUUAAGAAUACGCGUAG..... 16267

```


NGS-Mature	.....UUAUUGC...AAGAAUACGCGUA.....	9974
NGS-Mature	.....UUAUUGC...AAGAAUACGCGU.....	4607
NGS-Mature	.....UUAUUGC...AAGAAUACGCGUAG.....	1182
NGS-Mature	.....AUUGC...AAGAAUACGCGUAGU.....	1138
NGS-Mature	.....UUAUUGC...AAGAAUACGCGUAGU.....	736
NGS-Mature	.....UUAUUGC...AAGAAUACGCGUAGU.....	648
NGS-Mature	.....UUAUUGC...AAGAAUACGCGUA.....	444
NGS-Mature	.....AUUGC...AAGAAUACGCGUAG.....	357
NGS-Mature	.....UUAUUGC...AAGAAUACGCGU.....	272
NGS-Star	.....ACGGGUAUUCUUGGGUGGAUAAU.....	146
NGS-Star	.....ACGGGUAUUCUUGGGUGGAU.....	80
NGS-Star	.....ACGGGUAUUCUUGGGUGGAUAA.....	78
NGS-Star	.....ACGGGUAUUCUUGGGUGGAUAAU.....	40
NGS-Star	.....ACGGGUAUUCUUGGGUGGAUA.....	18
NGS-Star	.....UCCUCUGACUCUCUUCGGUG.....	6
NGS-Star	.....CCUCUGACUCUCUUCGGUG.....	3
NGS-Star	.....GUCUCUGACUCUCUUCGGUG.....	2
NGS-Star	.....GACGGGUAUUCUUGGGUGGAU.....	2
NGS-Star	.....CGGGUAUUCUUGGGUGGAUAAU.....	2
hsa-mir-3158-1 MI0014186	AUUCAGGCCGGUCCUGCAGAGAGGAAGCCUUCUGCUUACAGGUUUGGAGGGCUUCCUCUCUGCAGGACCGCCUGAAU	
	(((((.....))))))	
hsa-miR-3158 MIMAT0015032	.....AAGGGCUUCCUCUCUGCAGGAC.....	
NGS-Mature	.....AAGGGCUUCCUCUCUGCAGGAC.....	372
NGS-Mature	.....AAGGGCUUCCUCUCUGCAGGA.....	200
NGS-Mature	.....AAGGGCUUCCUCUCUGCAGG.....	30
NGS-Mature	.....AGGGCUUCCUCUCUGCAGGAC.....	26
NGS-Star	.....CCUGCAGAGAGGAAGCCUUCU.....	25
NGS-Star	.....CCUGCAGAGAGGAAGCCUUC.....	13
NGS-Star	.....GUCCUGCAGAGAGGAAGCCUUC.....	8
NGS-Mature	.....AAGGGCUUCCUCUCUGCAGGAC.....	7
NGS-Mature	.....AGGGCUUCCUCUCUGCAGGACG.....	7
NGS-Star	.....UCCUGCAGAGAGGAAGCCUUC.....	7
NGS-Mature	.....AGGGCUUCCUCUCUGCAGGA.....	6
NGS-Mature	.....AGGGCUUCCUCUCUGCAGGAC.....	6
NGS-Star	.....UCCUGCAGAGAGGAAGCCUUC.....	5
NGS-Mature	.....AAGGGCUUCCUCUCUGCA.....	4
NGS-Mature	.....AAGGGCUUCCUCUCUGCAG.....	3
NGS-Star	.....UCCUGCAGAGAGGAAGCCUUC.....	2
NGS-Star	.....GGUCCUGCAGAGAGGAAGCCUUC.....	1
NGS-Star	.....GUCCUGCAGAGAGGAAGCCUUC.....	1
NGS-Star	.....CGGUCCUGCAGAGAGGAAGCC.....	1
NGS-Star	.....CCUGCAGAGAGGAAGCCUUC.....	1
hsa-mir-3158-2 MI0014187	AUUCAGGCCGGUCCUGCAGAGAGGAAGCCUUCUCCAAUACCUGUAAGCAGAAGGGCUUCCUCUCUGCAGGACCGCCUGAAU	
	(((((.....))))))	
hsa-miR-3158 MIMAT0015032	.....AAGGGCUUCCUCUCUGCAGGAC.....	
NGS-Mature	.....AAGGGCUUCCUCUCUGCAGGAC.....	372
NGS-Mature	.....AAGGGCUUCCUCUCUGCAGGA.....	200
NGS-Mature	.....AAGGGCUUCCUCUCUGCAGG.....	30
NGS-Mature	.....AGGGCUUCCUCUCUGCAGGAC.....	26
NGS-Star	.....CCUGCAGAGAGGAAGCCUUC.....	13
NGS-Star	.....GUCCUGCAGAGAGGAAGCCUUC.....	8
NGS-Mature	.....AAGGGCUUCCUCUCUGCAGGAC.....	7
NGS-Star	.....UCCUGCAGAGAGGAAGCCUUC.....	7
NGS-Mature	.....AGGGCUUCCUCUCUGCAGGACG.....	7
NGS-Mature	.....AGGGCUUCCUCUCUGCAGGAC.....	6
NGS-Mature	.....AGGGCUUCCUCUCUGCAGGA.....	6
NGS-Star	.....UCCUGCAGAGAGGAAGCCUUC.....	5
NGS-Mature	.....AAGGGCUUCCUCUCUGCA.....	4
NGS-Mature	.....AAGGGCUUCCUCUCUGCAG.....	3
NGS-Star	.....UCCUGCAGAGAGGAAGCCUUC.....	2
NGS-Star	.....GGUCCUGCAGAGAGGAAGCCUUC.....	1
NGS-Star	.....GUCCUGCAGAGAGGAAGCCUUC.....	1
NGS-Star	.....CGGUCCUGCAGAGAGGAAGCC.....	1
NGS-Star	.....CCUGCAGAGAGGAAGCCUUC.....	1
hsa-mir-3187 MI0014231	GCUGGCCUGGGCAGCGUGUGGCUAAGGUCACCAUGUUCUCCUUGGCCAUGGGGCUGCGCGGGCCAGC	
	(((((.....))))))	
hsa-miR-3187 MIMAT0015069	.....UUGGCCAUGGGGCUGCGCGG.....	
NGS-Mature	.....UUGGCCAUGGGGCUGCGCGG.....	124
NGS-Mature	.....UUGGCCAUGGGGCUGCGCGGGC.....	46
NGS-Mature	.....UUGGCCAUGGGGCUGCGCGGG.....	36
NGS-Mature	.....UUGGCCAUGGGGCUGCGCGGG.....	34
NGS-Star	.....CCUGGGCAGCGUGUGGCUAAGG.....	19
NGS-Mature	.....UUGGCCAUGGGGCUGCGCG.....	9
NGS-Star	.....CCUGGGCAGCGUGUGGCUAAG.....	7
NGS-Mature	.....UUGGCCAUGGGGCUGCGC.....	4
NGS-Star	.....CCUGGGCAGCGUGUGGCUAAGU.....	3

NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCA	736
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCAUG	538
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCAU	283
NGS-Mature	. . . . . AUUGACACUUCUGUGAGUAG	227
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUC	163
NGS-Mature	. . . . . UUGACACUUCUGUGAGUAGA	159
NGS-Mature	. . . . . UGAUUGACACUUCUGUGAGUAG	121
NGS-Star	. . . . . UACUCUGGAGAGUGACAAU	101
NGS-Mature	. . . . . UUGAUUGACACUUCUGUGAGUAGA	95
NGS-Mature	. . . . . AUUGACACUUCUGUGAGUA	47
NGS-Mature	. . . . . UUGAUUGACACUUCUGUGAGUAG	37
NGS-Mature	. . . . . UGAUUGACACUUCUGUGAGUA	18
NGS-Mature	. . . . . AUUGACACUUCUGUGAGU	13
NGS-Star	. . . . . UACUCUGGAGAGUGACAA	13
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCAUGU	10
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCAUGUAU	7
NGS-Star	. . . . . ACUCUGGAGAGUGACAAUCA	6
NGS-Star	. . . . . ACUCUGGAGAGUGACAAUC	3
hsa-mir-514-3 MI0003200	GUUGUCUGUGUACCCUACUCUGGAGAGUGACAAUCAUGUAUAACUAAAUUUGAUUGACACUUCUGUGAGUAGUAACGCAUGACAC	
hsa-miR-514 MIMAT002883	.. ((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
NGS-Mature	. . . . . AUUGACACUUCUGUGAGUAGA	4401
NGS-Mature	. . . . . AUUGACACUUCUGUGAGUAGA	1065
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCA	736
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCAUG	538
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCAU	283
NGS-Mature	. . . . . AUUGACACUUCUGUGAGUAG	227
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUC	163
NGS-Mature	. . . . . UUGACACUUCUGUGAGUAGA	159
NGS-Mature	. . . . . UGAUUGACACUUCUGUGAGUAG	121
NGS-Star	. . . . . UACUCUGGAGAGUGACAAU	101
NGS-Mature	. . . . . UUGAUUGACACUUCUGUGAGUAGA	95
NGS-Mature	. . . . . AUUGACACUUCUGUGAGUA	47
NGS-Mature	. . . . . UUGAUUGACACUUCUGUGAGUAG	37
NGS-Mature	. . . . . UGAUUGACACUUCUGUGAGUA	18
NGS-Mature	. . . . . AUUGACACUUCUGUGAGU	13
NGS-Star	. . . . . UACUCUGGAGAGUGACAA	13
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCAUGU	10
NGS-Star	. . . . . UACUCUGGAGAGUGACAAUCAUGUAU	7
NGS-Star	. . . . . ACUCUGGAGAGUGACAAUCA	6
NGS-Star	. . . . . ACUCUGGAGAGUGACAAUC	3
hsa-mir-548v MI014174	AAUACUAGGUUUGAGCAAAGUAAUUGCGGUUUUGCCAUCAUGCCAAAAGCUACAGUUACUUUUGCACCAGCCUAAUUAU	
hsa-miR-548v MIMAT0015020	(((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
NGS-Mature	. . . . . AGCUACAGUUACUUUUGCACCA	147
NGS-Mature	. . . . . AGCUACAGUUACUUUUGCAC	48
NGS-Star	. . . . . GAGCAAAGUAAUUGCGGUUUU	47
NGS-Star	. . . . . AAAAGUAAUUGCGGUUUU	43
NGS-Star	. . . . . GAGCAAAGUAAUUGCGGUUUU	38
NGS-Mature	. . . . . AGCUACAGUUACUUUUGCA	18
NGS-Mature	. . . . . AGCUACAGUUACUUUUGCAC	17
NGS-Star	. . . . . GAGCAAAGUAAUUGCGGUU	12
NGS-Mature	. . . . . AAAGCUACAGUUACUUUUGCAC	11
NGS-Mature	. . . . . AAGCUACAGUUACUUUUGCACCA	11
NGS-Mature	. . . . . AAGCUACAGUUACUUUUGCAC	10
NGS-Mature	. . . . . AAAGCUACAGUUACUUUUGCA	8
NGS-Mature	. . . . . AAAGCUACAGUUACUUUUGCAC	6
NGS-Mature	. . . . . AAGCUACAGUUACUUUUGCA	5
NGS-Star	. . . . . AAAGUAAUUGCGGUUUUGCCA	3
NGS-Star	. . . . . AAAAGUAAUUGCGGUUUUGCC	3
NGS-Star	. . . . . AAAAGUAAUUGCGGUUUUGCCA	3
NGS-Star	. . . . . UGAGCAAAGUAAUUGCGGUU	3
NGS-Star	. . . . . GAGCAAAGUAAUUGCGGU	3
NGS-Star	. . . . . UGAGCAAAGUAAUUGCGGU	2
hsa-mir-551a MI0003556	GGGGACUGCCGGGUGACCCUGGAAUUCAGAGUGGGUGGGGCCAGUCUGACCGUUUCUAGGCGACCCACUCUUGGUUCCAGGGGUUCCCGGAAA	
hsa-miR-551a MIMAT0003214	(((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
NGS-Mature	. . . . . GCGACCCACUCUUGGUUCCA	145
NGS-Mature	. . . . . GCGACCCACUCUUGGUUCC	117
NGS-Mature	. . . . . GCGACCCACUCUUGGUUCC	31
NGS-Mature	. . . . . GCGACCCACUCUUGGUUCCA	11
NGS-Mature	. . . . . GCGACCCACUCUUGGUUU	6
NGS-Mature	. . . . . CGACCCACUCUUGGUUCC	5
NGS-Mature	. . . . . GACCCACUCUUGGUUCCA	4
NGS-Star	. . . . . GAAAUCCAGAGUGGGUGGGGC	2
NGS-Mature	. . . . . GCGACCCACUCUUGGUUU	2

```

NGS-Star .....GAAUCCAGAGUGGGGGGCCA..... 1
NGS-Star .GGGACUGCCGGGUGACCCU..... 1
NGS-Star .GGGACUGCCGGGUGACCCUG..... 1
NGS-Mature .....GACCCACUCUUGGUUCC..... 1

hsa-mir-643 MI0003658 ACCAAGUGAUUAUCAUUGUCUACCUGAGCUAGAAUACAAGUAGUUGGGCCUUCAGAGACACUUGUAGUCUAGCUCAGGUAUAUUGAAUGAAAA
.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-643 MIMAT0003313 .....ACUUGUAUGCUAGCUCAGGUAG.....
NGS-Mature .....ACACUUGUAUGCUAGCUCAGGU..... 205
NGS-Mature .....ACACUUGUAUGCUAGCUCAGGUA..... 53
NGS-Mature .....ACACUUGUAUGCUAGCUCAGG..... 32
NGS-Mature .....ACACUUGUAUGCUAGCUCAG..... 32
NGS-Star .....ACCUGAGCUAGAAUACAAGUAGU..... 30
NGS-Mature .....ACUUGUAUGCUAGCUCAGGUAG..... 28
NGS-Mature .....CACUUGUAUGCUAGCUCAGGUA..... 18
NGS-Mature .....CACUUGUAUGCUAGCUCAGGU..... 12
NGS-Star .....UACCUGAGCUAGAAUACAAGUA..... 8
NGS-Mature .....ACACUUGUAUGCUAGCUC..... 5
NGS-Star .....CCUGAGCUAGAAUACAAGUAGU..... 5
NGS-Mature .....ACUUGUAUGCUAGCUCAGGUA..... 4
NGS-Star .....ACCUGAGCUAGAAUACAAGUA..... 4
NGS-Mature .....ACACUUGUAUGCUAGCUCA..... 4
NGS-Star .....ACCUGAGCUAGAAUACAAGUAG..... 4
NGS-Star .....ACCUGAGCUAGAAUACAAGU..... 2
NGS-Star .....CCUGAGCUAGAAUACAAGUAG..... 2
NGS-Star .....CUGAGCUAGAAUACAAGUAG..... 2
NGS-Star .....CUGAGCUAGAAUACAAGUAGU..... 1
NGS-Star .....CUGAGCUAGAAUACAAGUAGUU..... 1

hsa-mir-760 MI0005567 GGGCGGUCGCCCCUUCAGUCCACAGCCGCGGUAUCCUAGAAUUCGGGUCUGGGUCUGGGGAGCGAAUUGCAAC
.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-760 MIMAT0004957 .....CGGCUCUGGGUCUGGGGGA.....
NGS-Mature .....CGGCUCUGGGUCUGGGGAG..... 1052
NGS-Mature .....CGGCUCUGGGUCUGGGGGA..... 532
NGS-Mature .....CGGCUCUGGGUCUGGGG..... 172
NGS-Mature .....CGGCUCUGGGUCUGGG..... 69
NGS-Mature .....UCGGCUCUGGGUCUGGGGAG..... 62
NGS-Mature .....UCGGCUCUGGGUCUGGGGA..... 25
NGS-Mature .....CGGCUCUGGGUCUGGGGAGC..... 24
NGS-Mature .....UCGGCUCUGGGUCUGGG..... 9
NGS-Mature .....UCGGCUCUGGGUCUGGGG..... 7
NGS-Mature .....GGCUCUGGGUCUGGGGAG..... 6
NGS-Star .....CCCCUCAGUCCACAGGCCCGGA..... 4
NGS-Star .....CCCCUCAGUCCACAGGCCCGGAU..... 3
NGS-Star .....CCCCUCAGUCCACAGGCCCGG..... 2
NGS-Star .....CCCCUCAGUCCACAGGCCCGGAU..... 1
NGS-Star .....CCCCUCAGUCCACAGGCCCG..... 1
NGS-Star .....CCCCUCAGUCCACAGG..... 1

hsa-mir-1269 MI0006406 UGGAUUGCCUAGACCAGGGAAGCCAGUUGGCAUGGCCUAGUCCAAGUCUGACCACCUAGAGAAUGCCUGGACUGAGCCGUGCUACUGGCUUCCUGGUCUCCAGC
.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-1269 MIMAT0005923 .....CUGGACUGAGCCGUGCUACUGG.....
NGS-Mature .....CUGGACUGAGCCGUGCUACU..... 6599
NGS-Mature .....CUGGACUGAGCCGUGCUACUGG..... 4606
NGS-Mature .....CUGGACUGAGCCGUGCUAC..... 1239
NGS-Mature .....CUGGACUGAGCCGUGCUACUG..... 1032
NGS-Mature .....CUGGACUGAGCCGUGCUA..... 305
NGS-Star .....AGUUGGCAUGGCUAGUCCAAGU..... 147
NGS-Mature .....CCUGGACUGAGCCGUGCUACU..... 120
NGS-Mature .....CCUGGACUGAGCCGUGCUACUGG..... 98
NGS-Mature .....CCUGGACUGAGCCGUGCUAC..... 27
NGS-Mature .....UGGACUGAGCCGUGCUACUGG..... 27
NGS-Mature .....CCUGGACUGAGCCGUGCUACUG..... 25
NGS-Star .....AGUUGGCAUGGCUAGUCCAAGUC..... 15
NGS-Star .....AGUUGGCAUGGCUAGUCCAAG..... 14
NGS-Star .....UUGCCUAGACCAGGGAAGCC..... 11
NGS-Star .....UGGCAUGGCUAGUCCAAGU..... 6
NGS-Star .....AGUUGGCAUGGCUAGUCCA..... 6
NGS-Star .....UGGCAUGGCUAGUCCAAG..... 2
NGS-Star .....CAUGGCUAGUCCAAGUC..... 2
NGS-Star .....AGUUGGCAUGGCUAGUCCA..... 1

NGS-Star .....UGCCUAGACCAGGGAAGCC..... 1

hsa-mir-376c MI0000776 AAAAGGUGGAUAUUCUUCUAUGUUUAUGUUUAUUGUUAAACAUAAGAGGAAAUUCCACGUUUU
.....((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-376c MIMAT0000720 .....AACAUAGAGGAAAUUCCACGU.....
NGS-Mature .....AACAUAGAGGAAAUUCCACGU..... 11771
NGS-Mature .....AACAUAGAGGAAAUUCCACG..... 1158
NGS-Mature .....AACAUAGAGGAAAUUCCACGU..... 788

```

```

NGS-Mature ..... ACAUAGAGGAAAUUCCAC..... 654
NGS-Mature ..... AACAUAGAGGAAAUUCCA..... 126
NGS-Mature ..... AACAUAGAGGAAAUUCCACGUUU. 77
NGS-Mature ..... ACAUAGAGGAAAUUCCACGU... 65
NGS-Star ..... GUGGAUUAUCCUUCUAUGUUU..... 45
NGS-Star ..... GUGGAUUAUCCUUCUAUGUUUA..... 41
NGS-Mature ..... AACAUAGAGGAAAUUCCACG... 38
NGS-Mature ..... ACAUAGAGGAAAUUCCACGUUU. 35
NGS-Mature ..... ACAUAGAGGAAAUUCCACGUU.. 32
NGS-Star ..... UGGAUUAUCCUUCUAUGUUUA..... 21
NGS-Star ..... UGGAUUAUCCUUCUAUGUUU..... 10
NGS-Star ..... GUGGAUUAUCCUUCUAUG..... 10
NGS-Star ..... GUGGAUUAUCCUUCUAUGUUU..... 9
NGS-Star ..... UGGAUUAUCCUUCUAUGUUUA..... 8
NGS-Star ..... UGGAUUAUCCUUCUAUGUU..... 7
NGS-Star ..... GUGGAUUAUCCUUCUAUGU..... 5
NGS-Star ..... GUGGAUUAUCCUUCUAUGUU..... 3

```

```

hsa-mir-381 MI0000789 UACUUA...AGCGAGGU...GCCCCUUUGUAUAUUCGGUUUAUUGACAUGGAAUUAACAAGGGCAAGCUCUCUGAGUA
(((((((.....))))))))).....
hsa-miR-381 MIMAT0000736 ..... UAUACAAGGGCAAGCUCUCUGU.....
NGS-Mature ..... UAUACAAGGGCAAGCUCUCUGU..... 2576
NGS-Mature ..... UAUACAAGGGCAAGCUCUCU..... 250
NGS-Star ..... AGCGAGGU...GCCCCUUUGUAU..... 189
NGS-Star ..... AGCGAGGU...GCCCCUUUGUAUUAU..... 158
NGS-Mature ..... ACAAGGGCAAGCUCUCUGU..... 128
NGS-Mature ..... AUACAAGGGCAAGCUCUCUGU..... 107
NGS-Mature ..... AUUAACAAGGGCAAGCUCUCU..... 103
NGS-Mature ..... UAUACAAGGGCAAGCUCUCUG..... 99
NGS-Mature ..... CAAGGGCAAGCUCUCUGU..... 71
NGS-Mature ..... UAUACAAGGGCAAGCUCUC..... 70
NGS-Mature ..... AUUAACAAGGGCAAGCUCUCUGU..... 68
NGS-Star ..... AGCGAGGU...GCCCCUUUGUAUUAU..... 61
NGS-Mature ..... AUACAAGGGCAAGCUCUCU..... 60
NGS-Star ..... AGCGAGGU...GCCCCUUUGUAUA..... 27
NGS-Star ..... AGCGAGGU...GCCCCUUUGUA..... 24
NGS-Star ..... AGCGAGGU...GCCCCUUUGU..... 9
NGS-Star ..... GGUUGCCCCUUUGUAUUAU..... 8
NGS-Star ..... AGGUUGCCCCUUUGUAUAUC..... 5
NGS-Star ..... AGCGAGGU...GCCCCUUUGUAUUAUC..... 2
NGS-Star ..... AGGUUGCCCCUUUGUAUUAU..... 2

```

```

hsa-mir-889 MI0005540 GUGCUU...AAGAAUGGCUGCCGUAGUUGGUUCUUAUAUUUAUGAUGAUUAUAUCGGACAACCAUUGUUUUAGUAUCC
(((((((.....))))))))).....
hsa-miR-889 MIMAT0004921 ..... UUAUAUCGGACAACCAUUGU.....
NGS-Mature ..... UUAUAUCGGACAACCAUUGU..... 25416
NGS-Mature ..... UUAUAUCGGACAACCAUUG..... 1408
NGS-Mature ..... UUAUAUCGGACAACCAUUGUU..... 1080
NGS-Mature ..... UUAUAUCGGACAACCAUU..... 723
NGS-Mature ..... UUAUAUCGGACAACCAU..... 197
NGS-Mature ..... UUAUAUCGGACAACCAUUGUU..... 172
NGS-Mature ..... UUAUAUCGGACAACCAUUGU..... 148
NGS-Mature ..... AAUAUCGGACAACCAUUGU..... 132
NGS-Mature ..... AUUAUAUCGGACAACCAUUGU..... 57
NGS-Star ..... AAUGGCUGUCCGUAGUAUGGU..... 24
NGS-Mature ..... UUAUAUCGGACAACCAUUGUU..... 18
NGS-Star ..... AAUGGCUGUCCGUAGUAUGGU..... 9
NGS-Star ..... AAUGGCUGUCCGUAGUAUGG..... 9
NGS-Star ..... AAUGGCUGUCCGUAGUAUG..... 4
NGS-Star ..... AAUGGCUGUCCGUAGUAU..... 4
NGS-Star ..... AAUGGCUGUCCGUAGUAUGGC..... 3
NGS-Star ..... GAAUGGCUGUCCGUAGUAUGGU..... 2
NGS-Star ..... GAAUGGCUGUCCGUAGUA..... 1

```

```

hsa-mir-3173 MI0014204 UCCCUGCCCUGCCU...UUUUUUUUGAUUUUAUGAGAACAAGGAGGAAA...UAGGCAGGCCAGGGA
(((((((.....))))))))).....
hsa-miR-3173 MIMAT0015048 ..... AAAGGAGGAAA...UAGGCAGGCCA.....
NGS-Star ..... UGCCUGCCUGUUUUUCCUUU..... 36
NGS-Mature ..... AAAGGAGGAAA...UAGGCAGGCCA..... 33
NGS-Mature ..... AAGGAGGAAA...UAGGCAGGCCA..... 25
NGS-Mature ..... AAGGAGGAAA...UAGGCAGGCCAG... 14
NGS-Mature ..... AAAGGAGGAAA...UAGGCAGGCC..... 13
NGS-Mature ..... AGGAGGAAA...UAGGCAGGCCAGG... 9
NGS-Star ..... CCCUGCCUGUUUUUCCUUUGU..... 9
NGS-Mature ..... AAAGGAGGAAA...UAGGCAGGCCAG... 8
NGS-Mature ..... AAGGAGGAAA...UAGGCAGGCC..... 6
NGS-Mature ..... AAGGAGGAAA...UAGGCAGGCCAGG... 6
NGS-Star ..... CCCUGCCUGUUUUUCCUUUG..... 5
NGS-Mature ..... AAGGAGGAAA...UAGGCAGGCCAG... 4
NGS-Star ..... UGCCUGCCUGUUUUUCCUUU..... 4

```

NGS-Star	.....GCCCGCCGUUUUUCUCCUUU.....	4
NGS-Mature	.....AGGAGGAAAAGGAGGCCA.....	4
NGS-Star	.....CCUGCCGUUUUUCUCCUU.....	3
NGS-Star	.....CCUGCCGUUUUUCUCCUUUG.....	3
NGS-Star	.....UGCCCGCCGUUUUUCUCCUU.....	3
NGS-Star	.....UGCCCGCCGUUUUUCUCCU.....	3
NGS-Star	.....GCCUGCCGUUUUUCUCCUU.....	2
hsa-mir-3190 MI0014235	CUGGGGUCACCGUCUGGCCAGCUACGUCGCCACGGCCUUUGCAGUGGAAAGGUAGAGCGCCAGAGAGGUGACCCCGG	
	((((((((.....)))))))))	
hsa-miR-3190 MIMAT0015073	.....UGUGGAAGGUAGACGGCCAGAGA.....	
NGS-Mature	.....UGGAAGGUAGACGGCCAGAGAG.....	122
NGS-Mature	.....GUGGAAGGUAGACGGCCAGAGA.....	99
NGS-Mature	.....UGGAAGGUAGACGGCCAGAGA.....	98
NGS-Mature	.....UGGAAGGUAGACGGCCAGAGAG.....	35
NGS-Mature	.....GUGGAAGGUAGACGGCCAGAG.....	29
NGS-Mature	.....UGGAAGGUAGACGGCCAGAG.....	27
NGS-Mature	.....UGUGGAAGGUAGACGGCCAGAGA.....	21
NGS-Mature	.....AAGGUAGACGGCCAGAGAGGUGA.....	7
NGS-Mature	.....GUGGAAGGUAGACGGCCAGA.....	7
NGS-Mature	.....AAGGUAGACGGCCAGAGAGGUG.....	6
NGS-Star	.....UGUCUGGCCAGCUACGUCCCA.....	2
NGS-Star	.....GGGUCACCUUGUCUGGC.....	1
NGS-Star	CUGGGGUCACCUUGUCUGGC.....	1
hsa-mir-548s MI0014141	UUGCUGCAAAAAUAAUUGCAGUUUUUUGCCAAUUUUUUUUUAAUAAUAAUAAUAAUGGCCAAAAACUGCAGUUUUUUUGCACCAA	
	(((((.....))))))	
hsa-miR-548s MIMAT0014987	.....AUGGCCAAAACUGCAGUUUUUU.....	
NGS-Mature	.....AUGGCCAAAACUGCAGUUUUUU.....	122
NGS-Mature	.....UAAUGGCCAAAACUGCAGUUUU.....	116
NGS-Mature	.....AUGGCCAAAACUGCAGUUUU.....	34
NGS-Mature	.....AUGGCCAAAACUGCAGUU.....	24
NGS-Mature	.....AUGGCCAAAACUGCAGUUUU.....	19
NGS-Star	.....AUAUUUGCAGUUUUUGCCAU.....	16
NGS-Star	.....AUAUUUGCAGUUUUUGCCAUUA.....	16
NGS-Mature	.....UAAUGGCCAAAACUGCAGUUUA.....	15
NGS-Mature	.....UAAUGGCCAAAACUGCAGUUUU.....	14
NGS-Mature	.....AAUGGCCAAAACUGCAGUUUUUU.....	9
NGS-Mature	.....AUGGCCAAAACUGCAGUUUU.....	9
NGS-Mature	.....UGGCCAAAACUGCAGUUUUUU.....	8
NGS-Star	.....AUAUUUGCAGUUUUUGCCAU.....	7
NGS-Star	.....AUAUUUGCAGUUUUUGCCAU.....	1
NGS-Star	.....AAUUGCAGUUUUUGCCAUUA.....	1
hsa-mir-548u MI0014168	AUUAGGAUGGUGCAAAAGUAAUGUGGUUUUUUUCUUUUUUUUAAUGGCCAAAAGACUGCAUUUUCUUUUGGCCAACCUAAU	
	(((((.....))))))	
hsa-miR-548u MIMAT0015013	.....CAAAGACUGCAAUUUCUUUUGCG.....	
NGS-Mature	.....CAAAGACUGCAAUUUCUUUUGCG.....	238
NGS-Mature	.....CAAAGACUGCAAUUUCUUUUG.....	151
NGS-Mature	.....CAAAGACUGCAAUUUCUUUUGC.....	80
NGS-Mature	.....CAAAGACUGCAAUUUCUUUU.....	52
NGS-Mature	.....AAAGACUGCAAUUUCUUUUGCG.....	30
NGS-Mature	.....AAAGACUGCAAUUUCUUUU.....	23
NGS-Mature	.....AAAGACUGCAAUUUCUUUUG.....	21
NGS-Mature	.....CAAAGACUGCAAUUUCUUU.....	17
NGS-Mature	.....AAAGACUGCAAUUUCUUUUGC.....	5
NGS-Star	.....CAAAAUAUUGGUGUUUUUU.....	5
NGS-Mature	.....CAAAGACUGCAAUUUCUU.....	4
NGS-Star	.....CAAAAUAUUGGUGUUUUUU.....	2
NGS-Star	.....AAAUAUUGGUGUUUUUU.....	1
hsa-mir-561 MI0003567	CUUCAUCCACCAGUCCUCCAGGAACAUCAGGAUCUUUAAACUUUGCCAGAGCUACAAGGCAAAGUUUAAGAUCUUUGAAGUCCUGGGGAACCAU	
	(((((.....))))))	
hsa-miR-561 MIMAT0003225	.....CAAAGUUUAAGAUCUUUUAAGU.....	
NGS-Star	.....AUCAAGGAUCUUUAACUUUGCC.....	600
NGS-Star	.....AUCAAGGAUCUUUAACUUUGC.....	157
NGS-Mature	.....CAAAGUUUAAGAUCUUUUAAGU.....	63
NGS-Star	.....AUCAAGGAUCUUUAACUUUG.....	41
NGS-Star	.....AUCAAGGAUCUUUAACUUU.....	17
NGS-Star	.....AAGGAUCUUUAACUUUGCC.....	11
NGS-Star	.....AUCAAGGAUCUUUAACUUUGCCA.....	6
NGS-Star	.....AGGAUCUUUAACUUUGCC.....	3
NGS-Star	.....AUCAAGGAUCUUUAACUU.....	2
NGS-Star	.....CAUCAAGGAUCUUUAACUUUGC.....	2
NGS-Mature	.....CAAAGUUUAAGAUCUUUUAAGUU.....	2
NGS-Mature	.....CAAAGUUUAAGAUCUUUGA.....	1
NGS-Mature	.....AAAGUUUAAGAUCUUUUAAGU.....	1
NGS-Star	.....AAGGAUCUUUAACUUUGC.....	1
NGS-Mature	.....CAAAGUUUAAGAUCUUUUAAGUUC.....	1
NGS-Mature	.....AAAGUUUAAGAUCUUUUAAGUU.....	1


```

NGS-Star .....UGGAAACAUUUCUGCACAAAC..... 1

hsa-mir-3121 MI0014137 AAAUGGUUAUGUCCUUUCCUAUUUCUUAUUUAAGACACCCUGUACCUUAAAUAAGAGUAGGCAAAGGACGAAACAUUU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-3121 MIMAT0014983 .....UAAUAAGAGUAGGCAAAGGACA.....
NGS-Mature .....UAAUAAGAGUAGGCAAAGGACA..... 170
NGS-Mature .....UAAUAAGAGUAGGCAAAG..... 87
NGS-Mature .....UAAUAAGAGUAGGCAAAGG..... 62
NGS-Mature .....UAAUAAGAGUAGGCAAAGGAC..... 18
NGS-Mature .....UAAUAAGAGUAGGCAAAGGA..... 11
NGS-Mature .....AAUAGAGUAGGCAAAGGACAGA..... 6
NGS-Mature .....AAUAGAGUAGGCAAAGGACA..... 1
NGS-Mature .....UAAUAAGAGUAGGCAAAGGACAG..... 1
NGS-Mature .....UAAUAAGAGUAGGCAAAGGACAGA..... 1
NGS-Star .....UCCUUUGCCUAUUUCUUAUUUAAG..... 1
NGS-Mature .....AAAUAAGAGUAGGCAAAGGA..... 1

hsa-mir-3140 MI0014163 CCUCUUGAGGUACCCGAAUUACCAAAGCUUUUAUGUAUUUCUGAAGUUUAUUGAAAUAAGAGCUUUUUGGGAAUUCAGGUAGUUCAGGAGUG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-3140 MIMAT0015008 .....AGCUUUUGGGAAUUCAGGUAGU.....
NGS-Mature .....AGCUUUUGGGAAUUCAGGUAG..... 193
NGS-Mature .....AGCUUUUGGGAAUUCAGGUAGU..... 52
NGS-Mature .....AGCUUUUGGGAAUUCAGGUAGU..... 34
NGS-Mature .....AGAGCUUUUGGGAAUUCAGGUAGU..... 29

NGS-Mature .....GAGCUUUUGGGAAUUCAGGUAGU..... 26
NGS-Star .....ACCUGAAUUACCAAAGCUUU..... 26
NGS-Mature .....GAGCUUUUGGGAAUUCAGGUAG..... 18
NGS-Mature .....AAGAGCUUUUGGGAAUUCAGGUAGU..... 17
NGS-Mature .....AGAGCUUUUGGGAAUUCAGGUAGU..... 17
NGS-Mature .....AAGAGCUUUUGGGAAUUCAGGU..... 13
NGS-Mature .....GAGCUUUUGGGAAUUCAGGUAGU..... 13
NGS-Star .....ACCUGAAUUACCAAAGC..... 7
NGS-Star .....ACCUGAAUUACCAAAGCUU..... 1
NGS-Star .....AUUACCAAAGCUUUUAUGU..... 1
NGS-Star .....ACCUGAAUUACCAAAGCUUUA..... 1

hsa-mir-372 MI0000780 GUGGGCCUCAAUUGUGGAGCACUAUUCUGAUGUCCAAGUGGAAAGUGCUGCGACAUUUGAGCGUCAC
..((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-372 MIMAT0000724 .....AAAGUCUGCGACAUUUGAGCGU...
NGS-Mature .....AAAGUCUGCGACAUUUGAGCGU... 16175
NGS-Mature .....AAGUCUGCGACAUUUGAGCGU... 10483
NGS-Mature .....AAAGUCUGCGACAUUUGAGCG... 1030
NGS-Mature .....AAAGUCUGCGACAUUUGA..... 882
NGS-Mature .....AAGUCUGCGACAUUUGA..... 501
NGS-Mature .....AAGUCUGCGACAUUUGAGCG... 487
NGS-Mature .....AAAGUCUGCGACAUUUGAG... 432
NGS-Mature .....AAAGUCUGCGACAUUUG... 359
NGS-Mature .....AAGUCUGCGACAUUUGAGC... 349
NGS-Mature .....AAGUCUGCGACAUUUGAGC... 187
NGS-Star .....CCUCAAUUGUGGAGCACUAUUC..... 21
NGS-Star .....CCUCAAUUGUGGAGCACUAUUC..... 12
NGS-Star .....CCUCAAUUGUGGAGCACUAU... 2
NGS-Star .....CCUCAAUUGUGGAGCACU..... 1
NGS-Star .....CCUCAAUUGUGGAGCACUA..... 1

hsa-mir-433 MI0001723 CCGGGGAGAAGUACGGUGAGCCUGUCAUUUAUUCAGAGAGGCUAGAUCCUCUGUUGAGAAGGAUCAUGAUGGGCUCUCCGGUUCUCCAGG
((.((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-433 MIMAT0001627 .....AUCAUGAGGGCUCUCCGGUGU.....
NGS-Mature .....AUCAUGAGGGCUCUCCGGUGU..... 36335
NGS-Mature .....AUCAUGAGGGCUCUCCGGUG..... 2827
NGS-Mature .....AUCAUGAGGGCUCUCCGGU..... 1647
NGS-Mature .....AUCAUGAGGGCUCUCCGGUGU..... 1496
NGS-Mature .....UCAUGAGGGCUCUCCGGUGU..... 1342
NGS-Star .....UACGGUGAGCCUGUCAUUUAU..... 527
NGS-Mature .....AUCAUGAGGGCUCUCCGG..... 398
NGS-Star .....UACGGUGAGCCUGUCAUUUAUC..... 299
NGS-Mature .....AUGAGGGCUCUCCGGUGU..... 239
NGS-Mature .....UCAUGAGGGCUCUCCGGUG..... 198
NGS-Mature .....GAUCAUGAGGGCUCUCCGGUGU..... 136
NGS-Mature .....AUCAUGAGGGCUCUCCGG..... 126
NGS-Star .....UACGGUGAGCCUGUCAUUU..... 95
NGS-Star .....UACGGUGAGCCUGUCAU..... 12
NGS-Star .....UACGGUGAGCCUGUCAUUUAUC..... 11
NGS-Star .....UACGGUGAGCCUGUCAUU..... 8
NGS-Star .....GUGAGCCUGUCAUUUAUC..... 3
NGS-Star .....ACGGUGAGCCUGUCAUUUAUC..... 2
NGS-Star .....CAGAGGGCUAGAUCC..... 1
NGS-Star .....UACGGUGAGCCUGUCAUUUAUCAG..... 1

```



```

NGS-Star .....AUGCAGACUCUUGGUUUU..... 1
NGS-Mature .....GAGUCCAGGAAUCUGCAUUUA..... 1
NGS-Star .....AUGCAGACUCUUGGUUUUCCACC..... 1
NGS-Star .....AUGCAGACUCUUGGUUUUCCACCCC..... 1
NGS-Mature .....GUGGAGUCCAGGAAUCUGCAUUU..... 1
NGS-Star .....AUGCAGACUCUUGGUUUUCCACCC..... 1
NGS-Star .....AAUGCAGACUCUUGGUUUUCCACC..... 1
NGS-Star .....AAUGCAGACUCUUGGUUUUCCAC..... 1
NGS-Mature .....GGUGGAGUCCAGGAAUCUGCAU..... 1
NGS-Mature .....UGGAGUCCAGGAAUCUGCAUUUA..... 1

hsa-mir-3138 MI0014161 CCCUCCUCGGCACUUCCCCCACCUCCACUCGCCCGGGUGCCCAAGACUGGACAGUAGAGGGAGUGCCGAGGAGGG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
UGUGGACAGUGAGGUUAGAGGGAGU.....
.....ACAGUGAGGUAGAGGGAGUGC..... 93
.....ACAGUGAGGUAGAGGGAGUG..... 83
.....UGUGGACAGUGAGGUUAGAGGGAG..... 31
.....UGUGGACAGUGAGGUUAGAGGGAGU..... 29
.....ACAGUGAGGUUAGAGGGAGU..... 25
.....GACAGUGAGGUUAGAGGGAGUGC..... 19
.....UGUGGACAGUGAGGUUAGAGGGA..... 18
.....GACAGUGAGGUUAGAGGGAGUG..... 16
.....UGGACAGUGAGGUUAGAGGGAGU..... 8
.....UGGACAGUGAGGUUAGAGGGAG..... 7
.....ACUUCCCCCACCUCCACUGCCC..... 2
.....ACUUCCCCCACCUCCACUGCCC..... 1

hsa-mir-3179-1 MI0014213 CAGGAUCACAGACGUUUAAAAUACACUCCUUCUGCUGGCCUUCACAGCAGUAGAAGGGGGUAAAUUUAAACGUCUGAUCCUG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
AGAAAGGGGUGAAAUUUAAACGU.....
.....AGAAAGGGGUGAAAUUUAAACGU..... 273
.....UAGAAGGGGUGAAAUUUAAACGU..... 110
.....UAGAAGGGGUGAAAUUUAAACG..... 69
.....AGAAAGGGGUGAAAUUUAAACG..... 49
.....AGGGGUGAAAUUUAAACGU..... 10
.....GGGGUGAAAUUUAAACGU..... 8
.....UUUAAAAUACACUCCUUCUGCU..... 5
.....AGAAAGGGGUGAAAUUUAAACGUC..... 2
.....GAAGGGGUGAAAUUUAAACGU..... 2
.....GUUUAAAAUACACUCCUUCUGC..... 2
.....AAGGGGUGAAAUUUAAACGU..... 1
.....AGGGGUGAAAUUUAAACG..... 1
.....AGGAUCACAGACGUUUAAAAU..... 1
.....GUUUAAAAUACACUCCUUCUG..... 1

hsa-mir-3179-2 MI0014216 CAGGAUCACAGACGUUUAAAAUACACUCCUUCUGCUGGCCUUCACAGCAGUAGAAGGGGGUAAAUUUAAACGUCUGAUCCUG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
AGAAAGGGGUGAAAUUUAAACGU.....
.....AGAAAGGGGUGAAAUUUAAACGU..... 273
.....UAGAAGGGGUGAAAUUUAAACGU..... 110
.....UAGAAGGGGUGAAAUUUAAACG..... 69
.....AGAAAGGGGUGAAAUUUAAACG..... 49
.....AGGGGUGAAAUUUAAACGU..... 10
.....GGGGUGAAAUUUAAACGU..... 8
.....UUUAAAAUACACUCCUUCUGCU..... 5
.....AGAAAGGGGUGAAAUUUAAACGUC..... 2
.....GAAGGGGUGAAAUUUAAACGU..... 2
.....GUUUAAAAUACACUCCUUCUGC..... 2
.....AAGGGGUGAAAUUUAAACGU..... 1
.....AGGGGUGAAAUUUAAACG..... 1
.....AGGAUCACAGACGUUUAAAAU..... 1
.....GUUUAAAAUACACUCCUUCUG..... 1

hsa-mir-3179-3 MI0014221 CAGGAUCACAGACGUUUAAAAUACACUCCUUCUGCUGGCCUUCACAGCAGUAGAAGGGGGUAAAUUUAAACGUCUGAUCCUG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
AGAAAGGGGUGAAAUUUAAACGU.....
.....AGAAAGGGGUGAAAUUUAAACGU..... 273
.....UAGAAGGGGUGAAAUUUAAACGU..... 110
.....UAGAAGGGGUGAAAUUUAAACG..... 69
.....AGAAAGGGGUGAAAUUUAAACG..... 49
.....AGGGGUGAAAUUUAAACGU..... 10
.....GGGGUGAAAUUUAAACGU..... 8
.....UUUAAAAUACACUCCUUCUGCU..... 5
.....AGAAAGGGGUGAAAUUUAAACGUC..... 2
.....GAAGGGGUGAAAUUUAAACGU..... 2
.....GUUUAAAAUACACUCCUUCUGC..... 2
.....AAGGGGUGAAAUUUAAACGU..... 1
.....AGGGGUGAAAUUUAAACG..... 1
.....AGGAUCACAGACGUUUAAAAU..... 1
.....GUUUAAAAUACACUCCUUCUG..... 1

```

```

hsa-mir-3116-1 MI0014128 CUUUUUGAGUCCUACUAGUUGCCAGGCACUGGUUUCGUAGGUGCCUGGAACAUAGUAGGGACUCAUUAAAG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.UGCCUGGAACAUAGUAGGGACU..... 57
NGS-Mature .UGCCUGGAACAUAGUAGGGACU..... 10
NGS-Mature .UGCCUGGAACAUAGUAGGGACU..... 6
NGS-Mature .UGCCUGGAACAUAGUAGGGACU..... 6
NGS-Star UCCCUACUAGUUC CAGGCACU..... 3
NGS-Mature .UGCCUGGAACAUAGUAGGGACU..... 2
NGS-Mature .GCCUGGAACAUAGUAGGGACU..... 2
NGS-Mature .UGGAACAUAGUAGGGACUCA..... 2
NGS-Mature .CCUGGAACAUAGUAGGGACUCA..... 1
NGS-Mature .UCCCUACUAGUUC CAGGCACU..... 1
NGS-Mature .UGGAACAUAGUAGGGACUCAAU..... 1
NGS-Mature .CCUGGAACAUAGUAGGGACU..... 1

hsa-mir-3116-2 MI0014129 UAUUUGAGUCCUACUAGUUGCCAGGCACUACGAUCCAGUGCCUGGAACAUAGUAGGGACUCAUA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.UGCCUGGAACAUAGUAGGGACU..... 57
NGS-Mature .UGCCUGGAACAUAGUAGGGACU..... 10
NGS-Mature .UGCCUGGAACAUAGUAGGGACU..... 6
NGS-Mature .UGCCUGGAACAUAGUAGGGACU..... 3
NGS-Mature .GCCUGGAACAUAGUAGGGACU..... 2
NGS-Mature .UGGAACAUAGUAGGGACUCA..... 2
NGS-Mature .CCUGGAACAUAGUAGGGACUCA..... 1
NGS-Mature .CCUGGAACAUAGUAGGGACU..... 1
NGS-Mature .UGGAACAUAGUAGGGACUCAAU..... 1
NGS-Star UCCCUACUAGUUC CAGGCACU..... 1

hsa-mir-370 MI0000778 AGACAGAGAAGCCAGGUCACGUCUCUCGAGUUACACAGCUCACGAGUGCCUGCUGGGUGGAACCUGGUCUGUCU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.UGCCUGGAACAUAGUAGGGACU..... 508
NGS-Mature .GCCUGCUGGGUGGAACCUGG..... 300
NGS-Mature .GCCUGCUGGGUGGAACCUGG..... 172
NGS-Mature .GCCUGCUGGGUGGAACCUGG..... 158
NGS-Star CAGGUCACGUCUCUCGAGUUAC..... 61
NGS-Star CAGGUCACGUCUCUCGAGUUAC..... 42
NGS-Star CAGGUCACGUCUCUCGAGUUUA..... 41
NGS-Star CAGGUCACGUCUCUCGAGUUAC..... 31
NGS-Mature .GCCUGCUGGGUGGAACC..... 27
NGS-Mature .GCCUGCUGGGUGGAACCUGGUCU..... 15
NGS-Star .AAGCCAGGUCACGUCUCUCAG..... 8
NGS-Mature .GCCUGCUGGGUGGAACCUGGUC..... 7
NGS-Mature .UGCCUGCUGGGUGGAACCUGG..... 5
NGS-Star .AAGCCAGGUCACGUCUCUCGA..... 5
NGS-Mature .CUGCUGGGUGGAACCUGG..... 5
NGS-Mature .UGCCUGCUGGGUGGAACCU..... 4
NGS-Star .CAGGUCACGUCUCUCGAGUU..... 4
NGS-Star .AAGCCAGGUCACGUCUCUCAGU..... 3
NGS-Star .CCAGGUCACGUCUCUCGAGUU..... 2
NGS-Star .AGGUCACGUCUCUCGAGUUAC..... 2

hsa-mir-376a-2 MI0003529 GGUUUUUAAAAGGUAUUUUUUUUUUUUAUGGUUACGUGUUUGAUGGUUAAUCAUAGAGGAAAAUCCACGUUUUCAGUAUC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.AUCAUAGAGGAAAAUCCACGU..... 1737
NGS-Mature .AUCAUAGAGGAAAAUCCACGU..... 205
NGS-Mature .AUCAUAGAGGAAAAUCCACG..... 155
NGS-Mature .AAUCAUAGAGGAAAAUCCACGU..... 149
NGS-Mature .AUCAUAGAGGAAAAUCCA..... 142
NGS-Mature .AUCAUAGAGGAAAAUCCAC..... 106
NGS-Star GUAGAUUUUUUUUUUUUUUAUGGUUA..... 42
NGS-Mature .AUAGAGGAAAAUCCACGU..... 33
NGS-Mature .AUCAUAGAGGAAAAUCCACGUUU..... 23
NGS-Mature .AAUCAUAGAGGAAAAUCCACG..... 13
NGS-Mature .AUAGAGGAAAAUCCACGUUU..... 11
NGS-Star GUAGAUUUUUUUUUUUUUUAUGGUU..... 6
NGS-Star .GGUAGAUUUUUUUUUUUUUUAUGGUU..... 5
NGS-Star .GUAGAUUUUUUUUUUUUUUAUGGU..... 3
NGS-Star .GGUAGAUUUUUUUUUUUUUUAUGGUUA..... 2
NGS-Star .GUAGAUUUUUUUUUUUUUUAUGG..... 2
NGS-Star .UAGAUUUUUUUUUUUUUUAUGGUUA..... 1

hsa-mir-376b MI0002466 CAGUCCUUCUUGGUAUUUUAAAACGGGAUAUUCUUCUAUGUUUACGUAUCCUGGUUAAUCAUAGAGGAAAAUCCAGUUUCAGUAUCAAAUGCUG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.AUCAUAGAGGAAAAUCCAGUU..... 1223
NGS-Mature .AUCAUAGAGGAAAAUCCAGU..... 1223

```


hsa-mir-1286 MI0006348 UGUCCUUGGGGACUCAGCUGUCUCUGGCCUGCGUGGAUUGAAUUAGCUGCAGGCCAAGAUGAGCCUUGGUGGAGACA
 ..(((.(.(((.(((.((((.((((.((((.(.....))))))..)))..)))..)))..)))..))....
 hsa-miR-1286 MIMAT0005877UGCAGGACCAAGAUGAGCCU.....
 NGS-MatureUGCAGGACCAAGAUGAGCCU..... 172
 NGS-MatureUGCAGGACCAAGAUGAGCC..... 113
 NGS-MatureUGCAGGACCAAGAUGAGCCUU..... 92
 NGS-MatureUGCAGGACCAAGAUGAGCC..... 63
 NGS-MatureUGCAGGACCAAGAUGAGC..... 20
 NGS-StarACUCAGCUUGCCUGGCUCGU..... 10
 NGS-StarGACUCAGCUUGCCUGGCUCG..... 3
 NGS-MatureCUCGAGGACCAAGAUGAGCC..... 3
 NGS-StarGACUCAGCUUGCCUGGCUCGU..... 1
 NGS-MatureCUCGAGGACCAAGAUGAGCCU..... 1
 NGS-StarUCUGGGACUCAGCUGUCUCUGGC..... 1
 NGS-MatureGCAGGACCAAGAUGAGCC..... 1
 NGS-MatureGCAGGACCAAGAUGAGCCU..... 1

hsa-mir-1295 MI0006357 AGGACAUUUUGCCAGAUCCGUGCCUAUUCAGAAUUGGGCCUGUGAUUAGGCGCAGAUUCUGGUGAAAUGUCCUC
 ((((((((((.(((.(((.(((.(((.(((.(.....))))..)))..)))..)))..)))..)))..))....
 hsa-miR-1295 MIMAT0005885UUAGCCGCAGAUUCUGGUGA.....
 NGS-MatureUUAGCCGCAGAUUCUGGUGA..... 193
 NGS-MatureUUAGCCGCAGAUUCUGGUGAA..... 53
 NGS-MatureUUAGCCGCAGAUUCUGGUG..... 25
 NGS-MatureUUAGCCGCAGAUUCUGGUGAAA..... 18
 NGS-MatureUUAGCCGCAGAUUCUGGUGA..... 15
 NGS-MatureUUAGCCGCAGAUUCUGGUG..... 6
 NGS-MatureUUAGCCGCAGAUUCUGGUGAAU..... 5
 NGS-MatureUUAGCCGCAGAUUCUGG..... 2
 NGS-MatureUUAGCCGCAGAUUCUGGUGAA..... 1
 NGS-StarUGCCAGAUCCGUGCCUAUUC..... 1
 NGS-MatureUUAGCCGCAGAUUCUGG..... 1

hsa-mir-133b MI000822 CCUCAGAAGAAAGAUCCUUGCCUGUCUGGCUGGUAACAAACGGAACCAAGUCCGUCUUCUGAGAGGUUUGGUCCCCUUAACACGCUACAGCAGGGCUGGCAUUGCCAGUCCUUGGAGA
 ((((((((((.(((.(((.(((.(((.(((.(.....))))..)))..)))..)))..)))..)))..))....
 hsa-miR-133b MIMAT0000770UUUGGUCCCUUAACACGCUA.....
 NGS-MatureUUUGGUCCCUUAACACGCU..... 53
 NGS-MatureUUUGGUCCCUUAACACG..... 38
 NGS-MatureUUUGGUCCCUUAACACGCU..... 16
 NGS-MatureUUUGGUCCCUUAACACG..... 9
 NGS-MatureUUUGGUCCCUUAACACG..... 6
 NGS-MatureUUUGGUCCCUUAACCA..... 1
 NGS-StarGCUGGUCAAACGGAACCAAGU..... 1
 NGS-MatureUUUGGUCCCUUAACACG..... 1
 NGS-MatureUUUGGUCCCUUAACACGCUA..... 1

hsa-mir-3177 MI0014211 CCACGUGCCAUGUGUACACACGUGCCAGGCGCUGUCUUGAGACAUUCGCGCAGUGCACGGCACUGGGGACACGUGGCACUGG
 ((((((((((.(((.(((.(((.(((.(((.(.....))))..)))..)))..)))..)))..)))..))....
 hsa-miR-3177 MIMAT0015054UGCACGGCACUGGGGACACGU.....
 NGS-MatureUGCACGGCACUGGGGACACGU..... 72
 NGS-MatureUGCACGGCACUGGGGACACG..... 14
 NGS-MatureUGCACGGCACUGGGGACACGUG..... 14
 NGS-MatureGUGCACGGCACUGGGGACACGU..... 3
 NGS-StarUGUGUACACACGUGCCAGGCGCU..... 2
 NGS-MatureUGCACGGCACUGGGGACAC..... 2
 NGS-StarUGUGUACACACGUGCCAGGCGUG..... 2
 NGS-StarUGUGUACACACGUGCCAGGCGC..... 1
 NGS-MatureGUCUUGAGACAUUCGCGCAG..... 1
 NGS-MatureAGUGCACGGCACUGGGGACAC..... 1

hsa-mir-489 MI0003124 GUGGCAGCUUGGUGGUCGUAGUGUGAGCCCAUUUAACUUGAACCUUUGAGGUGACAUACAUAUACGGCAGCUAACUGCUAC
 ((((((((((.(((.(((.(((.(((.(((.(.....))))..)))..)))..)))..)))..)))..))....
 hsa-miR-489 MIMAT0002805GUGACAUACAUAUACGGCAGC.....
 NGS-MatureGUGACAUACAUAUACGG..... 143
 NGS-MatureGUGACAUACAUAUACGGCAGC..... 53
 NGS-MatureGUGACAUACAUAUACGGCAG..... 27
 NGS-MatureGUGACAUACAUAUACGGCA..... 16
 NGS-MatureUGACAUACAUAUACGGCAGCU..... 7
 NGS-MatureUGACAUACAUAUACGGCAG..... 7
 NGS-StarUGGUCGUAGUGUGACGCCAU..... 6
 NGS-MatureUGACAUACAUAUACGGCAGC..... 4
 NGS-MatureAGUGACAUACAUAUACGG..... 3
 NGS-StarGGUCGUAGUGUGACGCCAUU..... 3
 NGS-MatureAGUGACAUACAUAUACGGCAGC..... 2
 NGS-StarGGUCGUAGUGUGACGCCAUU..... 2
 NGS-MatureGUGACAUACAUAUACGGC..... 2
 NGS-StarGGUCGUAGUGUGACGCCA..... 1
 NGS-StarGGUCGUAGUGUGACGCC..... 1
 NGS-StarUGGUCGUAGUGUGACGCCAU..... 1

hsa-mir-580 MI0003587 AUAAAAUUUCAAUUGGAAUCAAUGAUUCAACAGACUCAGAUAAUUAAGUUAACAGUAAUUGAGAAUGAUAUAUAGGUUCCGGUCAGAAUU

hsa-mir-518b MI0003156 UCAUGCUGUGGCCUCCAGAGGGGAAAGCGCUUUUCUGUUGUCUGAAGAAACAAAGCGCUCCUUUAGAGUUUACGGUUUGA
(((.(((.(.(.(.(.(.(.(.(.(((.(.(.(.(.(.(.(.(.(.((.....)))))))))))).)))))))).)))
hsa-miR-518b MIMAT0002844CAAAGCGUCCUUUAGAGGU..... 372
NGS-MatureCAAAGCGUCCUUUAGAGGU..... 72
NGS-MatureCAAAGCGUCCUUUAGAGGU..... 38
NGS-MatureCAAAGCGUCCUUUAGA..... 32
NGS-MatureCAAAGCGUCCUUUAGAG..... 23
NGS-MatureCAAAGCGUCCUUUAG..... 16
NGS-MatureAAAGCGUCCUUUAGAGGU..... 7
NGS-MatureCAAAGCGUCCUUUAGAGGU..... 7
NGS-MatureAAAGCGUCCUUUAGAGGU..... 3
NGS-StarCUCCAGAGGGAAAGCGCUUUUCUGU..... 3
NGS-StarCUCCAGAGGGAAAGCGCUUUUCUG..... 1
NGS-MatureACAAAGCGUCCUUUAGAGGU..... 1

hsa-mir-519d MI0003162 UCCCAUGCUGUGACCCUCCAAGGGAAGCGCUUUUCUGUUUUUCUUUAACAAGAGUCCUUUAGAGUUUACGGUUUGGA
(((.(.(.(.(.(.(.(.(.(((.(.(.(.(.(.(.(.(.(.((.....)))))))))))).)))))))).)))
hsa-miR-519d MIMAT0002853CAAAGUCCUUUAGAGGU..... 117
NGS-MatureCAAAGUCCUUUAGAGGU..... 6
NGS-MatureCAAAGUCCUUUAGAGGU..... 6
NGS-MatureCAAAGUCCUUUAGAGGU..... 6
NGS-MatureCAAAGUCCUUUAGAG..... 4
NGS-MatureCAAAGUCCUUUAGA..... 3
NGS-MatureACAAAGUCCUUUAGAGGU..... 3
NGS-MatureAAAGUCCUUUAGAGGU..... 3
NGS-MatureCAAAGUCCUUUAGAGU..... 3
NGS-MatureACAAAGUCCUUUAGAGU..... 3
NGS-MatureCAAAGUCCUUUAG..... 2
NGS-StarCUCCAAAGGGAAGCGCUUUUCUG..... 2
NGS-StarCUCCAAAGGGAAGCGCUUUUC..... 1
NGS-StarCUCCAAAGGGAAGCGCUUUUC..... 1
NGS-StarCUCCAAAGGGAAGCGCUUUUC..... 1

hsa-mir-656 MI0003678 CUGAAUAGGUUGCCUGUGAGGUUCACUUUCUUAUGAUGAAUUAUACAGUCAACCUUUCUGAUUCGAAUC
..(((.(((.(.(.(.(.(.(.(.(.(((.(.(.(.(.(.(.(.(.(.((.....)))))))))))).)))))))).)))
hsa-miR-656 MIMAT0003332AAUUAUACAGUCAACCU..... 724
NGS-MatureAAUUAUACAGUCAACCU..... 96
NGS-MatureAAUUAUACAGUCAACCU..... 73
NGS-MatureAAUUAUACAGUCAACC..... 33
NGS-StarAGGUUCCUGUGAGGUUCA..... 11
NGS-MatureAAUUAUACAGUCAACCU..... 9
NGS-MatureAAUUAUACAGUCAACCU..... 4
NGS-StarAGGUUCCUGUGAGGUUU..... 2
NGS-MatureAAUUAUACAGUCAACCUUU..... 2
NGS-MatureAAUUAUACAGUCAACCU..... 2
NGS-StarAAUUAUACAGUCAACCUC..... 2
NGS-StarAGGUUCCUGUGAGGUUC..... 1

hsa-mir-1538 MI0007259 GGGAACAGCAGCAACAUGGGCCUCGUUCCUGCCGGCCTGGCCGGGGCUGCUGCUGUCCU
(((.(.(.(.(.(.(.(.(.(((.(.(.(.(.(.(.(.(.(.((.....)))))))))))).)))))))).)))
hsa-miR-1538 MIMAT0007400CGGCCGGGUGCUGCUGUCCU..... 13
NGS-StarAACAGCAGCAACAUGGGCCUCG..... 2
NGS-MatureACAGCAGCAACAUGGGCCUCG..... 2
NGS-StarCGGCCGGGUGCUGCUGUU..... 2
NGS-MatureGCGGCCGGGUGCUGU..... 2
NGS-MatureCGGCCGGGUGCUGU..... 1
NGS-StarAGCAGCAACAUGGGCCUCG..... 1
NGS-MatureCGGCCGGGUGCUGU..... 1
NGS-StarAACAGCAGCAACAUGGGCCU..... 1
NGS-StarAACAGCAGCAACAUGGGCCUC..... 1
NGS-MatureGCCGCCGGCCCGGGCUG..... 1
NGS-MatureGCGGCCGGGUGCUGU..... 1
NGS-StarCUCGUUCCUGCCGGC..... 1
NGS-MatureGCGGCCGGGUGCUGU..... 1
NGS-StarGGGAACAGCAGCAACAUGGGCC..... 1
NGS-MatureUCGUUCCUGCCGGC..... 1

hsa-mir-1913 MI0008334 ACCUCUACCCUCCGGCAGAGGGUGCAGAGCGUGGUUCUCAAACUCUGCCCCCUGCUGGCCAAGUGGUCUGU
(((.(.(.(.(.(.(.(.(.(((.(.(.(.(.(.(.(.(.(.((.....)))))))))))).)))))))).)))
hsa-miR-1913 MIMAT0007888UCUGCCCCUCGCGUGCCA..... 17
NGS-StarCCGGCAGAGGAGCUGCAGAG..... 6
NGS-MatureUCUGCCCCUCGCGUGCCA..... 3
NGS-StarCCGGCAGAGGAGCUGCAGAG..... 3
NGS-StarCCGGCAGAGGAGCUGCAGAG..... 2
NGS-MatureUCUGCCCCUCGCGUG..... 1
NGS-MatureUCUGCCCCUCGCGUG..... 1

```

hsa-mir-3160-1 MI0014189 GGACCUGCCCUGGGCUUUCUAGUCUCAGCUCUCCUCCAGCUCAGCUGGUCAGGAGAGCUGAGACUAGAAAGCCAGGGCAGGUUC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-3160 MIMAT0015034 .....AGAGCUGAGACUAGAAAGCCCA.....
NGS-Mature .....AGAGCUGAGACUAGAAAGCCCA..... 29
NGS-Mature .....AGAGCUGAGACUAGAAAGCCC..... 26
NGS-Mature .....AGAGCUGAGACUAGAAAGCC..... 21
NGS-Mature .....AGAGCUGAGACUAGAAAGC..... 4
NGS-Mature .....GAGAGCUGAGACUAGAAAGCC..... 3
NGS-Mature .....AGAGCUGAGACUAGAAAG..... 2
NGS-Mature .....AGAGCUGAGACUAGAAAGCCCA..... 2
NGS-Mature .....GAGAGCUGAGACUAGAAAG..... 2
NGS-Mature .....AGACUAGAAAGCCAGGGCA..... 1
NGS-Mature .....GAGAGCUGAGACUAGAAAGCCCA..... 1
NGS-Star .....GGCUUUCUAGUCUCAGCUCUCC..... 1

hsa-mir-3160-2 MI0014190 ACCUGCCCUGGGCUUUCUAGUCUCAGCUCUCCUCCAGCUCAGCUGGAGGAGAGCUGAGACUAGAAAGCCAGGGCAGGU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-3160 MIMAT0015034 .....AGAGCUGAGACUAGAAAGCCCA.....
NGS-Mature .....AGAGCUGAGACUAGAAAGCCCA..... 29
NGS-Mature .....AGAGCUGAGACUAGAAAGCCC..... 26
NGS-Mature .....AGAGCUGAGACUAGAAAGCC..... 21
NGS-Mature .....AGAGCUGAGACUAGAAAGC..... 4
NGS-Mature .....GAGAGCUGAGACUAGAAAGCC..... 3
NGS-Mature .....AGAGCUGAGACUAGAAAG..... 2
NGS-Mature .....AGAGCUGAGACUAGAAAGCCCA..... 2
NGS-Mature .....GAGAGCUGAGACUAGAAAG..... 2
NGS-Mature .....AGACUAGAAAGCCAGGGCA..... 1
NGS-Mature .....GAGAGCUGAGACUAGAAAGCCCA..... 1
NGS-Star .....GGCUUUCUAGUCUCAGCUCUCC..... 1

hsa-mir-548x MI0014244 AGGUUAGUGCAAAGUAAUUGCAGUUUUUGCGUUACUUUCAAUCGUAACAAACUGCAAUUACUUUCACACCAAUCU
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-548x MIMAT0015081 .....UAAAAACUGCAAUUACUUUCA.....
NGS-Mature .....UAAAAACUGCAAUUACUUUCA..... 903
NGS-Mature .....UAAAAACUGCAAUUACUUUCAC..... 806
NGS-Mature .....UAAAAACUGCAAUUACUUUC..... 88
NGS-Mature .....AAAAACUGCAAUUACUUU..... 59
NGS-Mature .....UAAAAACUGCAAUUACUUU..... 47
NGS-Mature .....UAAAAACUGCAAUUACUUUCACA..... 37
NGS-Star .....AAAAGUAAUUGCAGUUUUU..... 28
NGS-Star .....AAAAGUAAUUGCAGUUUUUGC..... 28
NGS-Star .....AAAAGUAAUUGCAGUUUUUGCG..... 23

NGS-Mature .....UAAAAACUGCAAUUACUU..... 23
NGS-Star .....AAAAGUAAUUGCAGUUUUU..... 22
NGS-Star .....CAAAGUAAUUGCAGUUUUUGC..... 19
NGS-Mature .....AAAAACUGCAAUUACUUUCACA..... 19
NGS-Mature .....AAAAACUGCAAUUACUUUCA..... 17
NGS-Star .....AAAAGUAAUUGCAGUUUUUG..... 16
NGS-Mature .....AAAAACUGCAAUUACUUUCAC..... 11
NGS-Star .....CAAAGUAAUUGCAGUUUUU..... 11
NGS-Star .....CAAAGUAAUUGCAGUUUUUG..... 8
NGS-Star .....CAAAGUAAUUGCAGUUUUU..... 7
NGS-Star .....CAAAGUAAUUGCAGUUUU..... 5

hsa-mir-585 MI0003592 UGGGGUGUCUGUGCUAUGGCAGCCUAGCACACAGAUACGCCAGAGAAAGCCUGAACGUUGGGCGUAUCUGUAUGCUAGGGCUGCUUAACAA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-585 MIMAT0003250 .....UGGGCGUAUCUGUAUGCUA.....
NGS-Mature .....UGGGCGUAUCUGUAUGCUAGGG..... 135
NGS-Star .....CUAGCACACAGAUACGCCACA..... 49
NGS-Mature .....UGGGCGUAUCUGUAUGCUAGG..... 39
NGS-Star .....CUAGCACACAGAUACGCCAG..... 11
NGS-Mature .....UUGGGCGUAUCUGUAUGCUAGGG..... 10
NGS-Mature .....UGGGCGUAUCUGUAUGCUAG..... 9
NGS-Star .....CUAGCACACAGAUACGCCCA..... 6
NGS-Mature .....UGGGCGUAUCUGUAUGCUA..... 5
NGS-Mature .....UGGGCGUAUCUGUAUGCU..... 4
NGS-Mature .....UUGGGCGUAUCUGUAUGCUAGG..... 4
NGS-Star .....UAGCACACAGAUACGCCACA..... 3
NGS-Star .....UAGCACACAGAUACGCCAGAG..... 3
NGS-Mature .....GGGCGUAUCUGUAUGCUAGG..... 1
NGS-Star .....CCUAGCACACAGAUACGCCCC..... 1
NGS-Mature .....UUGGGCGUAUCUGUAUGCUA..... 1
NGS-Mature .....UUGGGCGUAUCUGUAUGCUAG..... 1
NGS-Star .....CUAGCACACAGAUACGCCCC..... 1

hsa-mir-1197 MI0006656 ACUUCUGGUUUUGAAGAUGCGGUAGCAUUGGUGUGUACGCUUUUUUGUGACGUGAGACACAUUGGCUACUUCUUCUCAAUAUCA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-1197 MIMAT0005955 .....UAGGACACAUGGUCUACUUCU.....

```


NGS-Mature	.....UAGGACACAUGGUCUACUUCU.....	984
NGS-Mature	.....UAGGACACAUGGUCUACUUCU.....	46
NGS-Mature	.....UAGGACACAUGGUCUACUUC.....	30
NGS-Mature	.....UAGGACACAUGGUCUACUUC.....	30
NGS-Mature	.....UAGGACACAUGGUCUACU.....	3
NGS-Star	.....CGGUUGACCAUGGUGUACG.....	3
NGS-Mature	.....GGACACAUGGUCUACUUCU.....	2
NGS-Mature	.....GCUUUUUUUGUGACGUAGGACACA.....	2
NGS-Mature	.....GUGACGUAGGACACAUGGUC.....	2
NGS-Mature	.....UUUGACGUAGGACACAUGGUC.....	2
NGS-Mature	.....GUGACGUAGGACACAUGGUC.....	2
NGS-Star	.....CUUCCUGGUAUUUGAAGAUG.....	1
NGS-Star	.....ACUCCUGGUAUUUGAAGAUG.....	1
hsa-mir-1229 MI0006319	GUGGGUAGGGUUUGGGGAGAGCGUGGGCUGGGUUCAGGGACACCCUCUACCACUGCCUCCACAG	
	((((((((((((((((((((((((((((((((.....))))))))))))))))))))))))))))))	
hsa-miR-1229 MIMAT0005584	.....CUCUCACCACUGCCUCCACAG	
NGS-Mature	.....CUCUCACCACUGCCUCCACAG	11
NGS-Mature	.....CUCUCACCACUGCCUCCACA	11
NGS-Mature	.....CUCUCACCACUGCCUCCAC	8
NGS-Star	GUGGGUAGGGUUUGGGGAGAGCGUG.....	6
NGS-Mature	.....CUCACCACUGCCUCCAC	5
NGS-Mature	.....UCUCACCACUGCCUCCACAG	4
NGS-Mature	.....CUCUCACCACUGCCUCCCA	3
NGS-Star	GUGGGUAGGGUUUGGGGAGAG.....	3
NGS-Star	GUGGGUAGGGUUUGGGGAGAGCGU.....	2
NGS-Mature	.....CCUCUCACCACUGCCUCCCA	1
NGS-Mature	.....CUCACCACUGCCUCCACAG	1
NGS-Star	GUGGGUAGGGUUUGGGGAGAGC.....	1
NGS-Mature	.....CUCUCACCACUGCCUCC	1
NGS-Star	.....CGUGGGCUGGGUUCAGGGA	1
NGS-Mature	.....CCUCUCACCACUGCCUCCACA	1
NGS-Star	.....GUUUGGGGAGAGCGUGGGCU	1
NGS-Star	GUGGGUAGGGUUUGGGGAGAG.....	1
NGS-Star	.....UGGCGUGGGUUCAGGGAC	1
hsa-mir-3145 MI0014170	UAUAUGAGUUAACUCCAACACUCAAAAACUCAUUUGUAAUGGAAUGAGAUUUUUUGAGUUUUGGAAUUGAACUCGUUAU	
	((((((((((((((((((((((((((((((((.....))))))))))))))))))))))))))))))	
hsa-miR-3145 MIMAT0015016	.....AGAUUUUUUGAGUUUUGGAAUUG.....	
NGS-Mature	.....AGAUUUUUUGAGUUUUGGAAUUG.....	149
NGS-Mature	.....UAUUUUUGAGUUUUGGAAUUG.....	37
NGS-Star	.....AACUCCAACACUCAAAAACU	26
NGS-Mature	.....UAUUUUUGAGUUUUGGAAUUGA	17
NGS-Star	.....AACUCCAACACUCAAAAACUCA	15
NGS-Mature	.....AGAUUUUUUGAGUUUUGGAAU	13
NGS-Mature	.....UAUUUUUGAGUUUUGGAAU	13
NGS-Mature	.....AGAUUUUUUGAGUUUUGGAAU	8
NGS-Mature	.....AGAUUUUUUGAGUUUUGGAA	5
NGS-Star	.....AACUCCAACACUCAAAAACUC	4
NGS-Star	.....AACUCCAACACUCAAAAAC	4
NGS-Mature	.....AGAUUUUUUGAGUUUUGGA	4
NGS-Mature	.....GAUUUUUUUGAGUUUUGGAAUUG	4
NGS-Mature	.....GAUUUUUUUGAGUUUUGGAAU	3
NGS-Star	.....AACUCCAACACUCAAAA	1
hsa-mir-487a MI0002471	GGUACUUGAAGAGUGGUUAUCCCGUCUGUUCGCUUAUUUUUAGACGAAUACUACAGGGACAUCCAGUUUUUCAGUAUC	
	((((((((((((((((((((((((((((((((.....))))))))))))))))))))))))))))))	
hsa-miR-487a MIMAT0002178	.....AAUCAUACAGGGACAUCCAGUU.....	
NGS-Mature	.....AAUCAUACAGGGACAUCCAGUU.....	2024
NGS-Star	.....GUGGUUAUCCCGUCUGUUCG.....	363
NGS-Mature	.....AAUCAUACAGGGACAUCCAGUU.....	278
NGS-Mature	.....AAUCAUACAGGGACAUCCAGU.....	119
NGS-Star	.....GUGGUUAUCCCGUCUGUUC.....	35
NGS-Mature	.....AUCAUACAGGGACAUCCAGUU.....	32
NGS-Mature	.....AUACAGGGACAUCCAGUU.....	26
NGS-Mature	.....AAUCAUACAGGGACAUCCA.....	18
NGS-Mature	.....AUCAUACAGGGACAUCCAGU.....	15
NGS-Mature	.....AAUCAUACAGGGACAUCCAG.....	12
NGS-Mature	.....AUCAUACAGGGACAUCCAGUU.....	11
NGS-Mature	.....AAUCAUACAGGGACAUCCAGUUU.....	8
NGS-Star	.....GUGGUUAUCCCGUCUGUUC.....	5
NGS-Star	.....GUGGUUAUCCCGUCUGUUC.....	1
hsa-mir-519a-2 MI0003182	UCUCAGGCUGUGUCCUCUACAGGGAAGCGCUUUUCUGUUGUCUGAAAGAAAGGAAAGUGCAUCCUUUUAGAGUGUUACUGUUUGAGA	
	((((((((((((((((((((((((((((((((.....))))))))))))))))))))))))))))))	
hsa-miR-519a MIMAT0002869	.....AAAGUGCAUCCUUUAGAGUGU.....	
NGS-Mature	.....AAAGUGCAUCCUUUAGAGUGU.....	1072
NGS-Star	.....CCUCUACAGGGAAGCGCUUCU.....	212
NGS-Mature	.....AAAGUGCAUCCUUUAGA.....	207

NGS-Mature	.....AAGUGCAUCCUUUAGAGUGU.....	36
NGS-Mature	.....AAAGUGCAUCCUUUAGAG.....	33
NGS-Mature	.....AAAGUGCAUCCUUUAGAGUG.....	30
NGS-Mature	.....AAAGUGCAUCCUUUAGAGU.....	23
NGS-Mature	.....AAAGUGCAUCCUUUAGAGUGUU.....	17
NGS-Star	.....CCUCUACAGGGAAGCGCUUC.....	15
NGS-Mature	.....GUGCAUCCUUUAGAGUGU.....	8
NGS-Star	.....CCUCUACAGGGAAGCGCUUU.....	6
NGS-Star	.....CUCUACAGGGAAGCGCUUCU.....	4
NGS-Star	.....CUCUACAGGGAAGCGCUUU.....	1
NGS-Mature	.....GAAAGUGCAUCCUUUAGAGUGU.....	1
NGS-Mature	.....AAGUGCAUCCUUUAGAGUG.....	1
NGS-Star	.....UACAGGGAAGCGCUUCU.....	1

hsa-mir-1537 MI0007258	ACAGCUGAAUUAGUCAGUUUCUGUCCUGCCACACAGAAAACCGUCUAGUUACAGUUGU	
hsa-miR-1537 MIMAT0007399	((((((((.....))))))))).....	
NGS-Mature	.....AAAACCGUCUAGUUACAGUUGU.....	240
NGS-Mature	.....AAAACCGUCUAGUUACAGU.....	62
NGS-Mature	.....AAAACCGUCUAGUUACAGUUG.....	52
NGS-Mature	.....AAAACCGUCUAGUUACAG.....	48
NGS-Mature	.....AAAACCGUCUAGUUACAGUUGU.....	38
NGS-Star	.....AGCUGAAUUAGUCAGUUUCU.....	25
NGS-Star	.....AGCUGAAUUAGUCAGUUUC.....	17
NGS-Star	.....CUGAAUUAGUCAGUUUCUGU.....	12
NGS-Mature	.....AAAACCGUCUAGUUACAGU.....	9
NGS-Mature	.....AAAACCGUCUAGUUACAGU.....	6
NGS-Mature	.....AAAACCGUCUAGUUACAGUUG.....	6
NGS-Mature	.....AGAAAACCGUCUAGUUACAGUU.....	6
NGS-Star	.....GCUGAAUUAGUCAGUUUCU.....	6
NGS-Mature	.....AGAAAACCGUCUAGUUACAGU.....	3
NGS-Star	.....AGCUGAAUUAGUCAGUUU.....	3
NGS-Star	.....AGCUGAAUUAGUCAGUUU.....	2
NGS-Star	.....CUGAAUUAGUCAGUUUCU.....	2
NGS-Star	.....CUGAAUUAGUCAGUUUCUG.....	1
NGS-Star	.....AGCUGAAUUAGUCAGU.....	1
NGS-Star	.....AGCUGAAUUAGUCAGUU.....	1

hsa-mir-3155 MI0014183	UCCGGGCAUCAACUCCACUGCAGAGCCUGGGGAGCCGGACGCUCCUCCAGGCUCUCAGUGGGAACUGAUGCCUGGA	
hsa-miR-3155 MIMAT0015029	((((((((.....))))))))).....	
NGS-Mature	.....CCAGGCUCUGCAGUGGGAACU.....	26
NGS-Star	.....CCUCCACUGCAGAGCCUGGGGA.....	11
NGS-Star	.....CCUCCACUGCAGAGCCUGG.....	8
NGS-Mature	.....CCAGGCUCUGCAGUGGGAAC.....	7
NGS-Star	.....CCUCCACUGCAGAGCCUGGG.....	5
NGS-Mature	.....CCAGGCUCUGCAGUGGGA.....	5
NGS-Mature	.....CCAGGCUCUGCAGUGGGAACUG.....	4
NGS-Star	.....CCUCCACUGCAGAGCCUGGG.....	4
NGS-Mature	.....CAGGCUCUCAGUGGGAACU.....	4
NGS-Mature	.....UCCAGGCUCUGCAGUGGGAAC.....	4
NGS-Star	.....ACCUCCACUGCAGAGCCUGG.....	3
NGS-Star	.....CCUCCACUGCAGAGCCU.....	2
NGS-Star	.....CCUCCACUGCAGAGCCU.....	2
NGS-Star	.....ACCUCCACUGCAGAGCCUGGG.....	2
NGS-Mature	.....CCAGGCUCUGCAGUGGGAACUGA.....	2
NGS-Star	.....CUCCACUGCAGAGCCUGGGGA.....	2
NGS-Mature	.....CAGGCUCUGCAGUGGGAACUG.....	1
NGS-Star	.....UCCACUGCAGAGCCUGGGGAG.....	1

hsa-mir-412 MI0002464	CUGGGGUACGGGAUGGAGUGGUGCACCAGUUGGAAAGUAAUUGUUUCUAAUUGUACUUCACUCCUGGUCCACUAGCCGUCUCCGUAUCCGUGCAG	
hsa-miR-412 MIMAT0002170	((((((((.....))))))))).....	
NGS-Star	.....ACUUCACUCCUGGUCCACUAGCCGU.....	490
NGS-Star	.....UGGUCGACCAGUUGGAAAGUAAU.....	213
NGS-Star	.....UGGUCGACCAGUUGGAAAGUAA.....	137
NGS-Star	.....UGGUCGACCAGUUGGAAAGU.....	93
NGS-Star	.....UGGUCGACCAGUUGGAAAG.....	6
NGS-Mature	.....ACUUCACUCCUGGUCCACUAGC.....	5
NGS-Star	.....GGUCGACCAGUUGGAAAGUAAU.....	4
NGS-Star	.....UGGUCGACCAGUUGGAAAGUAAU.....	3
NGS-Star	.....GACCAGUUGGAAAGUA.....	2
NGS-Mature	.....CUUCACUCCUGGUCCACUAGCCG.....	2
NGS-Mature	.....AUGUACUUCACUCCUGGUCCACUAGC.....	2
NGS-Star	.....GACCAGUUGGAAAGUAAU.....	2
NGS-Star	.....UGGUCGACCAGUUGGAAA.....	2
NGS-Mature	.....UACUUCACUCCUGGUCCACUAGC.....	1
NGS-Mature	.....GUACUUCACUCCUGGUCCACUA.....	1
NGS-Mature	.....UUCACUCCUGGUCCACUAGCCGU.....	1


```

NGS-Mature .....CGCAGACAAUGCCUACUGGCCUA..... 3
NGS-Mature .....CGCAGACAAUGCCUACUGGCCUAA..... 3
NGS-Mature .....CGCAGACAAUGCCUACUGGCCU..... 2
NGS-Mature .....CUAACGCAGACAAUGCCUACU..... 2
NGS-Star .....GAGGCCAGUAGGCAUUGUCU..... 2
NGS-Star .....GAGGCCAGUAGGCAUUGUCUGC..... 2
NGS-Star .....AGGCAUUGUCUGCGUUAGG..... 1
NGS-Star .....CCAGUAGGCAUUGUCUGCGU..... 1
NGS-Mature .....ACGCAGACAAUGCCUACUGGCCU..... 1
NGS-Star .....AGGCAUUGUCUGCGUUAGGAUU..... 1
NGS-Star .....AGGCCAGUAGGCAUUGUCUG..... 1
NGS-Mature .....GCAGACAAUGCCUACUGGCCUA..... 1
NGS-Mature .....UAACGCAGACAAUGCCUACUGGC..... 1
NGS-Star .....UAGGCAUUGUCUGCGUUAGGA..... 1

hsa-mir-1245 MI0006380 AUUUUUGUAUAGGCCUUUAGAUCAUCUGAUGUUGAAUACUCUUUAAAGUGAUCUAAAGGCCUACAUAUAAA
.(((((((.(((((((((((((((((.....))))))))))))))))))))))))))
hsa-miR-1245 MIMAT0005897 .....AAGUGAUCUAAAGGCCUACAU.....
NGS-Mature .....AAGUGAUCUAAAGGCCUACAU..... 24
NGS-Mature .....AAGUGAUCUAAAGGCCUACAU..... 14
NGS-Mature .....AAGUGAUCUAAAGGCCUACAU..... 7
NGS-Mature .....AAGUGAUCUAAAGGCCUACAU..... 7
NGS-Mature .....UAAUGAUCUAAAGGCCUACAU..... 7
NGS-Mature .....UUAAGUGAUCUAAAGGCCUACA..... 7
NGS-Star .....GUAUAGGCCUUUAGAUCAUCUGA..... 5
NGS-Mature .....UUAAGUGAUCUAAAGGCCUAC..... 4
NGS-Mature .....UGAUCUAAAGGCCUACAUAUAAA..... 2
NGS-Star .....GUAUAGGCCUUUAGAUCAUCUG..... 1
NGS-Star .....UAGGCCUUUAGAUCAUCUGAUG..... 1
NGS-Star .....AUAGGCCUUUAGAUCAUCUGA..... 1
NGS-Star .....UAUAGGCCUUUAGAUCAUCUGA..... 1
NGS-Mature .....UUAAGUGAUCUAAAGGCCUACAU..... 1

hsa-mir-520b MI0003155 CCCUCUACAGGGAAGCGCUUUCUGUUGUCUGAAAGAAAAGAAAGUGCUUCCUUUAGAGGG
(((((((.(((((((((((((((((.....))))))))))))))))))))))))))
hsa-miR-520b MIMAT0002843 .....AAAGUGCUUCCUUUAGAGGG
NGS-Star .....CCUCUACAGGGAAGCGCUUUCU..... 212
NGS-Mature .....AAAGUGCUUCCUUUAGAGGG..... 18
NGS-Star .....CCUCUACAGGGAAGCGCUUUC..... 15
NGS-Mature .....AAAGUGCUUCCUUUAGAGG..... 12
NGS-Mature .....AAAGUGCUUCCUUUAGAGG..... 8
NGS-Mature .....GAAAGUGCUUCCUUUAGAGG..... 7

NGS-Mature .....AAAGUGCUUCCUUUAGA..... 7
NGS-Star .....CCUCUACAGGGAAGCGCUUUC..... 6
NGS-Star .....CUCUACAGGGAAGCGCUUUC..... 4
NGS-Mature .....GAAAGUGCUUCCUUUAG..... 2
NGS-Mature .....GAAAGUGCUUCCUUUAGAG..... 2
NGS-Mature .....AAGUGCUUCCUUUAGAGGG..... 1
NGS-Mature .....AAGUGCUUCCUUUAGAG..... 1
NGS-Star .....CUCUACAGGGAAGCGCUUUC..... 1
NGS-Star .....UACAGGGAAGCGCUUUC..... 1

hsa-mir-521-1 MI0003176 UCUCAGGCUGUGACUCCUCAAAGGGAAGAAUUUCUGUUCUAAAAGAAAAGAACGCACUCCUUUAGAGUGUUACCGUGUGAGA
(((((((.(((((((((((((((((.....))))))))))))))))))))))))))
hsa-miR-521 MIMAT0002854 .....AACGCACUCCUUUAGAGUGU.....
NGS-Mature .....AACGCACUCCUUUAGAGUGU..... 286
NGS-Star .....CCUCCAAGGGAAGAAUUUCU..... 50
NGS-Mature .....CACUCCUUUAGAGUGU..... 14
NGS-Mature .....AACGCACUCCUUUAGAG..... 9
NGS-Mature .....AACGCACUCCUUUAGAGU..... 7
NGS-Mature .....AACGCACUCCUUUAGAGUGUU..... 6
NGS-Mature .....AACGCACUCCUUUAGAGUG..... 5
NGS-Mature .....AACGCACUCCUUUAGA..... 2
NGS-Mature .....CGCACUCCUUUAGAGUGU..... 2
NGS-Mature .....ACGCACUCCUUUAGAGUGU..... 2
NGS-Star .....CUCCAAGGGAAGAAUUUCU..... 1

hsa-mir-521-2 MI0003163 UCUCGGGUGUGACUCUCCAAAGGGAAGAAUUUCUUGUCUAAAAGAAAAGAACGCACUCCUUUAGAGUGUUACCGUGUGAGA
(((((((.(((((((((((((((((.....))))))))))))))))))))))))))
hsa-miR-521 MIMAT0002854 .....AACGCACUCCUUUAGAGUGU.....
NGS-Mature .....AACGCACUCCUUUAGAGUGU..... 286
NGS-Mature .....CACUCCUUUAGAGUGU..... 14
NGS-Mature .....AACGCACUCCUUUAGAG..... 9
NGS-Mature .....AACGCACUCCUUUAGAGU..... 7
NGS-Mature .....AACGCACUCCUUUAGAGUGUU..... 6

NGS-Star .....UCUCCAAGGGAAGAAUUUCU..... 6
NGS-Mature .....AACGCACUCCUUUAGAGUG..... 5

```

```

NGS-Mature .....CGCACUUCUUUAGAGUGU..... 2
NGS-Mature .....ACGCACUUCUUUAGAGUGU..... 2
NGS-Mature .....AACGCACUUCUUUAGA..... 2

hsa-mir-1258 MI0006392 CUGUGGCUUCCACGACCAAUCCUACUCCGCGAGUCCUGGAGUUAGGAUUAAGGUCUGGGAAGCCACAGGA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
.....AGUUAGGAUUAGGUCUGGAA.....
NGS-Mature .....AGUUAGGAUUAGGUCUGGAA..... 117
NGS-Mature .....AGUUAGGAUUAGGUCUGGAA..... 60
NGS-Mature .....GAGUUAGGAUUAGGUCUGGAA..... 22
NGS-Mature .....AGUUAGGAUUAGGUCUGG..... 22
NGS-Mature .....AGUUAGGAUUAGGUCUG..... 20
NGS-Mature .....AGUUAGGAUUAGGUCUGGAAG..... 20
NGS-Mature .....AGUUAGGAUUAGGUCUGGAAGC..... 16
NGS-Mature .....UUAGGAUUAGGUCUGGAAGC..... 15
NGS-Mature .....UUAGGAUUAGGUCUGGAAGCCA..... 15
NGS-Mature .....UGGAGUUAGGAUUAGGUCUGG..... 13
NGS-Star .....CACGACCUAAUCCUAACU..... 3
NGS-Star .....CCACGACCUAAUCCUAACU..... 2
NGS-Star .....UCCACGACCUAAUCCUAACUCC..... 2
NGS-Star .....ACGACCUAAUCCUAACUCCUG..... 1
NGS-Star .....UCCACGACCUAAUCCUAAC..... 1
NGS-Star .....UGGCUUCCACGACCUAAUCCUA..... 1
NGS-Star .....CACGACCUAAUCCUAACUCC..... 1

hsa-mir-506 MI0003193 GCCACCACCAUCAGCCUAUCUAGUGUAGUGCCUUAUUCAGGAAGGUGUUACUUAUAGAUUAUUUUUUAAGGCACCCUUCUGAGUAGAUUAGUCAACAUGGACAACAUUUUGUGGGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
.....UAAGGCACCCUUCUGAGUAGA.....
NGS-Mature .....GUAAGGCACCCUUCUGAGUAGA..... 910
NGS-Star .....UAUUCAGGAAGGUGUUACUUA..... 557
NGS-Mature .....UGUAAGGCACCCUUCUGAGUAGA..... 285
NGS-Star .....UAUUCAGGAAGGUGUUACUUAU..... 91
NGS-Mature .....GUAAGGCACCCUUCUGAGUAG..... 59
NGS-Star .....UAUUCAGGAAGGUGUUACUUA..... 54
NGS-Star .....UAUUCAGGAAGGUGUUACUU..... 32
NGS-Mature .....UGUAAGGCACCCUUCUGAGUAG..... 20
NGS-Mature .....GUAAGGCACCCUUCUGAGU..... 19
NGS-Star .....UAUUCAGGAAGGUGUUACUUAUA..... 17
NGS-Star .....UAUUCAGGAAGGUGUUACU..... 12
NGS-Mature .....UGUAAGGCACCCUUCUGAG..... 9
NGS-Mature .....UAAGGCACCCUUCUGAGUAGA..... 9
NGS-Mature .....UUUGUAAGGCACCCUUCUGAGUAGA..... 7
NGS-Mature .....UUGUAAGGCACCCUUCUGAGUAGA..... 5
NGS-Mature .....GUAAGGCACCCUUCUGAGUA..... 4
NGS-Star .....UAUUCAGGAAGGUGUUACUUAUAG..... 4
NGS-Star .....UAUUCAGGAAGGUGUUAC..... 3
NGS-Star .....CUUAUUCAGGAAGGUGUUACUU..... 2
NGS-Star .....UAUUCAGGAAGGUGUUACUUAUAGA..... 2

hsa-mir-552 MI0003557 AACCAUUCAAAUAUACCACAGUUUGUUUAACCUUUUUGCCUGUUGGUAAGAUGCCUUUAACAGGUGACUGGUUAGACAACACUGUGUAUUAACA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
.....AACAGGUGACUGGUUAGACAA.....
NGS-Mature .....AACAGGUGACUGGUUAGACAA..... 34
NGS-Mature .....AACAGGUGACUGGUUAGACAAA..... 25
NGS-Mature .....AACAGGUGACUGGUUAGACA..... 21
NGS-Mature .....AACAGGUGACUGGUUAGAC..... 5
NGS-Mature .....CAACAGGUGACUGGUUAGACA..... 3
NGS-Mature .....AACAGGUGACUGGUUAGACAAAC..... 2
NGS-Mature .....AACAGGUGACUGGUUAGA..... 2
NGS-Star .....UGUUUAACCUUUUGCCUGUUG..... 1
NGS-Mature .....ACAGGUGACUGGUUAGACAA..... 1

hsa-mir-665 MI0005563 UCUCUUCGAGGGGUCUCUGCCUUCACCCAGGACUUCUUCAGACCAGGAGGUCAGGCCCCUCACAGGCGGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))))
.....ACCAGGAGGCUGAGGCCUU.....
NGS-Mature .....ACCAGGAGGCUGAGGCCUUCA..... 245
NGS-Mature .....ACCAGGAGGCUGAGGCCUUCC..... 86
NGS-Mature .....ACCAGGAGGCUGAGGCCUU..... 37
NGS-Mature .....ACCAGGAGGCUGAGGCCUU..... 36
NGS-Mature .....ACCAGGAGGCUGAGGCCUU..... 34
NGS-Mature .....ACCAGGAGGCUGAGGCCUUCCAC..... 12
NGS-Mature .....ACCAGGAGGCUGAGGC..... 11
NGS-Mature .....CCAGGAGGCUGAGGCCUUCA..... 11
NGS-Star .....AGGGGUCUCUGCCUUAACCA..... 4
NGS-Mature .....AGGACUUCUUCAGUACACAGGAGG..... 3
NGS-Mature .....CCAGGAGGCUGAGGCCUUCC..... 2
NGS-Mature .....ACCAGGAGGCUGAGGCCUUACACA..... 2
NGS-Star .....AGGGGUCUCUGCCUUAACCCAGG..... 1
NGS-Star .....AGGGGUCUCUGCCUUAACC..... 1

```

```

hsa-mir-3153 MI0014180      GACAAAUUUUAAAUGUCCUGUCCUCCUCCUCCCAUUAAAGUAGAUUGGGGAAAGCGAGUAGGGACAUUUAAAUUUUUU
((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( (((
GGGAAAAGCGAGUAGGGACAUUU.....
NGS-Mature .....GGGAAAAGCGAGUAGGGACAUU..... 54
NGS-Mature .....GGGAAAAGCGAGUAGGGACAUUU..... 19
NGS-Mature .....GGGAAAAGCGAGUAGGGACAUU..... 5
NGS-Mature .....GGGAAAAGCGAGUAGGGACAUUU..... 3
NGS-Mature .....GGGAAAAGCGAGUAGGGACAUUU..... 3
NGS-Mature .....GGGAAAAGCGAGUAGGGACA..... 2
NGS-Mature .....GGGAAAAGCGAGUAGGGACAU..... 2
NGS-Mature .....GGGAAAAGCGAGUAGGGACAUU..... 2
NGS-Mature .....GGGAAAAGCGAGUAGGGACAUU..... 1
NGS-Mature .....GAGUAGGGACAUUUAAAUUUU..... 1
NGS-Mature .....CAUUAAAAGUAGAUUGGG..... 1
NGS-Star .....UGUCCUGUCCUCCUCCUCC..... 1

hsa-mir-2276 MI011282     GUGUUCUCCAGUCCGCCUUCUGACACCUUGCAGCGCCUUCUCUCCGAAUGUCGCAAGUGUCAGAGGGCAGGAGUGGCAGCUGCAU
((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( (((
UCUGCAAGUGUCAGAGGCGAGG.....
NGS-Mature .....UCUGCAAGUGUCAGAGGCGAGG..... 27
NGS-Mature .....UCUGCAAGUGUCAGAGGCGAG..... 18
NGS-Mature .....UCUGCAAGUGUCAGAGGCGA..... 7
NGS-Mature .....UCUGCAAGUGUCAGAGGCGA..... 7
NGS-Mature .....UCUGCAAGUGUCAGAGGCGAG..... 6
NGS-Star .....GCCCUUCUGUACCUUGCAGAC..... 4
NGS-Mature .....UCUGCAAGUGUCAGAGGCGA..... 3
NGS-Mature .....UCUGCAAGUGUCAGAGGCG..... 3
NGS-Star .....GCCCUUCUGUACCUUGCAGAC..... 2
NGS-Star .....GCCCUUCUGUACCUUGCAGA..... 2
NGS-Mature .....UGCAAGUGUCAGAGGCGAG..... 2
NGS-Mature .....UCUGCAAGUGUCAGAGGCGAGGAG..... 1
NGS-Mature .....UCGAAGUGUCAGAGGCGA..... 1
NGS-Mature .....UCUGCAAGUGUCAGAGGCGAGGA..... 1
NGS-Star .....CCGCCUUCUGUACCUUGCAGAC..... 1

hsa-mir-520f MI0003146   UCUCAGGCUGUAGCCUUCUAAAGGGAAGCGCUUUCUGUGUCAGAAAGAAAAGCAAGUCUCCUUUUAGAGGGUUACCGUUUGGGA
((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( (((
AAGUGCUUCCUUUAGAGGGUU.....
NGS-Mature .....CAAGUGCUUCCUUUAGAGGGU..... 159
NGS-Mature .....CAAGUGCUUCCUUUAGAGGGUU..... 28
NGS-Mature .....CAAGUGCUUCCUUUAGAGGG..... 17
NGS-Mature .....CAAGUGCUUCCUUUAGAG..... 13
NGS-Mature .....CAAGUGCUUCCUUUAGAGG..... 10
NGS-Mature .....CAAGUGCUUCCUUUAGA..... 8
NGS-Mature .....AAGUGCUUCCUUUAGAGGGU..... 6
NGS-Mature .....CAAGUGCUUCCUUUAGAGGGUUA..... 6
NGS-Mature .....AAGUGCUUCCUUUAGAGGGUU..... 5
NGS-Star .....CCUCUAAAAGGGAAGCGCUUUCU..... 5
NGS-Mature .....AAGUGCUUCCUUUAGAGGG..... 1

hsa-mir-544 MI0003515   AUUUUCAUCACCUAGGGAUCUUGUAAAAAGCAGAUUCUGAUUCAGGGACCAAGAUUCUGCAUUUUUAGCAAGUUCUCAAGUGAUGCUAUU
((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( (((
AUUCUGCAUUUUUAGCAAGUUC.....
NGS-Star .....UCUUGUAAAAAGCAGAUUCU..... 149
NGS-Mature .....AUUCUGCAUUUUUAGCAAGUU..... 96
NGS-Star .....CUUGUAAAAAGCAGAUUCUGAUU..... 10
NGS-Mature .....AUUCUGCAUUUUUAGCAAGU..... 10
NGS-Star .....CUUGUAAAAAGCAGAUUCUGAU..... 9
NGS-Star .....CUUGUAAAAAGCAGAUUCUGA..... 8
NGS-Star .....UCUUGUAAAAAGCAGAUUC..... 6
NGS-Mature .....AUUCUGCAUUUUUAGCAAG..... 4
NGS-Mature .....AUUCUGCAUUUUUAGCAAGUUC..... 4
NGS-Star .....UCUUGUAAAAAGCAGAUUCUGA..... 3
NGS-Star .....UCUUGUAAAAAGCAGAUUCUG..... 3
NGS-Star .....UAGGGAUCUUGUAAAAAGCAG..... 2
NGS-Mature .....AGAUUCUGCAUUUUUAGCAAGUU..... 2
NGS-Star .....UCUUGUAAAAAGCAGAUU..... 2
NGS-Star .....AUCUUGUAAAAAGCAGAUUCU..... 2
NGS-Mature .....AUUCUGCAUUUUUAGCAA..... 1
NGS-Mature .....CUGAUUCAGGGACCAAGAUUCUGC..... 1

hsa-mir-1976 MI0009986   GCAGCAAGGAAGGCAGGGGUCCUAAAGGUGUGUCCUCCUGCCUCCUUGCUGU
((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( ((( (((
CCUCCUGCCUCCUUGCUG.....
NGS-Mature .....CCUCCUGCCUCCUUGCUG..... 7
NGS-Mature .....CUCCUGCCUCCUUGCUG..... 3
NGS-Mature .....CUCCUGCCUCCUUGCUG..... 2
NGS-Mature .....CCUCCUGCCUCCUUGCU..... 2
NGS-Star .....GCAGCAAGGAAGGCAGGGGUCC..... 2
NGS-Mature .....CCUCCUGCCUCCUUGCUG..... 2
NGS-Star .....CAGCAAGGAAGGCAGGGGU..... 2

```



```

hsa-miR-633 MIMAT0003303 .....CUAAUAGUAUCUACCACAAUAAA.....
NGS-Star .....UGCGGUAGAUACUAUUAACCU..... 4
NGS-Star .....UGCGGUAGAUACUAUUAACC..... 1
NGS-Star .....UUGCGGUAGAUACUAUUAACCU..... 1
NGS-Mature .....CUAAUAGUAUCUACCACAAUAAA..... 1

hsa-mir-520g MI0003166 UCCCAUGCUGUGACCCUCUAGAGGAAGCACUUUCUGUUGUUGUCUGAGAAAAACAAAGUCUUCUUUUAGAGUGUUACCGUUUGGGA
(((((((.....)))))))))
hsa-miR-520g MIMAT0002858 .....ACAAAGUCUUCUUUUAGAGUGU.....
hsa-miR-520h MIMAT0002867 .....ACAAAGUCUUCUUUUAGAGU.....
NGS-Mature .....ACAAAGUCUUCUUUUAGAGUGU..... 104
NGS-Mature .....CAAAGUCUUCUUUUAGAGUGU..... 82
NGS-Mature .....ACAAAGUCUUCUUUUAGAGU..... 35
NGS-Mature .....ACAAAGUCUUCUUUUAGAGUG..... 32
NGS-Mature .....ACAAAGUCUUCUUUU..... 18
NGS-Mature .....ACAAAGUCUUCUUUUAGAGUGUU..... 14
NGS-Mature .....CAAAGUCUUCUUUUAGAGUGUU..... 13
NGS-Mature .....ACAAAGUCUUCUUUUAG..... 10
NGS-Mature .....CAAAGUCUUCUUUUAG..... 9
NGS-Mature .....ACAAAGUCUUCUUUUAGAG..... 7
NGS-Star .....CCUCUAGAGGAAGCACUUUCUGU..... 4
NGS-Star .....CCUCUAGAGGAAGCACUUUCUGUU..... 4
NGS-Star .....CCUCUAGAGGAAGCACUU..... 1
NGS-Star .....CCUCUAGAGGAAGCACUUUCU..... 1
NGS-Star .....CUCUAGAGGAAGCACUUUCUGUU..... 1

```



```

hsa-miR-130a MIMAT0000425 .....CAGUGCAAUGUAAAAGGGCAU.....
hsa-miR-130a* MIMAT0004593 .....UUCACAUUUGUCUACUGUCUGC.....
NGS .....CAGUGCAAUGUAAAAGGGCAU..... 170466
NGS .....CAGUGCAAUGUAAAAGG..... 32418
NGS .....CAGUGCAAUGUAAAAGGGCA..... 28162
NGS .....CAGUGCAAUGUAAAAGGGC..... 19848
NGS .....CAGUGCAAUGUAAAAGGG..... 18397
NGS .....CAGUGCAAUGUAAAAGGGCAUU..... 15575
NGS .....AGUGCAAUGUAAAAGGGCAU..... 1927
NGS .....AGUGCAAUGUAAAAGGGC..... 338
NGS .....AGUGCAAUGUAAAAGGG..... 333
NGS .....AGUGCAAUGUAAAAGGGCAUU..... 282
NGS .....GCUCUUUUCACAUUGUCUACU..... 125
NGS .....GCUCUUUUCACAUUGUCUAC..... 43
NGS .....GCUCUUUUCACAUUGUCU..... 21
NGS .....AGCUCUUUUCACAUUGUCUAC..... 9
NGS .....GCUCUUUUCACAUUGUCUA..... 8
NGS .....AGCUCUUUUCACAUUGUCUA..... 5
NGS .....AGCUCUUUUCACAUUGUCUACU..... 3
NGS .....CUCUUUUCACAUUGUCUACU..... 3
NGS .....GCUCUUUUCACAUUGUC..... 3
NGS .....AGCUCUUUUCACAUUGUC..... 3

hsa-mir-516a-1 MI0003180 UCUCAGGCUGGACCUUCGAGGAAAGAAGCACUUUCUGUUGUCUGAAAGAAAAGAAAGUCUCCUUUCAGAGGGUUACGGUUUGAGA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-516a-3p MIMAT0006778 .....UGCUUCCUUUCAGAGGGU.....
hsa-miR-516a-5p MIMAT0004770 .....UUCUCGAGGAAAGAAGCACUUUC.....
NGS .....UUCUCGAGGAAAGAAGCACUUUC..... 1130
NGS .....UUCUCGAGGAAAGAAGCACUUUC..... 326
NGS .....UUCUCGAGGAAAGAAGCACUUUC..... 243
NGS .....UCUCGAGGAAAGAAGCACUUUCU..... 35
NGS .....AGGAAAGAAGCACUUUCU..... 27
NGS .....UUCUCGAGGAAAGAAGCAC..... 25
NGS .....AAAGUCUCCUUUCAGAGGGU..... 15
NGS .....UUCUCGAGGAAAGAAGCACUU..... 14
NGS .....AAAGUCUCCUUUCAGAGGGU..... 5
NGS .....UUCUCGAGGAAAGAAGCACUUUCUG..... 5
NGS .....AAAGUCUCCUUUCAGA..... 4
NGS .....AAAGUCUCCUUUCAGAGGG..... 3
NGS .....CUCGAGGAAAGAAGCACUUU..... 3
NGS .....UUCUCGAGGAAAGAAGCACU..... 3
NGS .....AAAGUCUCCUUUCAGAGG..... 1

hsa-mir-516a-2 MI0003181 UCUCAGGUUGUGACCUUCGAGGAAAGAAGCACUUUCUGUUGUCUGAAAGAAAAGAAAGUCUCCUUUCAGAGGGUUACGGUUUGAGA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-516a-3p MIMAT0006778 .....UGCUUCCUUUCAGAGGGU.....
hsa-miR-516a-5p MIMAT0004770 .....UUCUCGAGGAAAGAAGCACUUUC.....
NGS .....UUCUCGAGGAAAGAAGCACUUUC..... 1130
NGS .....UUCUCGAGGAAAGAAGCACUUUC..... 326
NGS .....UUCUCGAGGAAAGAAGCACUUUC..... 243
NGS .....UCUCGAGGAAAGAAGCACUUUCU..... 35
NGS .....AGGAAAGAAGCACUUUCU..... 27
NGS .....UUCUCGAGGAAAGAAGCAC..... 25
NGS .....AAAGUCUCCUUUCAGAGGGU..... 15
NGS .....UUCUCGAGGAAAGAAGCACUU..... 14
NGS .....AAAGUCUCCUUUCAGAGGGU..... 5
NGS .....UUCUCGAGGAAAGAAGCACUUUCUG..... 5
NGS .....AAAGUCUCCUUUCAGA..... 4
NGS .....AAAGUCUCCUUUCAGAGGG..... 3
NGS .....CUCGAGGAAAGAAGCACUUU..... 3
NGS .....UUCUCGAGGAAAGAAGCACU..... 3
NGS .....AAAGUCUCCUUUCAGAGG..... 1

hsa-mir-516b-2 MI0003167 UCUCAUGAUGUGACCAUCUGGAGGUAAGAAGCACUUUGUUGUUUGUUGAAAGAAAGUCUCCUUUCAGAGGGUUACUCUUUGAGA
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
hsa-miR-516b* MIMAT0002860 .....UGCUUCCUUUCAGAGGGU.....
hsa-miR-516b MIMAT0002859 .....AUCUGGAGGUAAGAAGCACUUU.....
NGS .....AUCUGGAGGUAAGAAGCACUUUGU..... 450
NGS .....AUCUGGAGGUAAGAAGCACUUU..... 336
NGS .....CAUCUGGAGGUAAGAAGCACUUUGU..... 274

```

NGS	.....CCAUCUGGAGGUAAGAAGCACUUU.....	75
NGS	.....CAUCUGGAGGUAAGAAGCACUUU.....	55
NGS	.....CAUCUGGAGGUAAGAAGCACUUUG.....	51
NGS	.....AUCUGGAGGUAAGAAGCACUU.....	47
NGS	.....AUCUGGAGGUAAGAAGCACUUUG.....	45
NGS	.....CCAUCUGGAGGUAAGAAGCACUUUGU.....	38
NGS	.....AUCUGGAGGUAAGAAGCACU.....	25
NGS	.....AAAGUGCUUCCUUUCAGAGGGU.....	15
NGS	.....AAAGUGCUUCCUUUCAGAGGGUU.....	5
NGS	.....AAAGUGCUUCCUUUCAGA.....	4
NGS	.....AAAGUGCUUCCUUUCAGAGGG.....	3
NGS	.....AAAGUGCUUCCUUUCAGAGG.....	1

```

1 AAUGUGAGACACCCAGGGGUACCUUCUCACUGACUUGCAACAUACAUAUUGUCUUGGUGUGUUGCAAGUCGGUGGAGACGUACCCUUGGUGUCAACCCCU
  .((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
  .UGUUGCAAGUCGGUGGAGACGU . . . . . 17
  .UGUUGCAAGUCGGUGGAGACG . . . . . 6
  .UGUUGCAAGUCGGUGGAG . . . . . 2
  .UGCAAGUCGGUGGAGACGUAC . . . . . 2
  .UGUUGCAAGUCGGUGGAGACGUA . . . . . 2
  .CUCUCUACUGACUUGCAACAU . . . . . 2
  .CUCUCUACUGACUUGCAACAU . . . . . 1

102 AUAGAAAUAACACAUACUGCUGUAUUGUCAGGUAGUAUAGGAUUUAUCACUACCUAGACAAUACAGUAUGUUGUUUAUAUAUUU
  .((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
  .UGCUGUAUUGUCAGGUAGUA . . . . . 12
  .CUGCUGUAUUGUCAGGUAGUA . . . . . 8
  .UGCUGUAUUGUCAGGUAGUAU . . . . . 7
  .UCACUACCUAGACAAUACAGU . . . . . 6
  .GCUGUAUUGUCAGGUAGUA . . . . . 5
  .UGUAUUGUCAGGUAGUAUAGGAU . . . . . 3
  .CUGUAUUGUCAGGUAGUA . . . . . 3
  .GCUGUAUUGUCAGGUAGUA . . . . . 3
  .CUGCUGUAUUGUCAGGUAGU . . . . . 3
  .UGCUGUAUUGUCAGGUAGU . . . . . 3
  .AUUGUCAGGUAGUAUAGGAU . . . . . 2
  .CACUACCUAGACAAUACAGU . . . . . 1
  .UCACUACCUAGACAAUACAG . . . . . 1
  .CUACCUAGACAAUACAGUAUGU . . . . . 1
  .ACUACCUAGACAAUACAGUA . . . . . 1
  .UCACUACCUAGACAAUACAGUAU . . . . . 1
  .ACUACCUAGACAAUACAGUAUGU . . . . . 1
  .ACUACCUAGACAAUACAGUAUG . . . . . 1
  .ACUACCUAGACAAUACAGUAU . . . . . 1

105 CUAUGAAAGCCAGAUUCAGCUUCCCUUCAGAGCCUGGCUUUGGCAUCUAUGAAAGCCAGGCUCUGAAGGGAAGUUGAAUCUUGCUGAGUGG
  .((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
  .UUUCCCUUCAGAGCCUGGCUU . . . . . 29
  .AGCCAGGCUCUGAAGGGAAGU . . . . . 16
  .UUUCCCUUCAGAGCCUGGCUU . . . . . 10
  .CUUCCCUUCAGAGCCUGGCUU . . . . . 9
  .CCAGGCUCUGAAGGGAAGUU . . . . . 9
  .CUUCCCUUCAGAGCCUGGCUU . . . . . 8
  .AGCCAGGCUCUGAAGGGAAGUU . . . . . 5
  .GCCAGGCUCUGAAGGGAAGU . . . . . 4
  .GCCAGGCUCUGAAGGGAAG . . . . . 4
  .AGCCAGGCUCUGAAGGGAAG . . . . . 3
  .UUUCCCUUCAGAGCCUGGCU . . . . . 3
  .CUUCCCUUCAGAGCCUGGC . . . . . 2
  .GCCAGGCUCUGAAGGGAAGUU . . . . . 2
  .CCAGGCUCUGAAGGGAAGU . . . . . 2
  .UUUCCCUUCAGAGCCUGGC . . . . . 2
  .AGCCAGGCUCUGAAGGGAAG . . . . . 2
  .CCAGGCUCUGAAGGGAAG . . . . . 1
  .UUCCCUUCAGAGCCUGGCUU . . . . . 1

11 CGUGUCAACUGUAGGUUGGUGCAAAAGUAUUGUGGUUUUGAAAGUAACUUGGCAGAAACGACAAUGACUUUUGCACCACUAUAUACAUAACA
  .((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
  .AAAAGUAUUGUGGUUUUG . . . . . 249
  .AAAAGUAUUGUGGUUUUG . . . . . 134
  .CAAAAAGUAUUGUGGUUUUG . . . . . 74
  .AAAAGUAUUGUGGUUUUG . . . . . 49
  .CAAAAAGUAUUGUGGUUUUG . . . . . 47
  .AAAAGUAUUGUGGUUUUGA . . . . . 44
  .CAAAAAGUAUUGUGGUUUUGA . . . . . 23
  .UUAGGUUGGUGCAAAAGUAUU . . . . . 17
  .AAAAGUAUUGUGGUUUUG . . . . . 15
  .GAAAAGUAUUGUGGUUUUG . . . . . 12
  .GAAACGACAAUGACUUUUGCA . . . . . 6
  .GAAACGACAAUGACUUUU . . . . . 2
  .GAAACGACAAUGACUUUUGCAC . . . . . 1

14 GAUGUUCUUUCCCAUCCCUUACGUCCACCCCCACUCCUGUUUCUGUGAAUAUUCAACAGGAGUGGGGUGGACUAUAGGAGGAUAGGGAACACAG

```


28

UCUUCCUCUCUGCCUGGAUUUGGUUUUCGAGGCACUUAGUAGGUGAUAGCAUGACUGCCUCACUGACCACUUCGAGUAGGGUUACUC
AAUUGGUUUUCGAGGCACUUAGU
AAUUGGUUUUCGAGGCACUUA
AAUUGGUUUUCGAGGCACUU
AAUUGGUUUUCGAGGCAC
AAUUGGUUUUCGAGGCACUUAG
UUUGGUUUUCGAGGCACUUAGU
AAUUGGUUUUCGAGGCACU
UGACUGCCUCACUGACCACUU
AAUUGGUUUUCGAGGCACUU

30
19
15
6
3
2
2
1
1

30

UCAUAAUAUAUGAAGUACAACUUGGUAUAUUUGUGAAUUGGCUUUUACAAGACCAACUCACGAAGUAUACCAGUAUAUACUUGAUUACAACUA
UUCGGUAUACUUUGUGAAUUGG
UUCGGUAUACUUUGUGAAUUG
UUCGGUAUACUUUGUGAAUU
AAUUGGUUUUCGAGGCACUU
UUCGGUAUACUUUGUGAAU
AACUCACGAAGUAUACCGAAGU
UUCGGUAUACUUUGUGAAUUG
GGUAUACUUUGUGAAUUG
UUCGGUAUACUUUGUGAAUUGG

48
13
12
3
2
2
1
1
1
1

32

UUUAUUGAGCUGACUGGCCUUGUAUGGAGGUUCUAGACCAGUUAAGUUCUACAUGGUAUGGAAACCUUCAAGCAGGCCAAGCAGGAGACAGGUG
UAUGGAGGUUCUAGACCAUGU
UCAUGGAUGGAAACCUUCAAGC
ACAUGGAUGGAAACCUUCAAGC
UAUGGAGGUUCUAGACCAUGU
UCAUGGAUGGAAACCUUCAAGCA
ACAUGGAUGGAAACCUUCAAGCA
AUGGAUGGAAACCUUCAAGCA
CAUGGAUGGAAACCUUCAAG
UCAUGGAUGGAAACCUUCAAG
UAUGGAGGUUCUAGACCAUG
CAUGGAUGGAAACCUUCAAGCA
AUGGAUGGAAACCUUCAAGC
UCAUGGAUGGAAACCUUCA

12
8
7
6
5
3
2
2
2
1
1
1
1

33

AGCAUUUCUAUUAGGUUGGUGCAAAGUGAUUGCAGUGUUGCCAAUAAAAGUAAUGACAAAAUCGAGUACUUUUGCACCAGCCCAAUAUAGCCAA
AAAAGUGAUUGCAGUGUUU
CAAAAACUGCAGUUACUUUUGC
CAAAAACUGCAGUUACUUUUG
AAAAGUGAUUGCAGUGUUUG
AAAAGUGAUUGCAGUGUUUGCC
AAAAACUGCAGUUACUUUUG
CAAAAACUGCAGUUACUUU
AAAAACUGCAGUUACUUUUGC
AAAAACUGCAGUUACUUU
AAAAGUGAUUGCAGUGUUUGC
AAAAGUGAUUGCAGUGUUUGCC
AAAGUGAUUGCAGUGUUU
AAAAGUGAUUGCAGUGUUU
CAAAAACUGCAGUUACUUU
AAAAACUGCAGUUACUUUUGCA
CAAAAACUGCAGUUACUUU
CAAAAAGUGAUUGCAGUGUUUG
AAAGUGAUUGCAGUGUUUG
AAAGUGAUUGCAGUGUUUGCCA

523
419
278
252
151
138
127
106
87
85
38
36
31
30
29
26
25
15
13
13

43

AUGAGUUUGCUUUGUGUCAACACAAACUUGCAGGGUAGAGAUGAUUUUCCUACUUUUCUAGGUUGUUUGGGGCGGGGCAGGGGAACAGAG
UACUUUUUCUAGGUUGUUGGG
UACUUUUUCUAGGUUGUUGGG
UACUUUUUCUAGGUUGUUGGGG

9
7
4


```

..... UCACAAACACCUUGCAGGGUAGA..... 4
..... UCACAAACACCUUGCAGGGUA..... 2
..... UCACAAACACCUUGCAGGGUAG..... 2
..... UCACAAACACCUUGCAGGGUAG..... 1
46 GGCACUUGCUUGGGGUUAGUGAGGACAGGGCAAUUACAGAGAUGGGUUGUGCAGAGGCGACACUUGAAUUUCCUGGGCCUCAGGACUCCUUUCAGACAUGG
(((.....))) ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((.....
..... UGAGGACAGGGCAAUUUCACGA..... 57
..... UGAGGACAGGGCAAUUUCACG..... 21
..... UGAGGACAGGGCAAUUUCACGAGA..... 11
..... UGAGGACAGGGCAAUUUCAC..... 7
..... UGAGGACAGGGCAAUUUCA..... 6
..... UGAGGACAGGGCAAUUUCACGAG..... 5
..... CUUGGAUUUUCUGGGCCUCAG..... 3
..... GUGAGGACAGGGCAAUUUCAC..... 1
..... GUGCAGAGGCGACACUUG..... 1
..... CUUGGAUUUUCUGGGCCUCA..... 1
..... AGGACAGGGCAAUUUCACGAGAU..... 1
53 UCGUUUGACUCUAUUGGACAGGGGACUGGUUAAUAGAUAACUAACCAAGAAUAUUUUGUUCUGUUAACCCAUCCCUCAUCUAUAGAGUAUAACC
.. ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((.....
..... AGGGGACUGGUUAAUAGAAUA..... 26
..... GUUCUGUUAACCCAUCCCUCA..... 4
..... AGGGGACUGGUUAAUAGAAUA..... 3
..... AGGGGACUGGUUAAUAGAA..... 2
..... GUUCUGUUAACCCAUCCCUCA..... 1
..... AGGGGACUGGUUAAUAGAA..... 1
..... AGGGGACUGGUUAAUAGAA..... 1
58 AACUAUUUCUAGGUUGAUGCAGAAGUAACUACCGUUUUUCAGUUGAAAGUAUUGGCAAAGACCGGACUACUUUUGCAACAGCCUAAUAGUUUCU
(((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((.....
..... AAAGACCGUGACUACUUUUGCA..... 9
..... AAAGACCGUGACUACUUUUG..... 6
..... AGAAGUAACUACCGUUUUUGCA..... 5
..... AAAGACCGUGACUACUUUUGC..... 4
..... AAAGACCGUGACUACUUU..... 4
..... AGAAGUAACUACCGUUUUUGC..... 1
..... CAAAGACCGUGACUACUUUUG..... 1
..... AAAGACCGUGACUACUUUUGCAA..... 1
60 GGAGUGGGUAGAGGCAGGGAUCCAGGACUAACUACACUUAUUUUUCUGAAUUAUUUAGUGUAGUAGUCCUGGAUCCCGCCUCUUAUUUCUGAA
(((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((.....
..... UCCAGGACUAAUACACUUA..... 8
..... UCCAGGACUAAUACACUUA..... 5
..... UAGUGUAGUAGUCCUGGAU..... 4
..... UAGUGUAGUAGUCCUGGAU..... 4
..... UUAAGUGUAGUAGUCCU..... 3
..... AGGCAGGGAUCCAGGACUAAU..... 2
..... UCCAGGACUAAUACACUUA..... 2
..... UUAAGUGUAGUAGUCCUGGAU..... 2
..... AUCCAGGACUAAUACACUUA..... 1
..... UAGUGUAGUAGUCCUGGAU..... 1
..... UUAAGUGUAGUAGUCCUGGAU..... 1
..... AGAGGCAGGGAUCCAGG..... 1
68 AAUAAAAUUAGAAUAGUGAGCAACCCAGUGGGCUAUGGAAUUGUGGAAUGGCAUUUCUUAUUUCUCAGUGGGCCUCUUAACUUAUACUCAAC
..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((..... ((((((.....
..... AACCCAGUGGGCUAUGGAAUUG..... 8
..... AACCCAGUGGGCUAUGGAAUUG..... 8
..... AACCCAGUGGGCUAUGGAAUUG..... 6
..... UUUUCUUAUUUCUAGUGGGCCUC..... 4
..... UUUUCUUAUUUCUAGUGGGCCUC..... 4
..... UUUUCUUAUUUCUAGUGGGCCU..... 3
..... UUUUCUUAUUUCUAGUGGGG..... 2
..... UUUUCUUAUUUCUAGUGGGG..... 1
..... AACCCAGUGGGCUAUGGAAUUG..... 1
..... AACCCAGUGGGCUAUGGA..... 1
..... GAAAUUGUGGAAUGGC..... 1
80 CAACAGCUUACAGCAAUUGGAGAAGAUUGCAGAGUAAGUCCUGAUUAAGAAUUGGAAUUUACUCUGCAAUUCUCCAAUUGCUGACCAUCAUUC

```



```

.....CAAAAACCACAAUACUU..... 1
.....AAAACCACAAUACUUUU..... 1

9 GGGCUGACCCCUAGGGUCAGGUGAGGCCUUGGGGCACAGUGGUGCCAUUCCCUUGUCUCCAGGGCCUCGCCUGUCCUUGAGGUCGGCC
(((((((((((((.((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.....CCUGUGCUCCAGGGCCUCGC..... 22
.....UGAGGCCUUUGGGGCACAGUGG..... 13
.....UAGGGUCAGGUGAGGCCUUUG..... 3
.....CAGGGCCUCGCCUGUCCUUGA..... 3
.....CCAGGGCCUCGCCUGUCCUU..... 2
.....CCUGUGCUCCAGGGCCUCGCC..... 2
.....GAGGCCUUUGGGGCACAGUGG..... 2
.....UGAGGCCUUUGGGGCACAGUGG..... 2
.....UAGGGUCAGGUGAGGCCUUUG..... 1
.....CCAGGGCCUCGCCUGUCCUUGA..... 1
.....CAGGGCCUCGCCUGUCCUUG..... 1
.....GUGCUCCAGGGCCUCGCCUG..... 1
.....CAGGGCCUCGCCUGUCCUU..... 1

90 GACCAGAAGUUUUGGAUUUUGGACUUUUUCAGAUUUUGGGGAUUAUUUGCAUUAUACUUUAUCCUAAAUCUGAAAAGUCCAAAACCUGAAAUGACCAUAAG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.....UUGGACUUUUUCAGAUUUGGGGAU..... 34
.....UGGACUUUUUCAGAUUUGGGGAU..... 26
.....UUGGACUUUUUCAGAUUUGGGGA..... 18
.....UGGACUUUUUCAGAUUUGGGGAUA..... 14
.....UGGACUUUUUCAGAUUUGGGGA..... 12
.....UUUGGACUUUUUCAGAUUUGGGGA..... 9
.....AGAAAGUUUUUGGAUUUUG..... 8
.....UUUGGACUUUUUCAGAUUUGG..... 7
.....UUUGGACUUUUUCAGAUUUGGG..... 6
.....UUUGGACUUUUUCAGAUUUGGG..... 5
.....UCCUAAAUCUGAAAAGUCCAAA..... 1
.....UCCUAAAUCUGAAAAGUCCAA..... 1

97 GAUCCAGGGAACCCUAGAGCAGGGGGAUGGCAGAGCAAAAUAUUGGCCUACAGCUGCCUCUUGCCAAAUCGACUGGAUUUUGUGUCUCCAUUCCCCAGAGCUGUCUGAGGUGCUUUG
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.....AGGGGGAUGGCAGAGCAAAAUA..... 1052
.....AGGGGGAUGGCAGAGCAAAAUA..... 351
.....AGGGGGAUGGCAGAGCAAAA..... 87
.....AGGGGGAUGGCAGAGCAAAA..... 66
.....AGGGGGAUGGCAGAGCAAAAUC..... 66
.....CAGGGGGAUGGCAGAGCAAAAUA..... 52
.....AGGGGGAUGGCAGAGCAA..... 52
.....CAGGGGGAUGGCAGAGCAAAAUA..... 42
.....UUUUGUGUCUCCAUUCCCCAG..... 17
.....CAGGGGGAUGGCAGAGCAAAA..... 16
.....UUUUGUGUCUCCAUUCCCCAGA..... 9
.....CAGGGGGAUGGCAGAGCAA..... 9
.....UUUUGUGUCUCCAUUCCCCA..... 4
.....UUUUGUGUCUCCAUUCCCC..... 3
.....UUUUGUGUCUCCAUUCC..... 2
.....UUUUGUGUCUCCAUUCCC..... 2
.....AUUUUGUGUCUCCAUUCCCCAGA..... 1
.....UUUUGUGUCUCCAUUCCCCAG..... 1

99 AGAUGGUAUUGAGUGGUGUCUUUAUAUAACGCCAUGCACUCUGUAGUUUGGUUACACAGUGCAUGGCGUAUAUAUAACUAUCCAUAUCUUCACGC
((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((
.....GUGCAUGGCGUAUAUAUAACA..... 3
.....UAUAUAUAACGCCAUGCACUC..... 1
.....UGCAUGGCGUAUAUAUAACA..... 1
.....UUUAUAUAACGCCAUGCACU..... 1
.....UUUAUAUAACGCCAUGCACUC..... 1
.....AUGGCGUAUAUAUAACACU..... 1

```