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Supplemental Material to:

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Evolution of the miR199-214 cluster and vertebrate skeletal development

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1. 2013RNABIOL0183R-S1.xlsx
2. 2013RNABIOL0183R-S2.xlsx
3. 2013RNABIOL0183R-S4.xlsx
4. 2013RNABIOL0183R-S6.xlsx

Supplementary Figure Legend

Figure S1. Table of studied genes. Accession numbers, genomic location, strand, and other known aliases are given.

Figure S2. Table of primers used in this study.

Figure S3. (**A-C**) One-to-one conserved synteny relationships between the Ciona *Dnm* gene and each human *DNM* gene. Gene names in green indicate the presence of paralogs that occur on paralogous chromosome segments containing all three paralogous human *DYNAMIN* loci; gene names in blue indicate paralogs on paralogous chromosomes containing the human *DNM1* and *DNM2* loci; and gene names in red represent paralogs on chromosomes containing the human *DNM1* and *DNM3* loci. (**D-F**) One-to-one conserved paralogy relationships between the three human *DNM* loci. The *DNM1* genomic neighborhood shares just 90 and 171 paralogs with *DNM2* and *DNM3* loci respectively, whereas the *DNM2* and *DNM3* genomic neighborhoods share 200 paralogs.

Figure S4. Stockholm alignments of *pre-miR199* and *pre-miR214* transcripts in vertebrates.

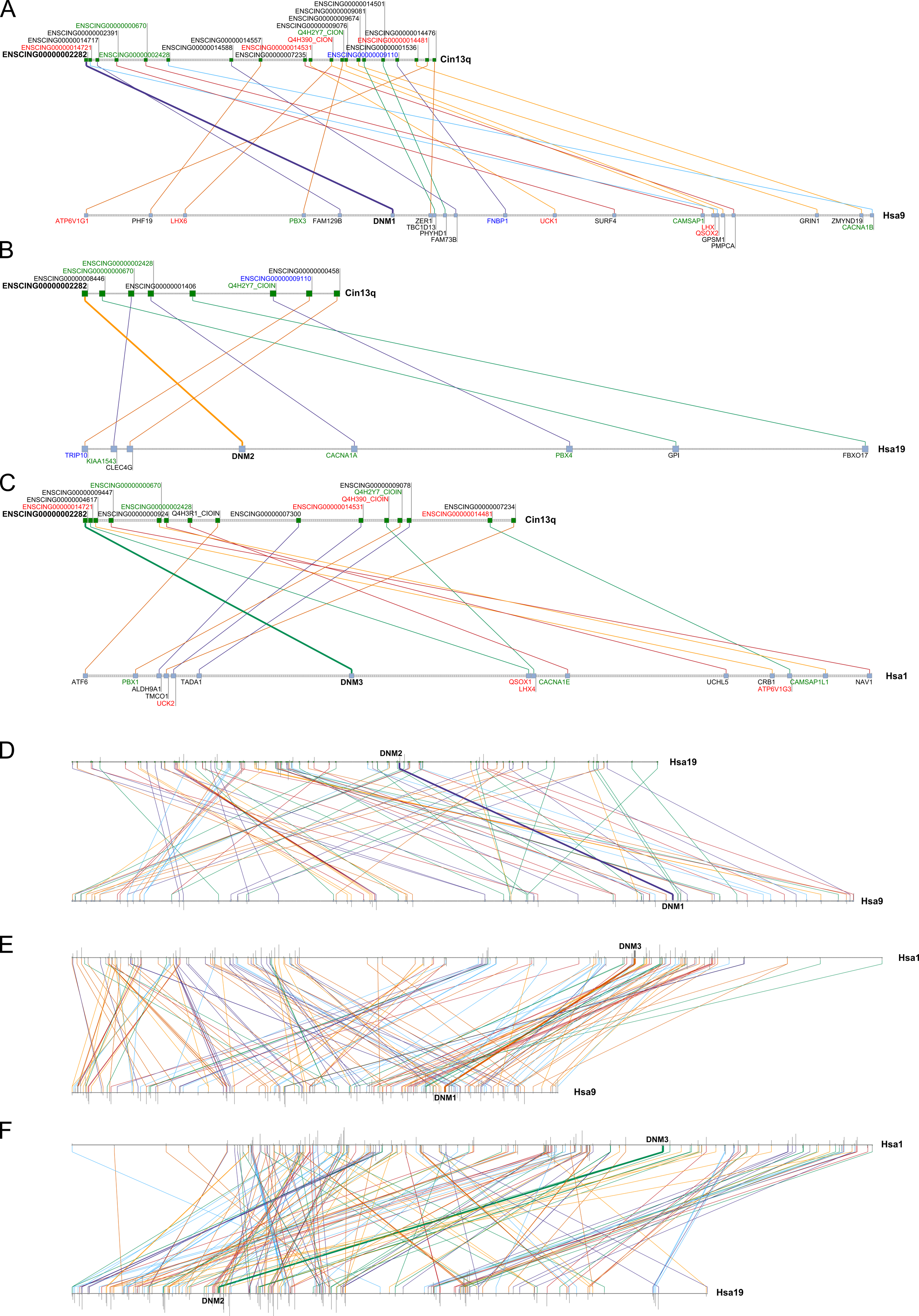
Figure S5. Various Fasta alignments of *pri-miR199* and *pri-miR214* sequences in vertebrates.

Figure S6. Lists of skeleton-related mRNAs that are predicted to be targeted by *miR199* or *miR214* in human, mouse, and zebrafish. In the case that there are co-orthologous transcripts in zebrafish, the targeted transcript(s) is indicated in brackets.

Figure S7. Wikipedia articles for *miR199* and *miR214* modified with new information on August 20, 2013.

http://en.wikipedia.org/wiki/Mir-199_microRNA_precursor

http://en.wikipedia.org/wiki/MiR-214


A
ENSCING00000014501
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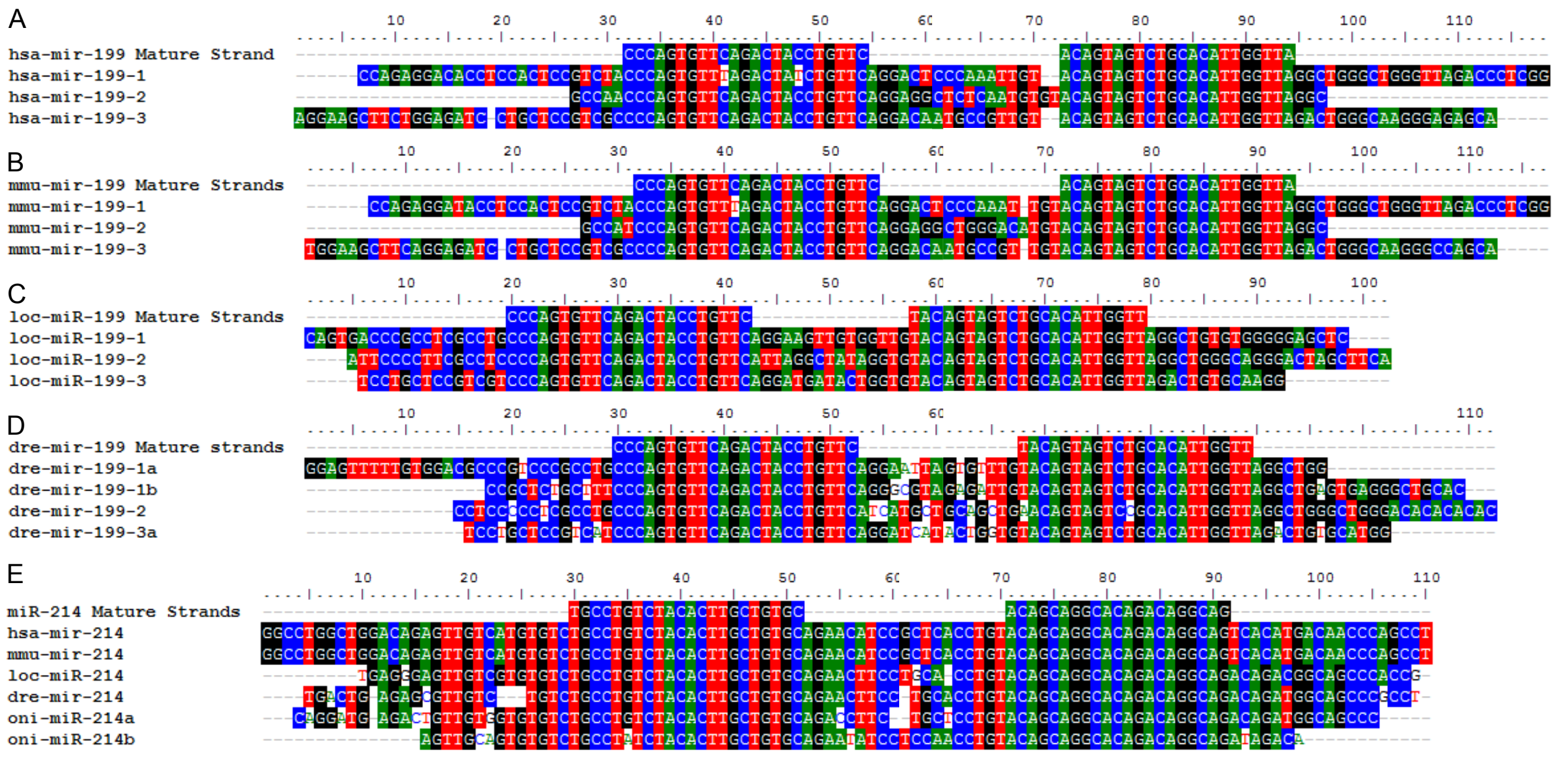
ENSCING00000009674
ENSCING00000009076
Q4H2Y7_CION
Q4H390_CION
ENSCING00000014476
ENSCING00000014481
ENSCING00000001536
ENSCING00000009110
ENSCING00000000670
ENSCING00000002391
ENSCING00000014717
ENSCING00000014721
ENSCING00000002282
ENSCING00000002428
ENSCING00000014557
ENSCING00000014588
ENSCING00000014531
ENSCING00000007235
Cin13q
ATP6V1G1
PHF19
LHX6
PBX3
FAM129B
DNM1
ZER1
TBC1D13
PHYHD1
FAM73B
FNBP1
UCK1
SURF4
CAMSAP1
LHX
QSOX2
GPSM1
PMPCA
GRIN1
ZMYND19
CACNA1B
Hsa9
B
ENSCING00000002428
ENSCING00000000670
ENSCING00000008446
ENSCING00000002282
ENSCING00000001406
ENSCING00000000458
ENSCING00000009110
Q4H2Y7_CIOIN
Cin13q
TRIP10
KIAA1543
CLEC4G
DNM2
CACNA1A
PBX4
GPI
FBXO17
Hsa19
C
ENSCING00000000670
ENSCING00000009447
ENSCING00000004617
ENSCING00000014721
ENSCING00000002282
ENSCING00000002428
ENSCING00000000924
Q4H3R1_CIOIN
ENSCING00000007300
ENSCING00000009078
Q4H2Y7_CIOIN
Q4H390_CIOIN
ENSCING00000014531
ENSCING00000007234
ENSCING00000014481
Cin13q
ATF6
PBX1
ALDH9A1
TMCO1
UCK2
TADA1
DNM3
QSOX1
LHX4
CACNA1E
UCHL5
CRB1
ATP6V1G3
CAMSAP1L1
NAV1
Hsa1
D
DNM2
Hsa19
DNM1
Hsa9
E
DNM3
Hsa1
DNM1
Hsa9
F
DNM3
Hsa1
DNM2
Hsa19


A
hsa-mir-199 Mature Strand
hsa-mir-199-1
hsa-mir-199-2
hsa-mir-199-3
B
mmu-mir-199 Mature Strands
mmu-mir-199-1
mmu-mir-199-2
mmu-mir-199-3
C
loc-miR-199 Mature Strands
loc-miR-199-1
loc-miR-199-2
loc-miR-199-3
D
dre-mir-199 Mature strands
dre-mir-199-1a
dre-mir-199-1b
dre-mir-199-2
dre-mir-199-3a
E
miR-214 Mature Strands
hsa-mir-214
mmu-mir-214
loc-miR-214
dre-mir-214
oni-miR-214a
oni-miR-214b