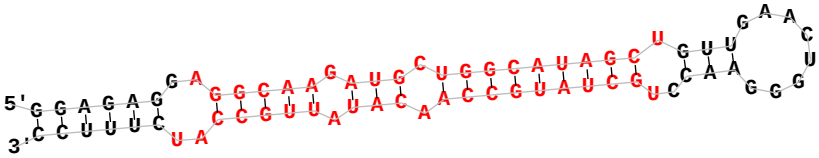
miRBase precursor	: hsa-mir-31
Total read count	: 19333
hsa-miR-31-5p read count	: 19208
hsa-miR-31-3p read count	: 124
remaining reads	: 125





hsa-miR-31-3p

hsa-miR-31-5p

```
5'- ggagaggaggcaagaugcuggcauagcuguugaacugggaaccugcuaugccaacauauugccaucuuucc   -3'    exp
    ((((((..((((((.(((.(((((((((.(((........))))..)))))))))).))))))..))))))    reads      mm         sample
    .....ggaggcaagaugcuggcau.....................................................   1          0          hsa
    .....Ugaggcaagaugcuggcauagc..................................................   1          1          hsa
    .....gUaggcaagaugcuggcauagcu.................................................   2          1          hsa
    ......gaggcaagaugcuggcaua....................................................   1          0          hsa
    ......gaggcaagaugcuggcauag...................................................   2          0          hsa
    ......gaggcaagaugcuggcauagc..................................................   2          0          hsa
    ......gaggcaagaugcuggcauagcu.................................................   10         0          hsa
    ......Caggcaagaugcuggcauagcu.................................................   1          1          hsa
    ......gaggcaagaugcuggcCuagcu.................................................   1          1          hsa
    ......Uaggcaagaugcuggcauagcug................................................   3          1          hsa
    ......Caggcaagaugcuggcauagcug................................................   3          1          hsa
    ......Aaggcaagaugcuggcauagcug................................................   1          1          hsa
    .......aggcaagaugcuggcauC....................................................   1          1          hsa
    .......aggcaagaugcuggcaua....................................................   26         0          hsa
    .......aggcaagaugcuggcauG....................................................   1          1          hsa
    .......aggcaagaugcuUgcaua....................................................   1          1          hsa
    .......aggcaagaugcuggcauU....................................................   10         1          hsa
    .......aggcaagaugcuggcauaA...................................................   11         1          hsa
    .......aggcaagCugcuggcauag...................................................   1          1          hsa
    .......aggcaagaugcuggcauaU...................................................   3          1          hsa
    .......aggcaagauAcuggcauag...................................................   1          1          hsa
    .......aggcaagaugcCggcauag...................................................   1          1          hsa
    .......aggUaagaugcuggcauag...................................................   1          1          hsa
    .......aggcaagaugcuGucauag...................................................   1          1          hsa
    .......aggcaaUaugcuggcauag...................................................   1          1          hsa
    .......aggcaagaugcuggcauag...................................................   162        0          hsa
    .......aggcCagaugcuggcauag...................................................   1          1          hsa
    .......aggcaagaugGuggcauag...................................................   1          1          hsa
    .......aUgcaagaugcuggcauag...................................................   4          1          hsa
    .......aggcUagaugcuggcauag...................................................   1          1          hsa
    .......aggcaagaugcuggcCuagc..................................................   1          1          hsa
    .......aggcaagaugcuggcauagc..................................................   202        0          hsa
    .......aggcaagaugcuggcauaCc..................................................   1          1          hsa
    .......aggcaagaCgcuggcauagc..................................................   1          1          hsa
```

hsa-miR-31-3p

hsa-miR-31-5p

ggagaggaggcaagaugcuggcauagcuguugaacugggaaccugcuaugccaacauauugccaucuuucc

.......aggcaagaugcuUgcauagc	1	1	hsa
.......aggcaagaugcuggcauGgc	1	1	hsa
.......aggcaagaugcugUcauagc	1	1	hsa
.......agCcaagaugcuggcauagc	1	1	hsa
.......aggcaagaugcCggcauagc	1	1	hsa
.......aggcaagaugcuggcauaUc	5	1	hsa
.......aggcaagaugcuggAauagc	1	1	hsa
.......aggcaaAaugcuggcauagc	1	1	hsa
.......aCgcaagaugcuggcauagc	1	1	hsa
.......aggcaagaugcugCcauagc	1	1	hsa
.......aggcaagaugcuggcauagA	3	1	hsa
.......aggcCagaugcuggcauagc	1	1	hsa
.......aggcaagaugUuggcauagc	1	1	hsa
.......aggcaagaugcuggcauagU	3	1	hsa
.......aUgcaagaugcuggcauagc	1	1	hsa
.......aggcaagaugcuggcauagcC	1	1	hsa
.......aAgcaagaugcuggcauagcu	6	1	hsa
.......aggcCagaugcuggcauagcu	26	1	hsa
.......aggcaagaugcuggUauagcu	5	1	hsa
.......aggcaagaugcuggcauaUcu	45	1	hsa
.......aCgcaagaugcuggcauagcu	4	1	hsa
.......aggcaagCugcuggcauagcu	6	1	hsa
.......aggcaagaugcuggcGuagcu	3	1	hsa
.......aggcaagaugcuggcauCgcu	6	1	hsa
.......aggcaagaugGuggcauagcu	1	1	hsa
.......aggcaagaugcuUgcauagcu	4	1	hsa
.......aggcaagaugcCggcauagcu	11	1	hsa
.......aggcaagauAcuggcauagcu	6	1	hsa
.......aggcaagaugcuggcauagAu	2	1	hsa
.......aggcaaUaugcuggcauagcu	12	1	hsa
.......aggcGagaugcuggcauagcu	4	1	hsa
.......aggcaagaugcuggcaCagcu	1	1	hsa
.......aggcaagaugcGggcauagcu	6	1	hsa
.......aggcaagaugcugAcauagcu	4	1	hsa
.......aggcaaAaugcuggcauagcu	6	1	hsa
.......aggAaagaugcuggcauagcu	2	1	hsa
.......Uggcaagaugcuggcauagcu	1	1	hsa
.......aUgcaagaugcuggcauagcu	16	1	hsa
.......aggcaagaugcuggcauGgcu	1	1	hsa
.......aggcaaCaugcuggcauagcu	4	1	hsa
.......aggcaagaugcugCcauagcu	8	1	hsa
.......aggcaagaugcuggcaGagcu	2	1	hsa
.......Cggcaagaugcuggcauagcu	7	1	hsa
.......aggcaagaugcuggcauagUu	17	1	hsa
.......aggcaagaugcuggAauagcu	3	1	hsa
.......aggcaagaugcuggcauagcu	3867	0	hsa
.......aggcaagaugcuggcauUgcu	1	1	hsa
.......aggcaagaugcuggcauaAcu	6	1	hsa
.......aggcaagaCgcuggcauagcu	2	1	hsa
.......aggcaagaugcugUcauagcu	34	1	hsa
.......aggcaUgaugcuggcauagcu	2	1	hsa
.......agUcaagaugcuggcauagcu	6	1	hsa
.......aggcUagaugcuggcauagcu	1	1	hsa
.......aggcaagauUcuggcauagcu	26	1	hsa
.......aggGaagaugcuggcauagcu	2	1	hsa
.......aggcaagaugcAggcauagcu	1	1	hsa
.......aggcaagaugUuggcauagcu	1	1	hsa
.......aggcaagaugAuggcauagcu	2	1	hsa
.......aggcaagUugcuggcauagcu	1	1	hsa
.......Gggcaagaugcuggcauagcu	5	1	hsa
.......aggcaagaugcuggcCuagcu	17	1	hsa
.......agCcaagaugcuggcauagcu	4	1	hsa
.......aggcaagaugcuggGauagcu	3	1	hsa
.......aggcaagaugcuggcauagcA	10	1	hsa
.......agAcaagaugcuggcauagcu	2	1	hsa
.......aggcaagaugcuggcUuagcu	2	1	hsa
.......aggUaagaugcuggcauagcu	5	1	hsa
.......aggcaagaugcuAgcauagcu	4	1	hsa
.......aggcaagaugcuggcauaCcu	3	1	hsa

hsa-miR-31-3p

hsa-miR-31-5p

ggagaggaggcaagaugcuggcauagcuguugaacugggaaccugcuaugccaacauauugccaucuuucc

.......aggcaagauCcuggcauagcu.....	12	1	hsa
.......aggcaagGugcuggcauagcu.....	4	1	hsa
.......aggcaagaugcuggcauagcG.....	4	1	hsa
.......aggcaagaugcuggcauagGu.....	4	1	hsa
.......aggcaCgaugcuggcauagcug.....	6	1	hsa
.......aggcaagaugcugUcauagcug.....	33	1	hsa
.......aggcaagaugcuCgcauagcug.....	2	1	hsa
.......aggcaagaugGuggcauagcug.....	6	1	hsa
.......aggcaagaugcuggcauaUcug.....	36	1	hsa
.......aggcaagaugcuggcaAagcug.....	1	1	hsa
.......aggcaagaugcuggcCuagcug.....	22	1	hsa
.......aggcaagaugcuggcauagcuC.....	5	1	hsa
.......aggcaagaugcuggcauGgcug.....	3	1	hsa
.......aggcaagaCgcuggcauagcug.....	1	1	hsa
.......aggcaagaugcCggcauagcug.....	10	1	hsa
.......aggcaaAaugcuggcauagcug.....	8	1	hsa
.......aggcaagaugcuggcauagcug.....	5433	0	hsa
.......aAgcaagaugcuggcauagcug.....	9	1	hsa
.......aUgcaagaugcuggcauagcug.....	12	1	hsa
.......aggGaagaugcuggcauagcug.....	3	1	hsa
.......aggcaagCugcuggcauagcug.....	8	1	hsa
.......aggcaaCaugcuggcauagcug.....	3	1	hsa
.......agUcaagaugcuggcauagcug.....	5	1	hsa
.......aggcaagaugcuggcauaCcug.....	4	1	hsa
.......aggcaagaugcuggcauagcuU.....	110	1	hsa
.......aggcaGgaugcuggcauagcug.....	5	1	hsa
.......aggcaUgaugcuggcauagcug.....	4	1	hsa
.......aggcUagaugcuggcauagcug.....	1	1	hsa
.......aggcaagauCcuggcauagcug.....	18	1	hsa
.......aggcaagaugUuggcauagcug.....	6	1	hsa
.......Gggcaagaugcuggcauagcug.....	6	1	hsa
.......aggcaagaugcugCcauagcug.....	3	1	hsa
.......aggcaagaugcuggGauagcug.....	5	1	hsa
.......aggcaagaugcuggcauagGug.....	8	1	hsa
.......aggcaagaugcuggcauagcCg.....	3	1	hsa
.......aggcaagaugcGggcauagcug.....	4	1	hsa
.......aggcaagaugcuggcauagcAg.....	2	1	hsa
.......aCgcaagaugcuggcauagcug.....	7	1	hsa
.......aggcaagaugcuAgcauagcug.....	7	1	hsa
.......aggcaaUaugcuggcauagcug.....	13	1	hsa
.......aggcCagaugcuggcauagcug.....	34	1	hsa
.......aggcaagaugcuggUauagcug.....	1	1	hsa
.......aggcaagaugcuggAauagcug.....	3	1	hsa
.......aggcaagaugcuggcauagAug.....	4	1	hsa
.......aggcaagaugcuggcauagUug.....	14	1	hsa
.......aggcaagaugcAggcauagcug.....	7	1	hsa
.......aggcaagGugcuggcauagcug.....	4	1	hsa
.......aggcaagaugcugAcauagcug.....	7	1	hsa
.......aggcaagaugcuggcUuagcug.....	5	1	hsa
.......aggcaagaugcuggcauagcGg.....	6	1	hsa
.......agCcaagaugcuggcauagcug.....	4	1	hsa
.......aggcaagUugcuggcauagcug.....	2	1	hsa
.......aggcaagaAgcuggcauagcug.....	3	1	hsa
.......aggcaagaugcuggcauaAcug.....	10	1	hsa
.......aggUaagaugcuggcauagcug.....	5	1	hsa
.......aggcaagaugAuggcauagcug.....	2	1	hsa
.......aggcaagaugcuggcaGagcug.....	5	1	hsa
.......Cggcaagaugcuggcauagcug.....	14	1	hsa
.......aggcaagaugcuUgcauagcug.....	14	1	hsa
.......aggcaagauAcuggcauagcug.....	17	1	hsa
.......aggcaagaugcuggcauCgcug.....	5	1	hsa
.......aggcaagaugcuggcaCagcug.....	4	1	hsa
.......aggcaagaugcuggcauUgcug.....	1	1	hsa
.......aggcaagaugcuggcauagcuA.....	86	1	hsa
.......agAcaagaugcuggcauagcug.....	9	1	hsa
.......aggcaagaugcuggcGuagcug.....	1	1	hsa
.......aggcaagauUcuggcauagcug.....	30	1	hsa
.......Uggcaagaugcuggcauagcug.....	3	1	hsa
.......aggcGagaugcuggcauagcug.....	4	1	hsa

hsa-miR-31-3p

hsa-miR-31-5p

ggagaggaggcaagaugcuggcauagcuguugaacugggaaccugcuaugccaacauauugccaucuuucc

.......aggAaagaugcuggcauagcug	1	1	hsa
.......aggcaagaugcugUcauagcugu	31	1	hsa
.......aggcaaUaugcuggcauagcugu	11	1	hsa
.......Cggcaagaugcuggcauagcugu	6	1	hsa
.......aggcaagaugcuggcaCagcugu	3	1	hsa
.......aggcaagGugcuggcauagcugu	3	1	hsa
.......aggcaagaugcuggcauaUcugu	38	1	hsa
.......aggcaagaugcuggAauagcugu	3	1	hsa
.......aggcaagaugcuggcauagcuCu	13	1	hsa
.......aggcaagaugcuggcauagAugu	1	1	hsa
.......aggcaagaugcuggcauCgcugu	12	1	hsa
.......aggcaagauUcuggcauagcugu	42	1	hsa
.......agAcaagaugcuggcauagcugu	6	1	hsa
.......aggcaagaugcuUgcauagcugu	15	1	hsa
.......agUcaagaugcuggcauagcugu	10	1	hsa
.......aggcaagaugcuggcCuagcugu	20	1	hsa
.......aggcaagaugcugAcauagcugu	8	1	hsa
.......aggcaagaugcuggcauagcugG	9	1	hsa
.......aggcaagaugcuggcGuagcugu	6	1	hsa
.......aggcaagaugcuggcaGagcugu	5	1	hsa
.......aggcaagaugcuggcauaAcugu	6	1	hsa
.......aggcCagaugcuggcauagcugu	35	1	hsa
.......aggcaagaugcuggcauGgcugu	5	1	hsa
.......aggcaagaugUuggcauagcugu	13	1	hsa
.......aggcaaCaugcuggcauagcugu	5	1	hsa
.......aggcaagaugcuggcauagcugu	5540	0	hsa
.......aggcaagauAcuggcauagcugu	18	1	hsa
.......aggcaagaugcuggcaAagcugu	1	1	hsa
.......aggcGagaugcuggcauagcugu	2	1	hsa
.......aggcaagaugcAggcauagcugu	2	1	hsa
.......aggcaagaugcuCgcauagcugu	2	1	hsa
.......aUgcaagaugcuggcauagcugu	13	1	hsa
.......aggcaagauCcuggcauagcugu	22	1	hsa
.......aggcaagaugcuggUauagcugu	7	1	hsa
.......aggcaagaugcuggcauagcAgu	2	1	hsa
.......aggcaagaugcuggcUuagcugu	2	1	hsa
.......aggcUagaugcuggcauagcugu	4	1	hsa
.......aggcaagaugcugCcauagcugu	6	1	hsa
.......aggUaagaugcuggcauagcugu	15	1	hsa
.......aggcaagaugcGggcauagcugu	9	1	hsa
.......aggcaagaugcuggcauagUugu	13	1	hsa
.......agCcaagaugcuggcauagcugu	1	1	hsa
.......aggcaagaugcuggcauagcCgu	7	1	hsa
.......aggcaagaugcuggcauagGugu	3	1	hsa
.......aggcaagaugcuggcauagcugC	12	1	hsa
.......aCgcaagaugcuggcauagcugu	9	1	hsa
.......aggcaagaugcuggcauagcuUu	63	1	hsa
.......aggcaagaugcuggGauagcugu	9	1	hsa
.......aggcaagaugcuggcauaCcugu	4	1	hsa
.......aAgcaagaugcuggcauagcugu	8	1	hsa
.......aggcaagaugcuggcauagcGgu	1	1	hsa
.......aggAaagaugcuggcauagcugu	3	1	hsa
.......aggcaGgaugcuggcauagcugu	3	1	hsa
.......aggcaCgaugcuggcauagcugu	7	1	hsa
.......aggcaagaugcuAgcauagcugu	3	1	hsa
.......aggcaagaugcuggcauagcugA	1230	1	hsa
.......Uggcaagaugcuggcauagcugu	5	1	hsa
.......aggcaagaugcuggcauagcuAu	27	1	hsa
.......aggcaagaGgcuggcauagcugu	1	1	hsa
.......aggcaagaugcCggcauagcugu	12	1	hsa
.......aggcaagaugGuggcauagcugu	4	1	hsa
.......aggGaagaugcuggcauagcugu	4	1	hsa
.......aggcaagaAgcuggcauagcugu	2	1	hsa
.......aggcaagUugcuggcauagcugu	1	1	hsa
.......aggcaaAaugcuggcauagcugu	7	1	hsa
.......aggcaUgaugcuggcauagcugu	3	1	hsa
.......aggcaagaugcuggcauUgcugu	1	1	hsa
.......Gggcaagaugcuggcauagcugu	7	1	hsa
.......aggcaagaCgcuggcauagcugu	6	1	hsa

hsa-miR-31-3p

hsa-miR-31-5p

ggagaggaggcaagaugcuggcauagcuguugaacugggaaccugcuaugccaacauauugccaucuuucc

.......aggcaagCugcuggcauagcugu.....	10	1	hsa
.......aUgcaagaugcuggcauagcuguu.....	1	1	hsa
.......agCcaagaugcuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuggcauGgcuguu.....	1	1	hsa
.......aggcaagaugcuggcauagcuguG.....	9	1	hsa
.......aggcaagaugcuggcauagcuAuu.....	1	1	hsa
.......aggcaaAaugcuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuggcauagcuguu.....	317	0	hsa
.......aggcaagaugcuggcauagAuguu.....	1	1	hsa
.......aggcaagaugcuggcaAagcuguu.....	1	1	hsa
.......aggcaagaugUuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuUgcauagcuguu.....	2	1	hsa
.......aggcaagauAcuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuggcCuagcuguu.....	2	1	hsa
.......aggcaagaugcugCcauagcuguu.....	1	1	hsa
.......aggcaagaCgcuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuggcauaAcuguu.....	1	1	hsa
.......agUcaagaugcuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuggcauagcugAu.....	45	1	hsa
.......aggcaagaugcuggcauagcuguA.....	288	1	hsa
.......Gggcaagaugcuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuCgcauagcuguu.....	2	1	hsa
.......aggcaagaugcugUcauagcuguu.....	4	1	hsa
.......aggcaagaugcCggcauagcuguu.....	1	1	hsa
.......aggcCagaugcuggcauagcuguu.....	4	1	hsa
.......aggcaagaugcuggcGuagcuguu.....	1	1	hsa
.......aggcaagaGgcuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuggcauaUcuguu.....	3	1	hsa
.......aggcaagaugcuggcauagcuUuu.....	5	1	hsa
.......aggcaaUaugcuggcauagcuguu.....	1	1	hsa
.......aggcaagauUcuggcauagcuguu.....	1	1	hsa
.......aggcaagaugcuggcauagcugCu.....	1	1	hsa
.......aggcaagaugcuggcauagcugGu.....	4	1	hsa
.......aggcaagaugcuggcauagcuguC.....	3	1	hsa
.......aggcaagaugcuggcauagcuguuA.....	4	1	hsa
.......aggcaagaugcuggcauagcuguug.....	2	0	hsa
.......aggcaagaugcuggcauagcuguuU.....	113	1	hsa
.......aggcaagaugcuggcauagcuguAg.....	14	1	hsa
.......aggcaagaugcuggcauagcuguuga.....	1	0	hsa
.......aggcaagaugcuggcauagcuguugU.....	2	1	hsa
.......aggcaagaugcuggcauagcuguuUa.....	1	1	hsa
.......aggcaagaugcuggcauagcuguAga.....	6	1	hsa
.......aggcaagaugcuggcauagcuguuAa.....	1	1	hsa
.......aggcaagaugcuggcauagcuguAgaa.....	1	1	hsa
........ggcaagaugcuggcauagc.....	1	0	hsa
........ggcaagaugcuggcauagcu.....	16	0	hsa
........ggcaagaugcCggcauagcug.....	1	1	hsa
........ggcaagaugcuggcauagcug.....	18	0	hsa
........ggcaagaugcuggcauagcuU.....	1	1	hsa
........gUcaagaugcuggcauagcug.....	1	1	hsa
........ggcaagaugcuggcauagcugu.....	30	0	hsa
........ggcaagaugcuggcauagcugA.....	5	1	hsa
........ggcaagaugcuggcauagcuUu.....	1	1	hsa
........ggcaagaugcuggcaAagcugu.....	1	1	hsa
........ggcaagaugcuggcauagcuguA.....	3	1	hsa
.........gcaagaugcuggcauagcuguAg.....	1	1	hsa
..........caagaugcuggcauagcu.....	1	0	hsa
..........caagaugcuggcauagcugA.....	1	1	hsa
..........caagaugcuggcauagcugu.....	1	0	hsa
...........aagaugcuggcauagcugA.....	2	1	hsa
...........aagaugcuggcauagcugu.....	3	0	hsa
.....................................ugcuaugccaacauauugcc.....	1	0	hsa
.....................................ugcuaugccaacauauugcca.....	4	0	hsa
.....................................uAcuaugccaacauauugccau.....	1	1	hsa
.....................................ugcuaugccaacauauugccaA.....	1	1	hsa
.....................................ugcuaugccaacauauugccau.....	19	0	hsa
.....................................ugcuCugccaacauauugccauc.....	1	1	hsa
.....................................ugcuaugccaacauauugccauA.....	6	1	hsa
.....................................ugAuaugccaacauauugccauc.....	1	1	hsa

hsa-miR-31-3p

hsa-miR-31-5p

ggagaggaggcaagaugcuggcauagcuguugaacugggaaccugcuaugccaacauauugccaucuuucc

.....ugcuaugccCacauauugccauc.....	1	1	hsa
.....ugcuaugccaacauauugccauU.....	1	1	hsa
.....ugcuaugccaacauaCugccauc.....	1	1	hsa
.....ugcuaugccaacauauuUccauc.....	1	1	hsa
.....ugcuaugccaacauauugccauc.....	64	0	hsa
.....ugcuaugccaacCuauugccauc.....	1	1	hsa
.....ugcuaugccaacauauugccaucu....	5	0	hsa
.....ugcuaugccaacauauugccaucA....	10	1	hsa
.....gcuaugccaacauauugccau......	1	0	hsa
.....gcuaugccaacauauugccauc.....	2	0	hsa
.....uaugccaacauauugccaucA....	1	1	hsa
.....uaugccaacauauugccaucu....	2	0	hsa