



|                                                                                                                   |       |       |        |
|-------------------------------------------------------------------------------------------------------------------|-------|-------|--------|
| 5' - ucgagcagggggcgagggaugaggagagaaggcaguuccugaugguccccucccaggggcuggcuuuccucuggguccuucccccuaaugaccgcgucuucgucgagg | -3'   | obs   |        |
| ucgagcagggggcgagggaugaggagagaaggcaguuccugaugguccccucccaggggcuggcuuuccucuggguccuucccccuaaugaccgcgucuucgucgagg      |       | exp   |        |
| ucgagcagggggcgagggaugaggagagaaggcaguuccugaugguccccucccaggggcuggcuuuccucuggguccuucccccuaaugaccgcgucuucgucgagg      |       | known |        |
| (((((...((((((((((((...(((...(((...(((((((((...(((...)))...))))))...))))))...))))))...))))))...))))))...))))))..  | reads | mm    | sample |
| .....aAuggagagaaggcaguuccuga.....                                                                                 | 11    | 1     | hsa    |
| .....aAuggagagaaggcaguuccugau.....                                                                                | 1     | 1     | hsa    |
| .....uuggagagaaggcaguuccuga.....                                                                                  | 2     | 0     | hsa    |
| .....Cuggagagaaggcaguuccuga.....                                                                                  | 20    | 1     | hsa    |
| .....Cuggagagaaggcaguuccugau.....                                                                                 | 4     | 1     | hsa    |
| .....uggagagaaggcaguuc.....                                                                                       | 21    | 0     | hsa    |
| .....ugAagagaaggcaguucc.....                                                                                      | 1     | 1     | hsa    |
| .....uggagagaaggcaguucc.....                                                                                      | 105   | 0     | hsa    |
| .....uggagagaaggcaguCcc.....                                                                                      | 8     | 1     | hsa    |
| .....Nggagagaaggcaguucc.....                                                                                      | 1     | 1     | hsa    |
| .....uggagaAaaaggcaguuccu.....                                                                                    | 2     | 1     | hsa    |
| .....uggagagaaggcaguuccA.....                                                                                     | 2     | 1     | hsa    |
| .....uggagagaaggcaguuccAu.....                                                                                    | 1     | 1     | hsa    |
| .....uggagagaaggcagAuccu.....                                                                                     | 1     | 1     | hsa    |
| .....uggagagaaggcGguuccu.....                                                                                     | 1     | 1     | hsa    |
| .....uggagagaaggcaguuccu.....                                                                                     | 135   | 0     | hsa    |
| .....uggagagaaggcaguuccC.....                                                                                     | 18    | 1     | hsa    |
| .....Nggagagaaggcaguuccu.....                                                                                     | 1     | 1     | hsa    |
| .....uggagagaaaUgcaguuccu.....                                                                                    | 1     | 1     | hsa    |
| .....uggagagaaggcaguAccu.....                                                                                     | 1     | 1     | hsa    |
| .....uggagagaaggcagGuccug.....                                                                                    | 2     | 1     | hsa    |
| .....uggagaAaaaggcaguuccug.....                                                                                   | 1     | 1     | hsa    |
| .....uggagagaaggcaguuccug.....                                                                                    | 530   | 0     | hsa    |
| .....uggagagaaggcaguCccug.....                                                                                    | 1     | 1     | hsa    |
| .....uggagagaaggcaguuccuU.....                                                                                    | 3     | 1     | hsa    |
| .....uggagagaaggcaguuccAug.....                                                                                   | 1     | 1     | hsa    |
| .....uggagagaaUggcaguuccug.....                                                                                   | 2     | 1     | hsa    |
| .....ugUagagaaggcaguuccug.....                                                                                    | 1     | 1     | hsa    |
| .....uggagagaaggcaguuccug.....                                                                                    | 1     | 1     | hsa    |
| .....Nggagagaaggcaguuccug.....                                                                                    | 2     | 1     | hsa    |
| .....Cggagagaaggcaguuccug.....                                                                                    | 2     | 1     | hsa    |
| .....uqqaqUqaaaagqcaguuccug.....                                                                                  | 1     | 1     | hsa    |

## Mature

## Star

ucgagcagggggcgagggauuggagagaaagggcaguuccugauggucccccaggggucggcuuccucugguccuucccccaugaccgcgucucgucgagg

|                            |       |   |     |
|----------------------------|-------|---|-----|
| .Aggagagaaagggcaguuccug.   | 1     | 1 | hsa |
| .uUgagagaaagggcaguuccug.   | 1     | 1 | hsa |
| .uggagagUaaagggcaguuccug.  | 1     | 1 | hsa |
| .uggagagaaagggcaguUcug.    | 1     | 1 | hsa |
| .uggagagaaaUgcaguuccug.    | 1     | 1 | hsa |
| .uggagagaaagggcaguuccuA.   | 6     | 1 | hsa |
| .uggCgagaaagggcaguuccug.   | 1     | 1 | hsa |
| .uggaAagaaagggcaguuccug.   | 1     | 1 | hsa |
| .uggagGgaaagggcaguuccuga.  | 12    | 1 | hsa |
| .uggagagaaagggcCguuccuga.  | 19    | 1 | hsa |
| .uggagagaaagggcaCuuccuga.  | 9     | 1 | hsa |
| .uggagagaaagggcagGuccuga.  | 23    | 1 | hsa |
| .uggagagaaagggcaguuccugC.  | 16    | 1 | hsa |
| .uggaUagaaagggcaguuccuga.  | 13    | 1 | hsa |
| .Cggagagaaagggcaguuccuga.  | 12    | 1 | hsa |
| .uggagagaaagggcaguuccGga.  | 1     | 1 | hsa |
| .uggagagaaagggcaguuccugU.  | 207   | 1 | hsa |
| .uggagagaaagUcaguuccuga.   | 18    | 1 | hsa |
| .uggCgagaaagggcaguuccuga.  | 10    | 1 | hsa |
| .uggagaUaaagggcaguuccuga.  | 14    | 1 | hsa |
| .uggagagaaagggcaguuccCga.  | 6     | 1 | hsa |
| .uggagagaaaUgcaguuccuga.   | 34    | 1 | hsa |
| .uggaAagaaagggcaguuccuga.  | 32    | 1 | hsa |
| .uggNgagaaagggcaguuccuga.  | 1     | 1 | hsa |
| .uggagagaNagggcaguuccuga.  | 1     | 1 | hsa |
| .uggagagaaagggcGguuccuga.  | 5     | 1 | hsa |
| .uggagagaaaAgcaguuccuga.   | 14    | 1 | hsa |
| .uggagagaaagggcaguuccAga.  | 3     | 1 | hsa |
| .ugUagagaaagggcaguuccuga.  | 20    | 1 | hsa |
| .uggagagaUagggcaguuccuga.  | 3     | 1 | hsa |
| .uggaCagaaagggcaguuccuga.  | 2     | 1 | hsa |
| .uggagagaaagggcaguAccuga.  | 14    | 1 | hsa |
| .uUgagagaaagggcaguuccuga.  | 18    | 1 | hsa |
| .uCgagagaaagggcaguuccuga.  | 9     | 1 | hsa |
| .uggagagCaagggcaguuccuga.  | 6     | 1 | hsa |
| .Nggagagaaagggcaguuccuga.  | 53    | 1 | hsa |
| .uggagagaaagggcagCuccuga.  | 22    | 1 | hsa |
| .uggagagaaCggcaguuccuga.   | 14    | 1 | hsa |
| .uAgaagagaaagggcaguuccuga. | 18    | 1 | hsa |
| .uggUgagaaagggcaguuccuga.  | 6     | 1 | hsa |
| .uggagagaaagggGaguuccuga.  | 5     | 1 | hsa |
| .uggagagaaagggcaguNccuga.  | 3     | 1 | hsa |
| .uggagagGaagggcaguuccuga.  | 17    | 1 | hsa |
| .uggagagaaagggcaguUGcuga.  | 7     | 1 | hsa |
| .uggagagaCagggcaguuccuga.  | 6     | 1 | hsa |
| .uggGgagaaagggcaguuccuga.  | 25    | 1 | hsa |
| .uggagagaaagggcaAuuccuga.  | 7     | 1 | hsa |
| .uggagagaaagggcaguucAuga.  | 7     | 1 | hsa |
| .uggagagaGagggcaguuccuga.  | 9     | 1 | hsa |
| .Gggagagaaagggcaguuccuga.  | 8     | 1 | hsa |
| .uggagagaaagggcagAuccuga.  | 17    | 1 | hsa |
| .uggagagaaagggUaguuccuga.  | 23    | 1 | hsa |
| .uggagagaaagggcaguUcuga.   | 43    | 1 | hsa |
| .Aggagagaaagggcaguuccuga.  | 11    | 1 | hsa |
| .uggagagUaaagggcaguuccuga. | 1     | 1 | hsa |
| .uggagagaaagggcaguucGuga.  | 5     | 1 | hsa |
| .uggagagaaagggcaguuccuAa.  | 81    | 1 | hsa |
| .uggagagaaagggcaguCccuga.  | 17    | 1 | hsa |
| .uggagagaaagggcaguGccuga.  | 2     | 1 | hsa |
| .uggagaAaaagggcaguuccuga.  | 46    | 1 | hsa |
| .ugAagagaaagggcaguuccuga.  | 13    | 1 | hsa |
| .uggagagaaagggcaguuccuga.  | 24375 | 0 | hsa |
| .ugCaagagaaagggcaguuccuga. | 3     | 1 | hsa |
| .uggagagaaagggcaguuccugG.  | 10    | 1 | hsa |
| .uggagUgaaagggcaguuccuga.  | 8     | 1 | hsa |
| .uggagagaaagggcaUuuccuga.  | 44    | 1 | hsa |
| .uggagagaaagCcaguuccuga.   | 8     | 1 | hsa |
| .uggagaCaaagggcaguuccuga.  | 8     | 1 | hsa |
| .uggagCgaaagggcaguuccuga.  | 3     | 1 | hsa |
| .uggagagaaagggcaguucUuga.  | 14    | 1 | hsa |

## Mature

## Star

ucgagcagggggcgagggauuggagagaaagggcaguuccugauggguccccuccccaggggucggcuuuccucugguccuuccccucccaugaccgcgucucgucgagg

|                                     |      |   |     |
|-------------------------------------|------|---|-----|
| .....uggagagaaagAcaguuccuga.....    | 18   | 1 | hsa |
| .....uggagagaaagggcaguuccuCa.....   | 4    | 1 | hsa |
| .....uggagagaaagggcUguuccuga.....   | 1    | 1 | hsa |
| .....uggagagaaaggcaguuccuga.....    | 11   | 1 | hsa |
| .....uggagagaaaggAaguuccuga.....    | 8    | 1 | hsa |
| .....uggagagaaagggcaguuuAcuga.....  | 12   | 1 | hsa |
| .....uggagagaaUggcaguuccuga.....    | 3    | 1 | hsa |
| .....uggagagaaagggcaguuccuVa.....   | 30   | 1 | hsa |
| .....uggagagaaaCgcaguuccuga.....    | 9    | 1 | hsa |
| .....uAgagagaaagggcaguuccugau.....  | 1    | 1 | hsa |
| .....uggagagaaagggcCaCuuccugau..... | 1    | 1 | hsa |
| .....uggagagaaagggcaguuccugUu.....  | 42   | 1 | hsa |
| .....ugCagagaaagggcaguuccugau.....  | 2    | 1 | hsa |
| .....uggagagaaaAgcaguuccugau.....   | 1    | 1 | hsa |
| .....uggagagaaagggcaguuccuUau.....  | 4    | 1 | hsa |
| .....uggagagaaaCgcaguuccugau.....   | 2    | 1 | hsa |
| .....ugAagagaaagggcaguuccugau.....  | 7    | 1 | hsa |
| .....uggagagaaagggcGguuccugau.....  | 3    | 1 | hsa |
| .....uggagagaaagggcAuuccugau.....   | 1    | 1 | hsa |
| .....uggUgagaaagggcaguuccugau.....  | 1    | 1 | hsa |
| .....uggaCagaaagggcaguuccugau.....  | 1    | 1 | hsa |
| .....uggagagaaagggcaguuccugCu.....  | 5    | 1 | hsa |
| .....uggagagaaagggcaguuccuAau.....  | 18   | 1 | hsa |
| .....uggagagaaagggcaguuccugaG.....  | 135  | 1 | hsa |
| .....uggagGgaaagggcaguuccugau.....  | 3    | 1 | hsa |
| .....uggCgagaaagggcaguuccugau.....  | 4    | 1 | hsa |
| .....uggagaAaaagggcaguuccugau.....  | 9    | 1 | hsa |
| .....uggagagaaagAcaguuccugau.....   | 3    | 1 | hsa |
| .....uggagagaaagggGaguuccugau.....  | 3    | 1 | hsa |
| .....uggagagUaaagggcaguuccugau..... | 1    | 1 | hsa |
| .....uggagagaaaggUaguuccugau.....   | 4    | 1 | hsa |
| .....uggagagaaagggcagGuuccugau..... | 3    | 1 | hsa |
| .....Nggagagaaagggcaguuccugau.....  | 9    | 1 | hsa |
| .....uggagagaaagggcaguuccugGu.....  | 4    | 1 | hsa |
| .....uggagagaaagggcaguuccCgau.....  | 6    | 1 | hsa |
| .....uggagagaaaggcaguuccugau.....   | 2    | 1 | hsa |
| .....uggagagaaagggcaguuccugaA.....  | 3619 | 1 | hsa |
| .....uggagagaaagggcaguuuUcugau..... | 16   | 1 | hsa |
| .....uggagagaaagggcaguucUugau.....  | 9    | 1 | hsa |
| .....uggaAagaaagggcaguuccugau.....  | 7    | 1 | hsa |
| .....uggagagaaagggcaguuccugaC.....  | 78   | 1 | hsa |
| .....uggagagCaagggcaguuccugau.....  | 1    | 1 | hsa |
| .....uggagagaaCggcaguuccugau.....   | 7    | 1 | hsa |
| .....uggagagaGagggcaguuccugau.....  | 4    | 1 | hsa |
| .....uUgagagaaagggcaguuccugau.....  | 4    | 1 | hsa |
| .....Cggagagaaagggcaguuccugau.....  | 8    | 1 | hsa |
| .....uggagagGaaagggcaguuccugau..... | 1    | 1 | hsa |
| .....uggagagaaagggcaguucGugau.....  | 2    | 1 | hsa |
| .....uggGgagaaagggcaguuccugau.....  | 2    | 1 | hsa |
| .....uggagagaaagggcaguAccugau.....  | 4    | 1 | hsa |
| .....uggagagaaagggcCguuccugau.....  | 1    | 1 | hsa |
| .....uggagagaCaggcaguuccugau.....   | 4    | 1 | hsa |
| .....uggagagaaUggcaguuccugau.....   | 1    | 1 | hsa |
| .....uggagagaaagggcagNuuccugau..... | 1    | 1 | hsa |
| .....uggagagaaagggcaguuccugau.....  | 5947 | 0 | hsa |
| .....uggagagaaagCcaguuccugau.....   | 1    | 1 | hsa |
| .....uggagagaaagggcagCuuccugau..... | 9    | 1 | hsa |
| .....uggagagaaagggcAUuccugau.....   | 18   | 1 | hsa |
| .....ugUagagaaagggcaguuccugau.....  | 4    | 1 | hsa |
| .....uggagaUaaagggcaguuccugau.....  | 3    | 1 | hsa |
| .....uggagCGaaagggcaguuccugau.....  | 4    | 1 | hsa |
| .....uggagagaaagggcaguCccugau.....  | 8    | 1 | hsa |
| .....uggagagaaagggcaguuuAcugau..... | 3    | 1 | hsa |
| .....uggagagaaagggcaguuccuCa.....   | 3    | 1 | hsa |
| .....uggagagaaagggcagAuuccugau..... | 1    | 1 | hsa |
| .....Aggagagaaagggcaguuccugau.....  | 1    | 1 | hsa |
| .....uggagagaaagggcaguucAugau.....  | 1    | 1 | hsa |
| .....uggaUagaaagggcaguuccugau.....  | 7    | 1 | hsa |
| .....uggagagaaagUcaguuccugau.....   | 2    | 1 | hsa |
| .....uggagagaaaUcaguuccugau.....    | 10   | 1 | hsa |

## Mature

## Star

|                                     |                                                                                         |   |     |  |
|-------------------------------------|-----------------------------------------------------------------------------------------|---|-----|--|
| ucgagcaggggcgagggau                 | uggagagaaaggcaguuccugauggguccccucccaggggcuggcuuuccucugguccuuccucccaaugaccgcgucucgucgagg |   |     |  |
| .....uggagagaaaggcaguuccugauAg..... | 23                                                                                      | 1 | hsa |  |
| .....uggagagaaaggcaguuccugaug.....  | 20                                                                                      | 0 | hsa |  |
| .....uggagagaaaggcaguuccugauC.....  | 22                                                                                      | 1 | hsa |  |
| .....uggagagaaaggcaguuccugaCg.....  | 2                                                                                       | 1 | hsa |  |
| .....uggagagaaaggcaguuccugauA.....  | 268                                                                                     | 1 | hsa |  |
| .....uggagagaaaggcaguuccugaGg.....  | 1                                                                                       | 1 | hsa |  |
| .....uggagagaaaggcaguuccugauU.....  | 483                                                                                     | 1 | hsa |  |
| .....uggagagaaaggcaguuccugaugA..... | 1                                                                                       | 1 | hsa |  |
| .....uggagagaaaggcaguuccugauAg..... | 1                                                                                       | 1 | hsa |  |
| .....uggagagaaaggcaguuccugaugU..... | 3                                                                                       | 1 | hsa |  |
| .....uggagagaaaggcaguuccugaugC..... | 1                                                                                       | 1 | hsa |  |
| .....uggagagaaaggcaguuccugaugg..... | 1                                                                                       | 0 | hsa |  |
| .....Ugagagaaaggcaguucc.....        | 1                                                                                       | 1 | hsa |  |
| .....ggagagaaaggcaguuccug.....      | 3                                                                                       | 0 | hsa |  |
| .....ggagagaaaggcaUuuccuga.....     | 1                                                                                       | 1 | hsa |  |
| .....ggaUagaaaggcaguuccuga.....     | 2                                                                                       | 1 | hsa |  |
| .....Cgagagaaaggcaguuccuga.....     | 1                                                                                       | 1 | hsa |  |
| .....ggagagaaaggcaguuccuga.....     | 35                                                                                      | 0 | hsa |  |
| .....ggagagaaaggUcaguuccuga.....    | 1                                                                                       | 1 | hsa |  |
| .....ggagagGaggcaguuccuga.....      | 1                                                                                       | 1 | hsa |  |
| .....Ugagagaaaggcaguuccuga.....     | 19                                                                                      | 1 | hsa |  |
| .....ggagagaaaggcaguuccugaG.....    | 1                                                                                       | 1 | hsa |  |
| .....ggagagaaaggcaguuccugau.....    | 10                                                                                      | 0 | hsa |  |
| .....ggagagaaaggcaguuccugauA.....   | 12                                                                                      | 1 | hsa |  |
| .....Ugagagaaaggcaguuccugau.....    | 3                                                                                       | 1 | hsa |  |
| .....ggagagaaaggcaguuccugauU.....   | 2                                                                                       | 1 | hsa |  |
| .....ggagagaaaggcaguuccugauA.....   | 1                                                                                       | 1 | hsa |  |
| .....Uagagaaaggcaguuccuga.....      | 3                                                                                       | 1 | hsa |  |
| .....gagagaaaggcaguuccuga.....      | 3                                                                                       | 0 | hsa |  |
| .....gagagaaaggcaguuccugauC.....    | 1                                                                                       | 1 | hsa |  |
| .....caggggcuggcuuuccucu.....       | 2                                                                                       | 0 | hsa |  |
| .....caggggcuggcuuuccucugg.....     | 5                                                                                       | 0 | hsa |  |
| .....caggggcuggcuuuccucuggu.....    | 16                                                                                      | 0 | hsa |  |
| .....caggggcuggcuuuccucugguU.....   | 1                                                                                       | 1 | hsa |  |
| .....caggggcuggcuuuccucugguA.....   | 8                                                                                       | 1 | hsa |  |
| .....aggggcuggcuuuccucu.....        | 22                                                                                      | 0 | hsa |  |
| .....aggggcuggcuuuccucug.....       | 1                                                                                       | 0 | hsa |  |
| .....aggggcuggcuuuccucugU.....      | 1                                                                                       | 1 | hsa |  |
| .....aggggcuggcuuuccucugg.....      | 11                                                                                      | 0 | hsa |  |
| .....aggggcuggGuuuccucuggu.....     | 1                                                                                       | 1 | hsa |  |
| .....aggggcUgcuuuccucuggu.....      | 2                                                                                       | 1 | hsa |  |
| .....aggggcuggcuuuccuAuggu.....     | 1                                                                                       | 1 | hsa |  |
| .....aggggcuggcuuuccucuggu.....     | 69                                                                                      | 0 | hsa |  |
| .....aggggcuggcuuuccucuggA.....     | 5                                                                                       | 1 | hsa |  |
| .....aggggcuggcuuuccucugguU.....    | 2                                                                                       | 1 | hsa |  |
| .....aggggcuggcuuuccucugguc.....    | 1                                                                                       | 0 | hsa |  |
| .....aggggcuggcuuuccucugguA.....    | 6                                                                                       | 1 | hsa |  |
| .....aggggcuggcuuuccucugguAc.....   | 1                                                                                       | 1 | hsa |  |