

| | Predicted consequential pairing of target region (top) and mRNA (bottom) | Site type | Context++ score | Context++ score percentile | Weighted context++ score | Conserved branch length | P _{CT} |
|----------------------------------|--|-----------|-----------------|----------------------------|--------------------------|-------------------------|-----------------|
| Position 40-47 of CYP24A1 3' UTR | 5' ...UAACAUCAUUCCAACUCAGGGA... | 8mer | -0.46 | 98 | -0.46 | 3.280 | 0.68 |
| hsa-miR-125a-5p | 3' AGUGUCCAUIUCCCAAGUCCCU | | | | | | |
| Position 40-47 of CYP24A1 3' UTR | 5' ...UAACAUCAUUCCAACUCAGGGA... | 8mer | -0.43 | 98 | -0.43 | 3.280 | 0.68 |
| hsa-miR-4319 | 3' CACCGAAACAGGUCCCU | | | | | | |
| Position 40-47 of CYP24A1 3' UTR | 5' ...UAACAUCAUUCCAACUCAGGGA... | 8mer | -0.46 | 98 | -0.46 | 3.280 | 0.68 |
| hsa-miR-125b-5p | 3' AGUGUCCAUIUCCCAAGUCCCU | | | | | | |

2-CYP27B1

Human CYP27B1 ENST00000228606.4 3' UTR length: 3390



Conserved sites for miRNA families broadly conserved among vertebrates

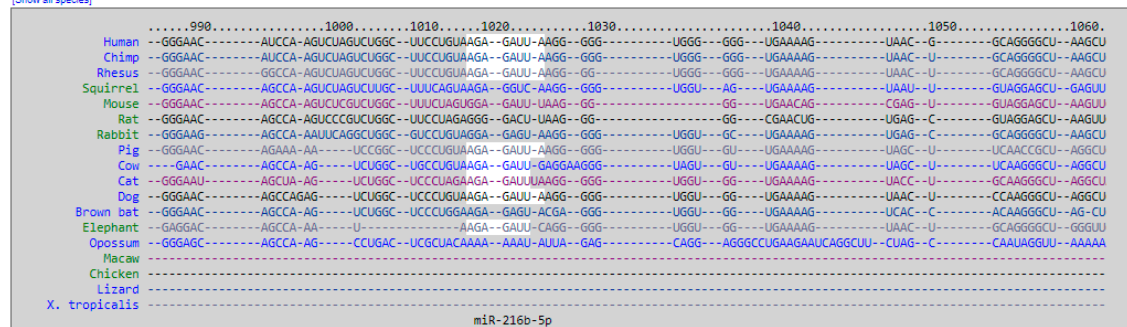
WIK-2155-5p

[Show poorly conserved sites for miRNA families conserved among vertebrates]
[Show conserved sites for miRNA families conserved only among mammals]
[Show poorly conserved sites for miRNA families conserved among mammals]
[Show sites for poorly conserved but confidently annotated miRNA families]
[Show sites for other miRBase annotations, most of which are miRNA* sequences or RNA fragments misannotated as miRNAs]

[\[Download SVG image of miRNA sites\]](#)
[\[View table of miRNA sites\]](#)
[\[View human genome browser \(hg19\)\]](#)

[\[Show all species\]](#)

Key:
 Sites with higher probability of preferential conservation
 8mer 7mer-m8 7mer-A1
 Sites with lower probability of preferential conservation
 8mer 7mer-m8 7mer-A1



Conserved

| | Predicted consequential pairing of target region (top) and miRNA (bottom) | Site type | Context++ score | Context++ score percentile | Weighted context++ score | Conserved branch length | P _{CT} | Predicted relative K _D |
|--------------------------------------|---|-----------|-----------------|----------------------------|--------------------------|-------------------------|-----------------|-----------------------------------|
| Position 1018-1025 of CYP27B1 3' UTR | 5' ...GUCUGGCUUCUGUAAGAGAUUA... | 8mer | -0.03 | 54 | -0.01 | 1.955 | < 0.1 | -4.141 |
| hsa-miR-216b-5p | 3' AGUGUAAACGGACGUCUCUAAA | | | | | | | |

Table S2. Primers sequences for the Vitamin D metabolism genes of the related miRNAs for real-time RT-PCR analyses

| Gene Name | | Primer sequences 5' to 3' |
|------------------------|--------------|---------------------------|
| hsa-miR-21-5p | Left primer | GTACCACCTTGTCGGGTAGC |
| | Right primer | ATGTCAGACAGCCCATCGAC |
| hsa-miR-216b-5p | Left primer | GCGAAATCTCTGCAGGCAA |
| | Right primer | AGTGCAGGGTCCGAGGTATT |
| hsa-miR-125b-5p | Left primer | TCTGGAGTGTGACAATGGTGT |
| | Right primer | GCCTAGCAGTAGCTGTTTAGTGT |
| hsa-miR-U6B | Left primer | CAGCACATATACTAAAATTGGAACG |
| | Right primer | ACGAATTTGCGTGTCAATCC |
| CYP27B1 | Left primer | TACCAGAGCCTCCCGGAAC |
| | Right primer | AACAGCGTGGACACAAACAC |
| CYP24A1 | Left primer | CCTGCTGCCAGATTCTCTGGAA |
| | Right primer | TTGCCATACTTCTTGTGGTACTCC |
| RPLP0 | Left primer | CGACCTGGAAGTCCAACACTAC |
| | Right primer | ATCTGCTGCATCTGCTTG |