

Berberine ameliorates hepatic insulin resistance by regulating microRNA-146b/SIRT1 pathway

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Supplementary Fig S4. MicroRNA target prediction databases, such as microRNA.org, showed alignment between miR-146b and SIRT1. Target analysis predicts that SIRT1 is a potential target of miR-146b in homo sapiens.

microRNA.org - Targets and Expression
 Predicted microRNA targets & target downregulation scores. Experimentally observed expression patterns.
 August 2010 Release. Last Update: 2010-11-01 [[release notes](#)]

target sites by: scores by: Computational Biology Center: miRanda - mirSVR 3.0 2008.08.08 CBio@MSKCC

Display Options
 View target sites of conserved miRNAs with good mirSVR scores
 Selected miRNAs: hsa-miR-146b-5p
 You may add additional miRNAs to the box above.

hsa-miR-146b-5p/SIRT1 Alignment

3' ucggaUACCUAAGUCAGAGu 5' hsa-miR-146b-5p mirSVR score: -0.1514
 ||| ||| ||||| PhastCons score: 0.5853
 1162:5' aaugaUGAAACU-AGUUCUu 3' SIRT1

Mouseover a miRNA mature name to see the miRNA/SIRT1 alignment.

SIRT1 sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae) Display 75 bases per row

1051 GCGAGAAAGGACAGGUCUCCACUUGGGAGGAGUUGGUGUUAUAACCAACUCUCUGCCUUGAGUUGGAGAU 1125
 1126 GAACAGAGUAGUAAUCUUGUAUAGCAGAAUAGUUAUAGAAUUGAAACUAGUUCUUAUUAUUCUUAUUAA 1200
 1201 AAGCTUAGCTGCTUAAAACUAGAGADCACTUUCAGUCUCAAAGCUUCUAGUCUUAAGAGUUCATAC 1275

Supplementary Table S1. Primers used in real-time PCR

Gene	Primers (5'→3')
SIRT1	Forward: GAAGTATGACAAAGATGA Reverse: AGAGCTTCTTGGAGACTG
FOXO1	Forward: ACAATCTGTCCCTACACAG Reverse: AAATTTGCTAAGAGCCGAGAPDH
GAPDH	Forward: CAAGATTGTCAGCAATGCAT Reverse: TCACTGCCACTCAGAAGAC