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

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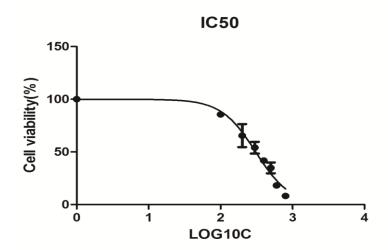
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## Supplementary Fig S1. The chemical structure of Berberine

$$H_3CO$$
  $OCH_3$   $OCH_3$ 

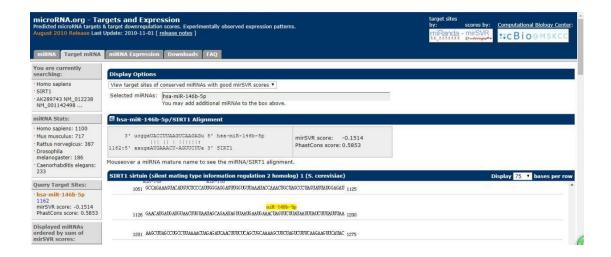
**Supplementary Fig S2.** The inhibitory effect of PA on cell viability of HepG2 cells. After calculation, the IC50 was about  $307.8\mu M$ .



**Supplementary Fig S3.** 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 Mus musculus.



**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.



## 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: TCACTGCCACTCAGAAGA C