

Figure S1.

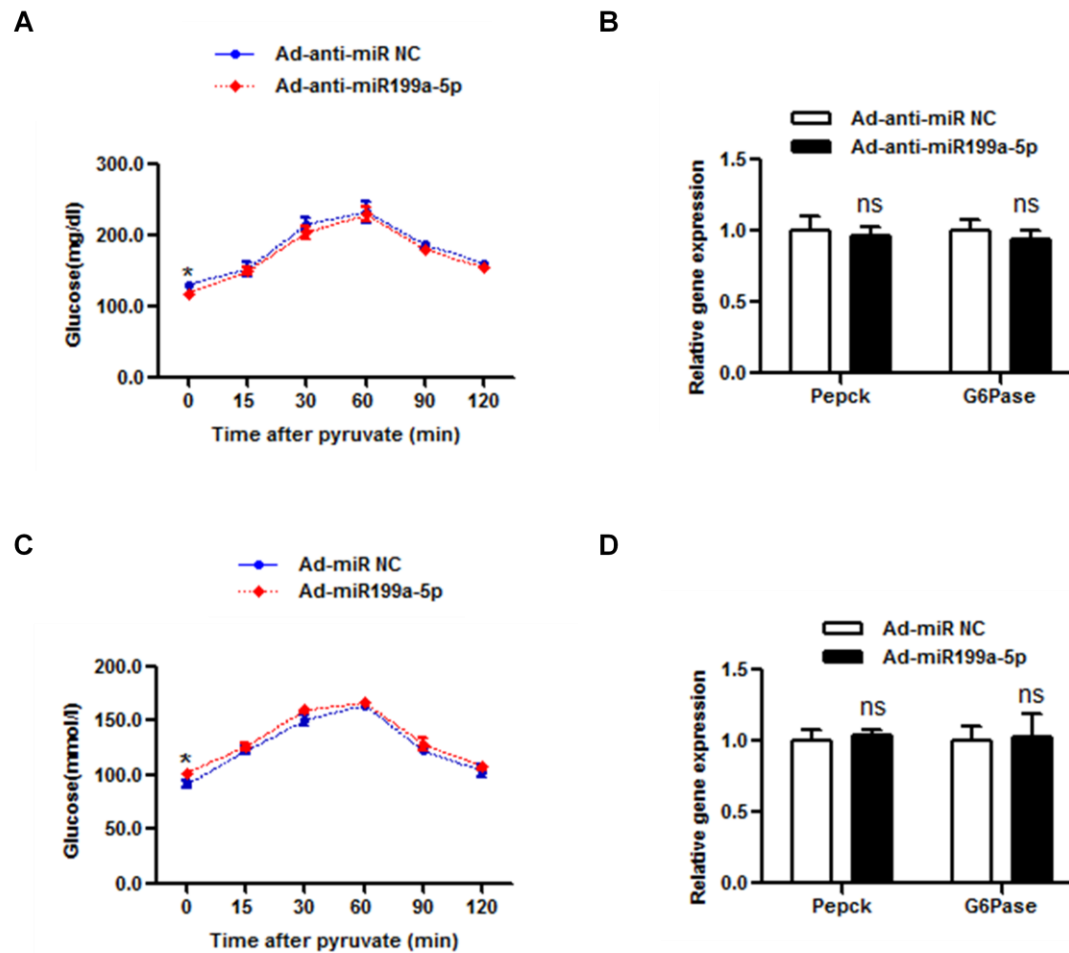


Figure legends.

Figure S1. Inhibition or overexpression of miR199a-5p has no effect on gluconeogenesis *in vivo*.

A-B: Male C57BL/6J WT mice were fed with high fat diet for 3 months, then infected with adenovirus-inhibiting miR199a-5p (Ad-anti-miR199a-5p) or negative control (Ad-anti-miR NC) via tail-vein injection. A. Performance of PTTs at day 7. B. mRNA expression levels of *PEPCK* and *G6Pase*. The two-tailed Student t test was applied to determine the difference between the Ad-anti-miR199a-5p group and the control group (\* $P < 0.05$ , ns, not statistically significant),

**n=8 per group.** C-D: Male C57BL/6J WT mice were infected with adenovirus-expressing miR199a-5p (Ad-miR199a-5p) or negative control (**Ad-miR NC**) via tail-vein injection. C. Performance of PTTs at day 7. D. mRNA expression levels of *Pepck* and *G6Pase*. The two-tailed Student t test was applied to determine the difference between the Ad-anti-miR199a-5p group and the control group (\*P < 0.05, ns, not statistically significant), **n=6 per group.**

### Supplementary Table 1.

Primers used for real-time quantitative PCR.

Genes	Forword primer(5' -> 3')	Reverse primer(5' -> 3')
Atg14	CACTGCACACACTCAGGAAC	ATCTCCACTCGCGTCTGATT
Cav1	GCTCTGCCCGGGTGTGGAAA	AACGGTGTAGAGATGTCCCTGCG
Hif1 $\alpha$	GATGACGGCGACATGGTTTAC	CTCACTGGGCCATTTCTGTGT
Ncor1	TATGGACCGGGTAGACCGAG	CGGTGTTTTTGTTCACAGGAG
Tab3	ATGGCGCAAACAGTCCACA	TGTAACATGCACTGGGATACCA
Sirt1	TGATTGGCACCGATCCTCG	CCACAGCGTCATATCATCCAG
Grb10	GTGGTGGAGATTCTAACCGACA	ACCTCTCTAATCCCAGTTGTGG
Map3k5	CGTGCTGGACCGTTTTTACAA	TGTCACCATGTAGGGGATGAAG
Ucp3	CTGCACCGCCAGATGAGTTT	ATCATGGCTTGAAATCGGACC
Pepck	CTGCATAACGGTCTGGACTTC	GCCTTCCACGAACTTCCTCAC
G6Pase	CTGTTTGGACAACGCCCGTAT	AGGTGACAGGGAACTGCTTTA
$\beta$ -Actin	GGCTGTATTCCCCTCCATCG	CCAGTTGGTAACAATGCCATGT
Atg14*	CGATCACAACGGAGACACCA	CAGCACTGATGGTGTAGGCA
$\beta$ -Actin*	CATGTACGTTGCTATCCAGGC	CTCCTTAATGTCACGCACGAT
miR199a-5p	GGGCCAGTGTTTCAGACTA	TGCGTGTCGTGGAGTC
U6	CTCGCTTCGGCAGCACA	ACGCTTCACGAATTTGCGT

\*human targets.