

# Insulin suppresses the AMPK signaling pathway to regulate lipid metabolism in primary cultured hepatocytes of dairy cows

Xinwei Li<sup>1</sup>, Yu Li<sup>2</sup>, Hongyan Ding<sup>2</sup>, Jihong Dong<sup>1</sup>, Renhe Zhang<sup>1</sup>, Dan Huang<sup>1</sup>, Lin Lei<sup>1</sup>, Zhe Wang<sup>1</sup>, Guowen Liu<sup>1</sup>, Xiaobing Li<sup>1,\*</sup>

<sup>1</sup> Key Laboratory of Zoonosis, Ministry of Education, College of Veterinary Medicine, Jilin University, Changchun 130062, China

<sup>2</sup> College of Animal Science and Technology, Anhui Agricultural University, 130 West Changjiang Road, Hefei, 230036, China

**\*Corresponding author** Prof. Xiaobing Li, Key Laboratory of Zoonosis, Ministry of Education, College of Veterinary Medicine, Jilin University, 5333 Xi'an Road, Changchun, Jilin, 130062, China, Tel.: +86 431 87836160, Fax: +86 431 87836160; E-mail: xbli@jlu.edu.cn.

**Supplementary Table S1** The primer sequences of the genes

Gene	Sequence number	Primer sequences (5'-3')	Length (bp)
PPAR $\alpha$	XM_341399	For TCAGATGGCTCCGTTATT Rev CCCGCAGATCCTACT	132
SREBP-1c	NM_001113302.	For GCAGCCCATTTCATCAGCCAGACC Rev CGACACCACCAGCATCAACCACG	119
ChREBP	NM_001205408.1	For ATCCGCCTCAACAACGC p Rev TCCCTCCAAGACGACG	144
ACO	NC_015500.1	For TAAGCCTTTGCCAGGTATT Rev ATGGTCCCGTAGGTCAG	189
ACC	NM_174224.2	For TCCTGCTGCTATTGCTACTCCA Rev CAGTCCCCGCACTCACATAA	95
SCD-1	NM_173959.4	For GGCACATCAACTTTACCACG Rev CAGCCACTCTTGTAGCTTTCCTC	136
FAS	NM_001012669.1	For ACAGCCTCTTCCTGTTTGACG Rev CTCTGCACGATCAGCTCGAC	144
MTP	NM_001101834.1	For CCATTCGGCATCTACTTACAGC Rev AGCCAGCATAGGAGTCAAGGTTCT	200
APOB	XM_003582812.1	For AAAAGACAGGCTTGAAGGATT Rev ACGATGGATAAGAGCGTAGAA	137
APOE	BT021053.1	For TGTGGGTTGCCGTGGTG Rev CCTGAATGACCTGGGTGTTGA	216
CPT1	NC_007330.4	For GGTCAACAGCAACTACTACG Rev TGAACATCCTCTCCATCTGG	188
$\beta$ -Actin	BC142413.1	For GCCCTGAGGCTCTCTTCCA Rev GCGGATGTCGACGTCACA	101