



**Figure S1.** Isolation, identification and myogenic differentiation of caprine skeletal muscle satellite cells (SMSCs). The morphology of isolated SMSCs cultured in growth medium for 48 h (A) and 96 h (B). (C) Identification of isolated SMSCs using immunofluorescence staining of Pax7. (D) SMSCs were differentiated into myotubes on day 6 after differentiation initiation.

**Table S1.** List of the primers used in this study.

miRNA/gene	Forward (5' to 3')	Reverse (5' to 3')
miR-381	TATACAAGGGCAAGCTCTCTGT	mRQ 3' primer <sup>1</sup>
<i>U6</i>	GGAACGATACAGAGAAGATTAGC	TGGAACGCTTCACGAATTGCG
<i>ACTB</i>	AGCCTCCTCCTGGCATGGA	GGACAGCACCGTGTGGCGTAA
<i>Myf5</i>	CACAACCAACCCTAACCA	TTGATCCGATCCACTATG
<i>TUBB</i>	AGCGTATCTCAGAGCAGTTC	AATCCTCTCCTCTTCTGCG
<i>CCND1</i>	CGTCCATGCGGAAGATCGT	ACAGGAAGCGGTCCAGGTAGT
<i>CDKN1C</i>	CAGCCAGAGCATTGGCAATG	CTGTCCACCTCGGTCCACT
<i>MyoG</i>	CGTGGCGTGTAAAGGTGT	GGCGCTCTATGTACTGGATGG
<i>MyHC</i>	CCACATCTTCTCCATCTCTG	GGTCCTCCTCTTCTTCTC
<i>MEF2C</i>	ATCCTGATGCAGACGATTCA	GGTGGAACAGCACACAATCTT
<i>PTEN</i> -wild <sup>2</sup>	CCGCTCGAGTGAGATGAAAGAGACTGATTTCC	AAATATGCGGCCGCTGGAAAGGGCTCTCAGTACA
<i>PTEN</i> -mut <sup>3</sup>	GTTGAACATAATTCATGTATATATTTCCTTAAATGGTGA A	CATGAATTATGTTCAACAAAAACAGGATTGTATAGTCACT GA
<i>PTEN</i> -CDS <sup>4</sup>	CGACGGGAAGACAAGTTCAT	AGGTTCCCTCTGGCCTGGT
<i>JAG2</i> -wild <sup>5</sup>	CCGCTCGAGGCCGGCGGCCGGCGCG	AAATATGCGGCCGACCACAGGAGCCCCGGCAGC
<i>JAG2</i> -mut <sup>6</sup>	CTGTAGCGAACATAAATTATTCGGTAAGTCAGGCG	ATTATGTTCGCTACAGAAACGTAGAAAATAACATTG
<i>JAG2</i> -CDS <sup>7</sup>	CGCCAATGAGTGTGAAGGGA	TCGTTGGCGTTGATGTGGC

<sup>1</sup> A universal down-stream primer used for RT-qPCR analysis of miRNA.

<sup>2,5</sup> Primers used to amplify 3'UTR sequence of *PTNE* and *JAG2* in wild-type vectors constructed, respectively.

<sup>3,6</sup> Primers used to amplify complementarily mutant sequence to 3'UTR sequence of *PTNE* and *JAG2* in mutant-type vectors constructed, respectively.

<sup>4,7</sup> Primers used to amplify the coding sequence of *PTNE* and *JAG2*, respectively.