**Table S1. Primer sequences of genes**

| Primer name | Primer sequence | Product length/bp |
|---|---|---|
| PCNA | F: 5′-TGCAGATGTACCCCTTGTTGT-3′<br>R: 5′-CATCCTCGATCTTGGGAGCC-3′ | 83 |
| Bax | F: 5′-GCATCCACCAAGAAGCTGAG-3′<br>R: 5′-CCGCCACTCGGAAAAAGAC-3′ | 130 |
| Bcl-2 | F: 5′-ATGTGTGTGGAGAGCGTCA-3′<br>R: 5′-AGAGACAGCCAGGAGAAATC-3′ | 182 |
| p53 | F:5′-TCAGATCCGTGGGCGTAAAC-3′<br>R:5′-AGTCTGAGTCAGGCCCTTCT-3′ | 191 |
| caspase3 | F:5′-TGAAACATGCCGCCTTCCTA-3′<br>R:5′-AGTGGCATACCCACATGACTG-3′ | 242 |
| caspase9 | F:5′-CCAGATGCCGTGTCTAGTCTG-3′<br>R:5′-ACAGTAAGGTAGGGTGAGGGG-3′ | 296 |
| | F: 5′-CGCGACGTTTAAGCTGTGTG-3′ | 217 |

| | | |
|---|---|---|
| Star | R: 5′-ATAGGCAAGCTCTTGGTCGC-3′ | |
| Cyp11A1 | F: 5′-TCCCCTTTCCACCAATCA-3′<br>R: 5′-GCAGCGTTCACCCGTTTATT-3′ | 256 |
| 3β-HSD | F: 5′-ATCCACACCAGCACCATAG-3′<br>R: 5′-TTCCAGCACAGCCTTCTC-3′ | 144 |
| Cyp19A1 | F: 5′-TTTTGCCGAGAAACGTGGTG-3′<br>R: 5′-ATTGCCTCTTCAACCTGGGG-3′ | 133 |
| AMPK | F: 5′-GTTCCTGGAGAAAGATGGCGA-3′<br>R: 5′- TTTGCCAACCTTCACTTTGCC-3′ | 122 |
| mTOR | F: 5′-TAAGAAAACGGGGACCACGG-3′<br>R: 5′-CAAGAGAAGTGCTGTGGGCA-3′ | 282 |
| si-IGF1Raa | F: 5′- GGUUCCCGACUCGGCCGAGTT-3′<br>R: 5′- CUCGGCCGAGUCGGGAACCTT-3′ | |

**Table S2. Details of antibodies**

| Antibodies | Cat No. | Source | Dilution of WB |
|---|---|---|---|
| ACTB | bs-0061R | Bioss (Beijing, China) | 1:5000 |
| IGF1R | 21707-1-AP | Proteintech(Wuhan, China) | 1:1000 |
| 3xflag | **20543-1-AP** | Proteintech(Wuhan, China) | 1:20000 |
| PCNA | AF0239 | Affinity (OH, USA) | 1:1000 |
| Star | bs3570R | Bioss (Beijing, China) | 1: 5000 |
| CYP11A1 | bs1099R | Bioss (Beijing, China) | 1:500 |
| BAX | 2772 | CST(MA, USA) | 1:1000 |
| Bcl-2 | 3498 | CST(MA, USA) | 1:1000 |
| PPP2A | 13482-1-AP | Proteintech(Wuhan, China) | 1:1000 |
| AMPK | MCA2673GA | Bio-Rad, Hercules, CA, USA | 1:500 |
| mTOR | 2983 | CST (MA, USA) | 1:1000 |
| Raptor | DF7527 | Affinity (OH, USA) | 1:2000 |
| p-mTOR(ser2448) | 5536 | CST (MA, USA) | 1:1000 |
| p-AMPK(thr172) | sc-33524 | Santa Cruz, California, USA | 1:1000 |
| p-Raptor(ser792) | AF8350 | Affinity (OH, USA) | 1:2000 |
| HRP-labeled Goat Anti-rabbit IgG(H+L) | 31460 | Invitrogen, Rockford, IL,USA | 1:5000 |
| HRP-labeled Goat Anti-Mouse IgG(H+L) | A0216 | Beyotime, Haimen, China | 1:1000 |