

**Figure S1 C2C12 myoblasts differentiate into mature myotubes.** D0, C2C12 myoblasts differentiated for 0 days. D4, C2C12 myoblasts differentiated for 4 days. Scale bar = 50μm.



**Figure S2 Ratios of Gast, TA, Sol and Quad muscle to body weight.** n=8 per group.Gast, gastrocnemius; TA, tibialis anterior muscle; sol, soleus muscle; Quad, quadriceps. Data are shown as mean ± SEM. \* *P*＜0.05 *vs.* Ctrl. \*\* *P*＜0.01 *vs.* Ctrl. # *P*＜0.05 *vs.* DEX. ## *P*＜0.01 *vs.* DEX. DEX, dexamethasone. TMZ, trimetazidine. Ctrl, control.

**Table S1. Antibodies for Western Blot**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Antibody | Source | Vendor | Catalog No. | Dilution |
| Fbx32(Atrogin-1) | Rabbit | abcam | ab168372 | 1:1500 |
| Caspaase1 | Rabbit | abcam | ab179515 | 1:1000 |
| IL-18 | Rabbit | abcam | ab71495 | 1:1000 |
| p-FoxO3a (Ser253) | Rabbit | Cell Signaling Technology | #9466 | 1:1000 |
| FoxO3a | Rabbit | Cell Signaling Technology | #2497 | 1:1000 |
| Gasdermin D (L60) | Rabbit | Cell Signaling Technology | #93709S | 1:1000 |
| NLRP3 (D4D8T) | Rabbit | Cell Signaling Technology | #15101S | 1:1000 |
| IL-1β (3A6) | Mouse | Cell Signaling Technology | #12242S | 1:1000 |
| GAPDH | Mouse | Proteintech | 60004-1-Ig | 1:10 000 |
| MURF-1(TRIM63） | Goat | R&D Systems | AF5366-SP | 1ug/ml |

**Table S2. Primer sets for Real-time PCR analyses**

|  |  |  |
| --- | --- | --- |
| Gene | Forward primer (5′ to 3′) | Reverse Primer (5′ to 3′) |
| GAPDH | AGGTCGGTGTGAACGGATTTG | TGTAGACCATGTAGTTGAGGTCA |
| Atrogin-1 | CAGCTTCGTGAGCGACCTC | GGCAGTCGAGAAGTCCAGTC |
| MuRF1 | GTGTGAGGTGCCTACTTGCTC | GCTCAGTCTTCTGTCCTTGGA |
| NLRP3 | TGTGAGAAGCAGGTTCTACTCT | GACTGTTGAGGTCCACACTCT |
| GSDMD | CCATCGGCCTTTGAGAAAGTG | ACACATGAATAACGGGGTTTCC |
| Caspase-1 | AGGCATGCCGTGGAGAGAAACAA | AGCCCCTGACAGGATGTCTCCA |
| Caspase-4 | ACAAACACCCTGACAAACCAC | CACTGCGTTCAGCATTGTTAAA |
| IL-1β | GACTCTTGCGTCAACTTCAAGG | CAGGCTGTCTTTTGTCAACGA |
| FoxO3a | CTGGGGGAACCTGTCCTATG | TCATTCTGAACGCGCATGAAG |