

## SUPPLEMENTARY TABLES

**Supplementary Table 1. List of primers used by SybrGreen for real-time PCR.**

Name	Gene symbol	Primers Sequence
Glyceraldehyde 3-phosphate dehydrogenase	GAPDH	Sense: 5'-CATGTTCCA GTATGACTCCA CTC-3' Antisense: 5'-GGCCTCA CCCCATTTGATGT-3'
Interleukin-6	IL-6	Sense: 5'-ATGGATGCTA CCAAAGTGGAT-3' Antisense: 5'-TGAAGGACTCTGGCTTTGTCT-3'
Interleukin-1 beta	IL-1 $\beta$	Sense: 5'-CTGA ACTCAACTGTGAAATGCCA-3' Antisense: 5'-AAAAGTTTGGAAAGCA GCCCT-3'
Tumor necrosis factor- $\alpha$	TNF- $\alpha$	Sense 5'- ACGGCATGGA TCTCAAAGAC-3' Antisense 5'- AGATAGCAAATCGGCT GACG-3'
Interleukin-18	IL-18	Sense: 5'- GACTCTTGCGTCAACTTCAA GG -3' Antisense: 5'- CAGGCTGTCTTTGTCAA CGA -3'
Chemokine receptor type 5	CCR5	Sense: 5'-CGAAAACACATGGTCAAACG-3' Antisense: 5'-TTCCTACTCCAAAGCTGCAT-3'
Chemokine ligand 5 (RANTES)	CCL5	Sense: 5'-ATATGGCTCGGACA CCACTC-3' Antisense: 5'-GTGACAAAACAGCA CTGCAA GA -3'
Mammalian target of Rapamycin	mTOR	Sense: 5'- CTGGGACTCAAATCTCTCCAGTTC-3' Antisense: 5'- GAACAATAGGGTGAATGATCCGGG-3'
Caspase-3	Caspase-3	Sense: 5'-ATGGGA GCAA GTCA GTGGAC-3' Antisense: 5'-CGTACCA GA GCGA GATGACA-3'
Insuline receptor substrate-1	IRS-1	Sense: 5'- CCAGCCTGGCTATTTA GCTG-3' Antisense: 5'-CCCAACTCAACTCCA CCACT-3'
Insuline receptor substrate-2	IRS-2	Sense: 5'-GTAGTTCA GGTGCGCTCTGC-3' Antisense: 5'-CAGCTATTGGGACCA CCACT-3'
NAD-dependent protein deacetylase sirtuin-1	SIRT-1	Sense: 5'- AGTTCAGCCGTCTCTGTGT-3' Antisense: 5'- CTCCACGAACA GCTTCA CAA-3'
NAD-dependent protein deacetylase sirtuin-3	SIRT-3	Sense: 5' GCTGCTTCTGCGGCTCTATAC-3' Antisense: 5'-GAAGGACCTTCGACA GA CCGT-3'
NAD-dependent protein deacetylase sirtuin-6	SIRT-6	Sense: 5'- CTGAGAGA CACCATTCTGGACT-3' Antisense: 5'- GGTTGCA GGTTGA CAATGACC-3'
Nuclear factor NF-kappa-B p105 subunit	NFkB1	Sense: 5'-GAAATTCCTGATCCA GA CAAAAAC-3' Antisense: 5'-ATCACTTCAATGGCCTCTGTGTAG-3'
Nuclear factor NF-kappa-B p100 subunit	NFkB2	Sense: 5'-CTGGT GGA CA CATA CA GGAA GA C-3' Antisense: 5'-ATAGGCACTGTCTTCTTTCA CCTC-3'

**Supplementary Table 2. Details of the ELISA assay methods.**

<b>Biomarker</b>	<b>Procedure</b>	<b>Sensitivity Minimum Detectable Dose (MDD)</b>	<b>Commercial Producer</b>
IL-1 $\beta$	Quantikine® ELISA	0.46-4.80 pg/ml (The mean was 2.31 pg/ml)	R&D Systems
IL-6	Quantikine® ELISA	1.3-1.8 pg/ml (The mean was 1.6 pg/ml)	R&D Systems
TNF- $\alpha$	Quantikine® ELISA	0.36-7.21 pg/ml (The mean was 1.88 pg/ml)	R&D Systems
Myostatin	Quantikine® ELISA	0.922-5.32 pg/ml (The mean was 2.25 pg/ml)	R&D Systems

**Abbreviations:** 1 IL-1 $\beta$  = interleukin 1 $\beta$ ; IL6 = interleukin 6; TNF- $\alpha$  = Tumor necrosis factor alpha.

**Supplementary Table 3. Kinases detected in this study.**

<b>Antibody used</b>	<b>Commercial Producer</b>	<b>Molecular weight of the protein</b>
anti-AMPK antibody	Abcam, Cambridge, MA, USA (Cat. No. 80039)	62 kDa
Anti-AMPK (phospho Thr 172) antibody	Cell Signaling, Danvers, MA (Cat. No. 109458)	60 kDa
Anti-AKT antibody	Cell Signaling, Danvers, MA (Cat. No. 9272)	60 kDa
Anti- AKT (phospho S473) antibody	Abcam, Cambridge, MA, USA (Cat No. 81283)	56 kDa
Anti-NF-kb p65 antibody	Abcam, Cambridge, MA, USA (Cat No. 16502)	64 kDa
Anti NF-kb p65 (phospho S529) antibody	Abcam, Cambridge, MA, USA (Cat No. 16502)	60 kDa
mTOR	Cell Signaling, Danvers, MA (Cat. No. 2983T)	289 kDa
Anti-mTOR (phospho S2448) antibody	Abcam, Cambridge, MA, USA (Cat No. 109268)	kDa
Anti-SIRT1 antibody	Abcam, Cambridge, MA, USA (Cat No. 32441)	110 kDa
Anti-SIRT3 antibody	Abcam, Cambridge, MA, USA (Cat No. 217319)	28 kDa
Anti-SIRT6 antibody	Abcam, Cambridge, MA, USA (Cat No. 191385)	39 kDa
Anti-IRS1 antibody	Abcam, Cambridge, MA, USA (Cat No. 40777)	170 kDa
Anti-IRS2 antibody	Abcam, Cambridge, MA, USA (Cat No. 134101)	137 kDa
Anti-pro Caspase-3 antibody	Abcam, Cambridge, MA, USA (Cat No. 32150)	35 kDa
Anti-GAPDH antibody	Thermo Fisher Scientific, Waltham, MA (Cat. No. AM4300)	37 kDa