

Key Abbreviations

AIP	Atherogenic index of plasma
ApoE	Apolipoprotein E
ARG1	Arginase-1
Ath diet	Atherogenic diet
BMAL1	Brain and muscle Arnt-like protein 1
bp	Base pair
BRC	Basal respiratory capacity
CD 68	Cluster of Differentiation 68
CD	Chronodisruption
cDNA	Complementary deoxyribonucleic acid
CLOCK	Circadian locomotor output cycles kaput
CO	Carbon monoxide
CORM-A1	Carbon monoxide releasing molecule A1
CRP	C reactive Protein
CRR	Cardiac risk ratio
CRY	Cryptochrome
CVD	Cardiovascular Disorders
DAB	3, 3' diaminobenzidine tetrahydrochloride

DAMPs	Damage-associated molecular patterns
DCF-DA	Dichlorofluorescein Diacetate
DMSO	Dimethyl sulphoxide
Drp1	Dynamin related protein1
ECAR	Extracellular acidification rate
ECL	Enhanced Chemiluminescence
ETC	Electron transport chain
FBS	Fetal bovine serum
GAPDH	Glyceraldehyde 3-phosphate dehydrogenase
H&E stain	Hematoxylin and Eosin staining
HDL	High density lipoprotein
HO-1	Hemeoxygenase-1
HSP 60	Heat shock protein 60
i.p.	Intraperitoneal
IB cells	antagomir transfected cells
ICAM1	Intercellular adhesion molecule 1
ICC	Immunocytochemistry
IHC	Immunohistochemistry
iNOS	Inducible nitric oxide synthase
kDa	Kilo Dalton

KLF 4	Krüppel-like factor 4
LDL	Low density Lipoprotein
LSD	Lifestyle disorders
MCP-1	Macrophage chemoattractant protein 1
MDMs	Monocyte derived macrophages
miRNA	micro-RNA
MM/GBSA	Molecular mechanics with generalised Born and surface area solvation
MMP	Mitochondrial membrane potential
MRC	Maximal respiratory capacity
MSP assay	Methylation specific PCR assay
mtDNA	Mitochondrial DNA
MTT	3-(4, 5-dimethylthiazolyl-2)-2, 5-diphenyltetrazolium bromide
NF- κ B	Nuclear factor κ B
OCR	Oxygen consumption rate
ORO	Oil Red O
Ox-LDL	Oxidized Low density lipoprotein
OXPHOS	Oxidative phosphorylation
P53	Tumor protein p53
PER	Period

PMA	Phorbol-12-myristate-13-acetate
qPCR	Quantitative polymerase chain reaction
ROS	Reactive oxygen species
SCN	Suprachiasmatic nuclei
SD rat	Sprague Dawley rats
SEM	Standard error mean
SIRT1	Sirtulin 1
SNAIL	Snail family transcriptional repressor 1
SOD2	Superoxide dismutase 2
SRC	Spare respiratory capacity
STAT3	Signal transducer and activator of transcription 3
TC	Total cholesterol
TG	Triglycerides
TNF- α	Tumor necrosis factor α
TrxR2	Thioredoxin reductase 2
VCAM1	Vascular cell adhesion molecule 1
VLDL	Very low-density lipoprotein
ZEB1	Zinc finger E-box binding homeobox 1
ZT	Zeitgeber time