

Abbreviations

ADA- American diabetic association
ADIPOQ- Adiponectin
AIF- Apoptosis inducing factor
ATM- Adipose tissue macrophage
Akt- Protein kinase B
AMPK- AMP-activated protein kinase
APPL1- Adaptor protein, phosphotyrosine interacting with PH domain and leucine zipper 1
ARX- Aristaless-related homeobox
AT- Adipose tissue
AUC- Area under curve
BMI- Body mass index
BrdU- 5-bromo-2'-deoxyuridine
BSA- Bovine serum albumin
BW- Body weight
DAG- Diacyl glycerol
DAPI- 4',6-diamidino-2-phenylindole
DEPC- Diethylpyrocarbonate
DM- Diabetes mellitus
ETC- Electron transport chain
FBG- Fasting blood glucose
FBPase- Fructose 1,6-bisphosphatase
FFA- Free fatty acid
GAD65- Glutamic acid decarboxylase
GCK- Glucokinase
GD- Gestation diabetes
GLUT2- Glucose transporter 2
GLUT4- Glucose transporter 4
GSIS- Glucose stimulated insulin secretion
Gly Synth- Glycogen synthase
Gly phosphorylase- Glycogen phosphorylase
G6Pase- Glucose 6-phosphatase
GWAS- Genome wide association studies
HDL- High density Lipoproteins
HFD- High fat diet
HMW- High molecular weight
IDF- International diabetes federation
IL- Interleukin
IPGTT- Intraperitoneal glucose tolerance test
IPITT- Intraperitoneal insulin tolerance test
IR1 β - Insulin receptor 1 β
IRS- Insulin receptor substrate
JNK- cJun N-terminal Kinase
kDa- Kilodalton
LDL- Low density lipoproteins
LG- L-glutamine
MCP1- Monocyte chemoattractant protein-1
NEFAs- Non-esterified free fatty acids
NGN3- Neurogenin-3

NS- Non significant
OCR- Oxygen consumption rate
P- Pitavastatin
PAX 4- Paired box 4
PBMC- Peripheral Blood Mononuclear cells
PCR- Polymerase chain reaction
PDX 1- Pancreas/duodenum homeobox protein 1
PEPCK- Phosphoenolpyruvate carboxykinase
PGC1 α - PPAR γ coactivator
PI3K- Phosphoinositide 3-kinase
PO- Per OS
PPAR- Peroxisome Proliferator- activated receptor
PPAR γ - Peroxisome proliferator-activated receptor gamma
RFLP- Restriction fragment length polymorphism
SEM- Standard error mean
SIRT1- Sirtuin 1
SNP- Single nucleotide polymorphism
STZ- Streptozotocin
TFAM- Transcription factor A, mitochondrial
TG- Triglyceride
TNF α - Tumor Necrosis Factor- alpha
TUNEL- Terminal deoxynucleotidyl transferase dUTP nick end labelling
T2D- Type 2 Diabetes mellitus
WAT- White adipose tissues
WHO- World health organization