List of Abbreviation

ABT-888-Veliparib-2-((R)-2-Methylpyrrolidin-2-yl)-1H-benzimidazole-4-carboxamide
AGE- advanced glycosylation end-product
aPKC- Atypical protein kinase C
ANOVA-Analysis of variance
Arx- Aristaless-related homeobox gene
ATP- Adenosine triphosphate
BM- Bone marrow
BMP-bone morphogenic protein
BSA- Bovine serum albumin
cAMP- Cyclic Adenosine monophosphate
CD-Cluster of differentiation
ChIP-Chromatin immunoprecipitation
CCl_4- Carbon tetrachloride
CDK- Cyclin dependent kinase
CK-Cytokeratin
CNS- Central Nervous System
CPCSEA- Committee for the purpose of control and supervision of experiments on animals
DAPI- 4'6'-diamidino-2-phenylindole dihydrochloride
DM-Diabetes mellitus
DMEM- KO -Delbecoo's Modified Eagle Media-Knock out
DMSO- Dimethyl Sulphoxide
DTZ- Dithizone
EBs- Embryoid bodies
EDTA- Ethylenediaminetetraacetic acid
EGF-Epidermal growth factor
EGFR- epidermal growth factor receptor
El- *Enicostemma littorale*
ELISA- Enzyme linked immunesorbent assay
ESCs- Embryonic stem cells
FACS- Fluorescent activated cell sorter
FBS- Fetal Bovine Serum
FGF- Fibroblast growth factor
FITC- Fluorescein isothiocyanate
FOXO1-Forkhead box protein O1
GAD- Glutamate decarboxylase
GCK- Glucokinase
GFP- Green Fluorescent protein
GLP-1- Glucagon-like peptide-1
GLUT- Glucose Transporter
GPx- Glutathione peroxidase
GSH- Reduced glutathione
GSIS- Glucose-stimulated insulin secretion
GTT- Glucose tolerance test
H & E- Hematoxylin and Eosin
HNF- Hepatocyte nuclear factor
HLA-Human leukocyte antigen
HSCs-Hematopoietic stem cells
IP-Immunoprecipitation
I.P.- Intraperitoneal
I.V. Intravenous
ICC- Immunocytochemistry
IFG-Impaired fasting glucose
IGT- Impaired Glucose Tolerance
IHC- Immunohistochemistry
IL- Interleukin
ILCC- Islet like cell clusters
ILC-Islet like clusters
IPC-Insulin producing clusters
INF- Interferon
INGAP-Islet neogesis associated protein
IPC- Intra-Islet Precursor Cells
iNOS-Inducible nitric oxide synthase
iPSC- Induced pluripotent stem cells
IR- Insulin receptor

List of Abbreviation

IRS- Insulin receptor substrate
ITS-Insulin transferrin selenium
kDa- Kilodaltons
KGF- Keratinocyte growth factor
KRBH- Krebs-Ringer bicarbonate hepes buffer
BMSCs-Bone Marrow Mesenchymal Stem Cells
MafA- musculoaponeurotic fibro sarcoma oncogene homology A
MHC- Major histocompatibility complex
MSCs- Mesenchymal stem cells
MTT- (3-(4,5-Dimethylthiazol-2-yl)-2,5Diphenyltetrazolium Bromide)
NGN-3-Neurogenin-3
NIDDM- Non-insulin dependent diabetes mellitus
NO- Nitric Oxide
NOD- Non-obese diabetic
ONS- Oct4, Sox-2, Nanog
PARG- PAR glycohydrolase
PARP- Poly (ADP-ribose) Polymerase
PAX-4-Paired box-containing gene-4
PANC-1-Pancreatic carcinoma cell line
PBS- Phosphate buffer saline
PCR- Polymerase chain reaction
PDL- Partial duct ligation
PDX-1- Pancreatic duodenal homeobox-1
PE- Phycoerythrin
PFA- Paraformaldehyde
PI3-K- phosphatidylinositol 3-kinase
PKB- Protein kinase B
PP-Pancreatic Polypeptide
PPAR-γ- Peroxisome proliferative activated receptor gamma
PREPs: Pancreatic resident endocrine progenitors
PPx- Partial pancreatectomy
PTGS- Posttranscriptional gene silencing
q-PCR- Quantitative PCR
qRT-PCR- Quantitative Real Time PCR
Reg- Regenerating islet-derived gene family
ROS-Reactive Oxygen Species
RT-PCR- Reverse transcriptase PCR
SFM- Serum free media
SEM-Standard error of mean
shRNA-Short hairpin RNA
Shh-Sonic hedgehog
siRNA-Small interfering RNA
SIS3-(2E)-1-(6,7-Dimethoxy-3,4-dihydro-1H-isoquinolin-2-yl)-3-(1-methyl-2-phenyl-1H-pyrrolo[2,3-b]pyridin-3-yl)-propenone hydrochloride
SOD- superoxide dismutase
SSB- Single strand DNA breaks
STZ- Streptozotocin
T1DM- Type 1 diabetes mellitus
T2DM- Type 2 diabetes mellitus
TBARS- Thiobarbituric acid reactive substances
TF-Transcription factors
TGF-β- Transforming growth factor-β
TGS-Transcriptional gene silencing
TNF- Tumor necrosis factor
TRITC-Tetramethyl Rhodamine Iso-Thiocyanate
TSS-Transcription start site
UCB- Umbilical cord blood
VEGF-Vascular endothelial growth factor