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LIST OF ABBERVATIONS

CNS: the Central Nervous System

DCFHDA: Dichloro-hydrofluoresceindiacetate

ELISA: Enzyme linked immunosorbent assay

EDTA: Ethylenediaminetetraacetic acid

EGTA: Ethylene glycol tetraacetic acid

HFD: High fat diet

HOMA: Homeostasis Model

HPLC: High-performance liquid chromatography

IR: Insulin receptor

IRS: Insulin receptor substrate

ND: Normal diet

MDA: Malondialdehyde

MWM: Morris Water Maze

ROS: Reactive Oxygen Species

T2DM: Type 2 diabetes mellitus

$\Delta\Psi_m$: The mitochondrial membrane potential