

تأثيرات المكملات مساعد الإنزيم كيم ١٠ و فيتامين (هـ) على التشنجات التي يسربها البنتيلين تترازول و التحمور الإحراكي الناجو عن الغينيتوين في الجرخان

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Effects of Coenzyme Q 10 and Vitamin E supplementation on Pentylenetetrazole-induced seizures and Phenytoin-induced cognitive impairment in rats

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ARABIC SUMMARY	

List of Abbreviations

AEDs Anti-epileptic drugs AD Alzheimer's disease

AREs Antioxidant response elements

α-Toc DL-alpha-Tocopherol

AM Amygdala

AMPA Alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid

ANOVA Analysis of variance **ATP** Adenosine triphosphate

BDNF Brain derived neurotrophic factor

BW Body weight

BSA Bovine serum albumin

CA1 Region I of hippocampus proper CA3 Region III of hippocampus proper

CAMK Calmodulin-dependent protein kinase kinase

CBZ Carbamazepine

cDNA Complementary deoxyribonucleic acid

CoO10 Coenzyme Q10

CREB Cyclic AMP (cAMP)-responsive element-binding protein

CX Cortex

CNS Central nervous system

CT Cycle threshold

DBS Deep brain stimulation

DG Dentate gyrus

DI Discrimination index EEG Electroencephalogram

ELISA Enzyme-linked immunosorbent assay

ETC Electron transport chain
EPM Elevated plus maze

GAD Glutamate decarboxylase

GAPDH Glyceraldehyde 3-phosphate dehydrogenase

GFAP Glial fibrillary acidic protein

GSH Reduced glutathione

GABA Gamma-aminobutyric acid

H&E Hematoxylin & eosin

HP Hippocampus

HO-1 Heme oxygenase-1
HRP Horseradish peroxidase

List of Abbreviations

Iba1 Ionized calcium binding adaptor molecule 1

IgGImmunoglobulin GIL-1βInterleukin-1-beta

KA Kainic acid

MDA Malondialdehyde

mRNA Messenger ribonucleic acid MSG Monosodium glutamate

NAD Nicotinamide adenine dinucleotide

NF-κB Nuclear Factor kappa-light chain enhancer of activated B cells

NMDA N-methyl-D-aspartate
NOR Novel object recognition

NQO1 NAD(P)H:quinone oxidoreductase 1 Nrf2 Nuclear factor-erythroid 2-related factor 2

OD Optical density

PBS Phosphate buffer saline

PHT Phenytoin

PCBs Phytocannabinoids

PGC-1α Peroxisome proliferator-activated receptor-gamma coactivator

1 alpha

PκB α Phosphorylated inhibitory kappa B-α

PUFAs Polyunsaturated fatty acids

PO Per os

PPI Protease and phosphatase inhibitors

PFCX Prefrontal cortex
PTZ Pentylenetetrazole
RNA Ribonucleic acid

ROS Reactive oxygen species

RT-PCR Reverse transcription polymerase chain reaction

SE Status epilepticus SN Substantia nigra

Sir2 Silent information regulator 2

SIRTs Sirtuins

SOD Superoxide dismutase

TL Transfer latency

TLE Temporal lobe epilepsy TMB Tetra methyl benzidine

Tmax Time at which peak serum concentration is reached

TMS Transcranial Magnetic Stimulation

TNF-α Tumor necrosis factor-alpha