



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



HANAA ALY



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



HANAA ALY



A study of different structures of central nervous system implicated in Parkinson's disease neuropathic pain

Thesis

Submitted For Partial Fulfilment of M.D. Degree in
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Table of Abbreviations

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6-OHDA	6-Hydroxydopamine
AC	Adenyl cyclase
ACC	Anterior cingulate cortex
Amyg	Amygdala
ASCT 1	Alanine, Serine, Cysteine, Threonine subtype of neural aminoacid transporters
ATP	Adenosine Triphosphate
BBB	Blood brain barrier
BSA	Bovine serum albumin
Ca+++	Calcium
cAMP	Cyclic adenosine monophosphate
CB 1	Cannabinoid receptor
CCI	Chronic constriction injury
CFA	Complete Freund's adjuvant
CFOS	Pain marker CFOS
CGRP	Calcitonin gene related protein
CMA	Chaperone-mediated autophagy
COX-2	Cyclooxygenase-2

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CL	Central lateral nucleus
CNS	Central nervous system
COMT	Catechol-O-methyl transferase in the extracellular compartment
CREB	cAMP-response element binding protein
CSF	Cerebrospinal Fluid
Cu⁺⁺	Copper
DAO/ DAA	D-aminoacid oxidase
DF	Descending facilitatory
DI	Descending inhibitory
DA	Dopamine
DATs	Dopamine active transporters
DLPAG	Dorsolateral periaqueductal grey
DMPAG	Dorsomedial periaqueductal grey
D1R	Dopamine 1 receptor
D2R	Dopamine 2 receptor
EDS	Excessive Daytime Sleepiness
EOPS	Free from organisms specific pathogens Exempt d'organismes pathogènes spécifiques
FGF	Fibroblast growth factor
Fe⁺⁺	Iron

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FG	Fluorogold
FR	Fluororuby
GABA	Gamma aminobutyric acid
GAD67	Gluatamate decarboxylase 67
GDNF	Glial derived neurotrophic factor
GFAP	Glial fibrillary acidic protein
GIRK	G-protein-gated inwardly rectifying potassium
GFR α-3	Glial cell line- derived neurotrophic factor family of receptors – alpha 3
GlyT1	Glycine transporter
GSH	Glutathione
HIV	Human immunodeficiency virus
HLA	Human leucocyte antigen
HTR	Hydroxytryptamine (serotonin) receptor
Hsp27	Heat shock protein
IASP	International association for the study of pain
IHC	Immunohistochemistry
IKD	Excitability Brake Potassium Current
LRRK2	Leucine rich repeat kinase 2
K⁺	Potassium
KCC2	Potassium chloride cotransporter isoform 2

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LatC	Lateral cervical nucleus
LSp	Lateral spinal nucleus
LIG	Ligature
LPAG	Lateral periaqueductal grey
LTMRs	Low threshold mechanoreceptors
MAPK	Mitogen-activated protein kinase
MCI	Mild cognitive impairment
MDH	Medullary dorsal horn
MDS	Movement Disorder Society
MDvc	Ventral caudal part of the medial dorsal nucleus
MEK	Mitogen-activated protein kinase kinase
MFB	Medial forebrain bundle
mGluRs	Metabotropic glutamate receptors
miRNAs	Micro ribonucleic acids
Mg⁺⁺	Magnesium
Mn⁺⁺	Manganese
MPTP	1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine
MS	Multiple sclerosis
Na⁺	Sodium
NA	Noradrenaline

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NK1R	Neurokinin 1 receptor
NMDA	N-methyl D-aspartate receptor
NO	Nitric oxide
nNOS	Neuronal nitric oxide synthase
NP	Neuropathic Pain
NR2B	N-methyl D-aspartate receptor subtype 2B
Opioid R	Opioids receptor
PAFs	Primary afferent fibers
PAG	Periaqueductal grey
PBS	Phosphate buffered saline
PD	Parkinson's Disease
pERK	Phosphorylated extracellular signal-regulated kinase
PFC	Prefrontal cortex
PIGD	Postural Instability and Gait Disorders
piRNAs	Piwi interacting RNAs
PKC-γ	Protein kinase C - gamma
PN	Projection neurons
PNS	Peripheral nervous system
PPC	Posterior parietal cortex
PV	Parvalbumin

Table of Abbreviations

PVN	Hypothalamic paraventricular nucleus
Px	Pannexins
RAF	RAF kinase
RAIC	Rostral angular insular cortex
RAS	RAS GTPase
RBD	Rapid Eye Movement Sleep Behavior Disorder
RNA	Ribonucleic acid
ROS	Reactive oxygen species
RVM	Rostral ventral medulla
S1	Primary sensory cortex
SDH	Spinal dorsal horn
SEM	Standard error of the mean
siRNAs	Small interfering RNAs
SMA	Supplementary motor area
SN	Substantia Nigra
SNpc	Substantia Nigra pars compacta
SNpr	Substantia Nigra pars reticulata
SOD	Superoxide Dismutase
Substance P	Substance P
TBS	Tris-buffered saline

Table of Abbreviations

Th	Thalamus
TH	Tyrosine Hydroxylase
TPP	Thermal place preference
TRP	Transient potential channels
TRPM8	Transient receptor potential melastatin 8
TrpV1	Transient receptor potential cation channel subfamily V member 1 (TrpV1)
UK	United kingdom
UPDRS	Unified Parkinson's Disease Rating Scale
UPS	Ubiquitin-proteasome system
VFT	Von Frey Test
VGAT	Vesicular GABA transporter
VGLUT3	Vesicular glutamate transporter
VL	Ventral lateral nucleus
VLPAG	Ventrolateral periaqueductal grey
VM	Ventral medial nucleus
VPI	Ventral posterior inferior nucleus
VPL	Ventral posterior lateral nucleus
VTA	Ventral tegmental area

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