



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم

# بسم الله الرحمن الرحيم



**HANAA ALY**



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

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## **Pharmacological study on the potential neuroprotective effect of diosmin in rotenone-induced model of Parkinson's disease in rats"**

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Doctor of Philosophy (PhD) in Pharmaceutical Sciences (Pharmacology &  
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## **List of Abbreviations**

|               |                                   |
|---------------|-----------------------------------|
| 6-OHDA        | 6-Hydroxydopamine                 |
| AADC          | Aromatic amino acid decarboxylase |
| Ab            | Antibody                          |
| A $\beta$     | Amyloid $\beta$ peptide           |
| ANOVA         | Analysis of variance              |
| AD            | Alzheimer's disease               |
| Bax           | Bcl-2-associated X protein        |
| BBB           | Blood-brain barrier               |
| Bcl-2         | B-cell lymphoma 2 protein         |
| CBD           | Corticobasal degeneration         |
| COMT          | Catechol-O-methyl-transferase     |
| COX-2         | Cyclooxygenase-2                  |
| DA            | Dopamine                          |
| DAT           | Dopamine transporter              |
| DBS           | Deep brain stimulation            |
| DM            | Diosmin                           |
| ELISA         | Enzyme-Linked Immunosorbent Assay |
| FGF2          | Fibroblast growth factor 2        |
| GSH           | Glutathione                       |
| GWAS          | Genome-wide association study     |
| H&E           | Hematoxylin and eosin             |
| HDL           | High-density lipoproteins         |
| HO-1          | Heme oxygenase-1                  |
| IL-1 $\beta$  | Interleukin-1 $\beta$             |
| IL-6          | Interleukin-6                     |
| INF- $\gamma$ | Interferon- $\gamma$              |
| iNOS          | Inducible nitric oxide synthase   |
| LBs           | Lewy bodies                       |
| L-DOPA        | 3,4 Dihydroxy-L-phenylamine       |
| LDL           | Low-density lipoproteins          |

|                  |                                                                   |
|------------------|-------------------------------------------------------------------|
| LPS              | Lipopolysaccharide                                                |
| LRRK2            | Leucine-rich repeat kinase 2                                      |
| MAO-B            | Monoamine oxidase type-B                                          |
| MAPK             | Mitogen activated protein kinase                                  |
| MDA              | Malondialdehyde                                                   |
| MPP <sup>+</sup> | 1-Methyl-4-phenylpyridinium                                       |
| MPTP             | 1-Methyl-4-phenyl-1, 2, 3, 6-tetrahydropyridine                   |
| MSA              | Multiple system atrophy                                           |
| NF-κB            | Nuclear Factor kappa B                                            |
| Nrf2             | Nuclear factor erythroid 2-related factor 2                       |
| PBS              | Phosphate buffer saline                                           |
| PD               | Parkinson's disease                                               |
| PET              | Positron emission tomography                                      |
| PGE2             | Prostaglandin E2                                                  |
| pJAK2            | Phosphorylated janus kinase 2                                     |
| p.o.             | Peroral administration                                            |
| PSP              | Progressive supranuclear palsy                                    |
| pSTAT3           | Phosphorylated signal transducers and activators of transcription |
| REM              | Rapid eye movement                                                |
| ROS              | Reactive oxygen species                                           |
| rpm              | Revolutions per minute                                            |
| s.c.             | Subcutaneous administration                                       |
| SNpc             | Substantia nigra pars compacta                                    |
| SNCA             | α-synuclein-encoding gene                                         |
| SOD              | Superoxide dismutase                                              |
| SP               | Streptavidin peroxidase                                           |
| SPECT            | Single-photon emission computed tomography                        |
| STN              | Subthalamic nucleus                                               |
| TBI              | Traumatic brain injury                                            |
| TH               | Tyrosine hydroxylase                                              |
| TLRs             | Toll-like receptors                                               |

|               |                                    |
|---------------|------------------------------------|
| TNF- $\alpha$ | Tumor necrosis factor              |
| TNFR1         | Tumor necrosis factor receptor 1   |
| TxA2          | Thromboxane A2                     |
| VEGF          | Vascular endothelial growth factor |
| VMAT2         | Vesicular monoamine transporter-2  |
| UPS           | Ubiquitin proteasomal system       |

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