



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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MONA MAGHRABY

Evaluation of Cytotoxic Effect of Moringa Oleifera Leaf Extract on Head and Neck Squamous Cell Carcinoma Cell Line: An In Vitro Study

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Dedication

*To my lovely parents
Thank you for your constant
inspiration and endless faith
in me.....*

*To my beloved husband,
Islam,
Thank you for your endless
support and patience.....*

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List of Abbreviations

AIDS: Acquired Immuno Deficiency Syndrome

Apaf-1: Apoptosis-activating factor-1

Asp: Aspartate

ATP: Adenosine Triphosphate

Bad: Bcl-2 Associated Agonist of Cell Death

Bak: Bcl-2-antagonist/Killer

Bax: Bcl-2 Associated Protein X

Bcl-2: B-cell Lymphoma 2

Bcl-xL: B-cell Lymphoma-Extra-Large

Bcl-xS: B-cell Lymphoma-Extra-Small

BITC: Benzyl Isothiocyanate

CAD: Caspase Activated DNase

CF: Cisplatin plus 5- Fluorouracil

DACH: 1,2 Diamino cyclohexane ring

DAMP: Damage-Associated-Molecular Patterns

DMSO: Dimethyl Sulphoxide

DNA: Deoxyribonucleic acid

EBV: Epstein Barr Virus

ELISA: Enzyme-Linked Immunosorbent Assay

FADD: Fas-Associated Death Domain

FasL: Fas Ligand

FU: Fluorouracil

GSH: Glutathione

H&E: Hematoxylin and Eosin

Hep-2: Human epithelial carcinoma type 2

HIV: Human Immunodeficiency Virus

HMG1: Non- Histone chromosomal- high mobility group 1 and 2

hMSH2: Mismatch Repair protein homolog 2

HNC: Head and Neck Cancer

HNSCC: Head and Neck Squamous Cell Carcinoma

HPV: Human PapillomaVirus

HRP: Horseradish Peroxidase

IAPs: Inhibitors of Apoptosis

ICAD: Inhibitor of Caspase Activated DNase

LA-SCCHN: Locally and regionally Advanced Squamous Cell Carcinoma of the Head and Neck

LDH: Lactate Dehydrogenase

MAPK: Mitogen-Activated Protein Kinase

MMR: Mismatch Repair

MO: Moringa Oleifera

MOE: Moringa Oleifera Extract

mRNA: messenger Ribonucleic Acid

MTT: Methyl Thiazol Tetrazolium

NAC: N-Acetyl-Cysteine

NADPH: Dependent Oxidoreductase Enzyme

NAF: Nuclear Area Factor

NRC: National Research Center

Nrf2: Nuclear factor-erythroid 2 p45-related factor 2 protein

OD: Optical Density

OMM: Outer Mitochondrial Membrane

OPSCC: Oropharyngeal Squamous Cell Carcinoma

OSCC: Oral Squamous Cell Carcinoma

PAMP: Pathogen-Associated-Molecular Patterns

PARP: Poly-ADP Ribose Polymerase

PBMCs: Peripheral Blood Mononuclear Cells

PBS: Phosphate Buffer Saline

pRB: Retinoblastoma protein

PSN: Peripheral Sensory Neuropathy

RNA: Ribonucleic acid

ROS: Reactive Oxygen Species

RPMI: Rosewell Park Memorial Institute

SCC: Squamous Cell Carcinoma

SCCHN: Squamous Cell Carcinoma of the Head and Neck

SDS: Sodium dodecyl sulphate