



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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Bioactive Secondary Metabolites from *Gleditsia caspi* Desf. Family Fabaceae

A Thesis Submitted

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LIST OF ABBREVIATIONS

A23187	Calcium ionophore
A2780	Human ovarian cancer cell line
A549	Adenocarcinomic
ABTS	2, 2'-Azino-bis(3-ethylbenzothiazoline-6-sulfonic acid)
ALI	Acute lung injury
ANOVA	Analysis of variance
Api	Apifuranosyl
APT	Attached proton test
Bel-7402	Human hepatoma cell line
bFGF	Basic fibroblast growth factor
BGC-823	Human gastric cancer cell line
BLAST	Basic local alignment search tool
CC50	Cytotoxic concentration 50%
CDK	Cyclin dependant kinase
COLO 320 DM	Colon colorectal adenocarcinoma
COSY	Correlation spectroscopy
DCM	Dichloromethane
DDBH	2,2-Diphenyl-1-picryl-hydrazyl-hydrate
DDBJ	DNA data bank of Japan
ddH₂O	Double distilled water
DMEM	Dulbecco's modified Eagle's medium
DMSO	Dimethylsulfoxide
DMSO-<i>d</i>₆	Deuterated dimethylsulfoxide- <i>d</i> ₆
DNP-BSA	Dinitrophenyl-conjugated bovine serum albumin
DPPH	2,2-diphenyl-1-picrylhydrazyl radical
DU 145	Prostate carcinoma cell line
EC₅₀	Effective concentration by 50%
ED₅₀	Effective dose 50%
EDN1	Endothelin 1
EMBL	European molecular biology laboratory
eNOS	Endothelial nitric oxide synthase
EPCs	Endothelial progenitor cells
ERK	Extracellular signal-regulated kinases
ESCC	Esophageal squamous cells carcinoma
EtOAc	Ethyl acetate
FBS	Fetal bovine serum
fMLF	Formyl-methionyl-leucyl-phenylalanine
GCLC	Glutamate-Cysteine Ligase Catalytic Subunit
GCPSR	Genealogical concordance phylogenetic species recognition
HCT116	Human colorectal carcinoma cell line
HeLa	Human cervical carcinoma cell lines
HEPES	4-(2-hydroxyethyl)-1-piperazine ethane sulfonic acid

HepG2	Human hepatocellular liver carcinoma cell line
HL-60	Human promyelocytic leukemia cell line
HMBC	Heteronuclear multiple bond correlation
HO-1	Heme oxygenase <i>1</i>
HPLC	High performance liquid chromatography
HSQC	Heteronuclear single-quantum correlation
HT29	Human colon cancer cell line
HUVECs	Human umbilical vein endothelial cells
Hz	Hertz
IC₅₀	Inhibitory concentration by 50%
IgE-FcεRI	The high-affinity IgE receptor
INH	Isoniazid
ITS	Internal transcribed spacer
<i>J</i> value	Coupling constant
JNK	C-Jun N-terminal kinase
K562	Human erythroleukemic cell line
L5178Y	Mouse lymphoma cell line
L929	Embryonic fibroblasts cell line
LD₅₀	Lethal dose 50%
LDL	Low density lipoprotein
<i>m/z</i>	Mass to charge ratio
MCF7	Human breast adenocarcinoma cell line
MDA-MB231	Negative breast cancer cell line
MEA	Malt extract agar
MeOH	Methanol
MIC	Minimum inhibitory concentration
MMP-9	Matrix metalloproteinase 9
MNNG	Methyl nitro nitrosoguanidine
MOLT-4	Human acute T lymphoblastic leukaemia cell line
MP-WS	Mobile phase working solution
MS	Mass spectrometry
MT	Monoterpene
MTT	Microculture tetrazolium assay
NCBI	National center for biotechnology information
NF-κB	Nuclear factor kappa B
NIH 3T3	Non tumor mouse embryonic fibroblast
NMR	Nuclear magnetic resonance
NO	Nitric oxide
NQO	4-nitroquinoline-1-oxide
OD	Optical density
p27	Cyclin-dependent kinase inhibitor
PBS	Phosphate buffered saline
PCR	Polymerase chain reaction
PDA	Potato dextrose agar
PDB	Potato dextrose broth

<i>p</i>-NAG	<i>p</i> -nitrophenyl- <i>N</i> -acetyl- β -D-glucosaminide
PYZ	Pyrazinamide
RABD	Random amplified polymorphic DNA
RBL- 2H3	Rat basophilic leukemia cell line
RDA	Retro-Diels-Alder
REL_P	Restriction fragment length polymorphism
ROS	Reactive oxygen species
S.E.M	Standard error of mean
SD	Standard deviation
SI	Safety index
SK-hep-1	Human hepatic adenocarcinoma cell line
SNU-5	Human gastric cancer cell line
TB	Tuberculosis
TIC	Total ion chromatogram
TNF-α	Tumor necrosis factor alpha
TQD	Triple quadruple instrument
UPLC	Ultra-performance liquid chromatography
δ value	Chemical shift (ppm)

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