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التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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قسم

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HANAA ALY

Faculty of Pharmacy
Microbiology and Immunology

Modulation of Resistance and Virulence of *Acinetobacter baumannii* using Some Selected Natural Products

MSc Thesis presented

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1 List of abbreviations

ABC family	ATP-Binding Cassette family
ACB complex	*Acinetobacter calcoaceticus –Acinetobacter baumannii* complex
AceI	*Acinetobacter* chlorhexidine efflux protein
AMEs	Aminoglycoside modifying enzymes
AmpC	Ambler class C cephalosporinases
ATCC	American Type Culture Collection
bap	Biofilm-associated proteins
bla_{NDM}	New Delhi metallo-beta-lactamase
bla_{oxa}	Oxacillinase beta lactamase
bla_{PER-1}	*Pseudomonas aeruginosa* Extended spectrum RND-1 Beta lactamase
bla_{VIM}	Verona integrin associated metallo-beta-lactamase
bp	Base pair
c DNA	Complementary Deoxyribonucleic acid
CDC	Centers for disease control and prevention
CFU	Colony forming unit
CLSI	Clinical and laboratory standard institute
CpaA	glycan-specific adamalysin-like protease
*csu*E	chaperon/usher pilus system
CT	Cycle threshold
DMSO	Dimethyl sulfoxide
DNA	Deoxyribonucleic acid

List of abbreviations

EPSs	Extracellular polymeric substances
I	Intermediate
Kb	Kilo base
LPS	Lipopolysaccharide
MATE family	Multidrug and Toxic compound Extrusion family
MDR	Multiple drug resistance
MFS	Major Facilitator Superfamily
MIC	Minimum inhibitory concentration
nfs	nitrofurantoin activating genes
ODc	Optical density cut-off value
omp	Outer membrane protein
PBP	Penicillin binding protein
PBS	Phosphate buffered saline
PCR	Polymerase chain reaction
PDR	Pan drug resistant
PetN	Phosphoryl ethanolamine
PNAG	poly-β-1,6-N-acetylglucosamine
Qnr	Quinolone resistance
qPCR	Quantitative Polymerase chain reaction
QQ	Quorum quenching
QS	Quorum sensing
R	Resistant
RNA	Ribonucleic acid
RND family	The Resistance-Nodulation-Division

List of abbreviations

ROS	Reactive oxygen species
S	Sensitive
SEM	Scanning Electron Microscope
SMR family	Small Multidrug Resistance family
T2SS	type II secretion system
T6SS	type VI secretion system
TAE	Tris-Acetate EDTA
TSB	Trypticase soya broth
VAP	Ventilator associated pneumonia
WFI	Water for injection
WHO	World health organization

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