بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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MONA MAGHRABY

Molecular and Physiological Characterization of Bacterial Macrolide Resistance Mechanisms as an Approach of Infection Control

A Thesis

Submitted in Partial Fulfillment of the Requirements for the

PhD degree

In Pharmaceutical Sciences
(Microbiology and Immunology)

By

Amr Shaker Meselhy

Master of Pharmaceutical Sciences, 2014
Department of Microbiology and Immunology,
Faculty of Pharmacy, Ain Shams University

2020

Ain Shams University
Faculty of Pharmacy
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Amr Shaker Meselhy

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List of Abbreviations

Abbreviation	Definition
23S rRNA	23S ribosomal ribonucleic acid
ABC	ATP-binding cassette
AZM	Azithromycin
BLAST	Basic Local Alignment Search tool
CLI	Clindamycin
CLSI	Clinical and Laboratory Standards Institute
CoNS	Coagulase-negative *Staphylococcus aureus*
EDTA	Ethylene diaminetetraacetic acid
ERE	Erythromycin esterase
ere	Gene encodes erythromycin esterase
ERM	Erythromycin ribosomal methylase
ERY	Erythromycin
erm	Gene encodes erythromycin ribosomal methylase
MCS	Multiple cloning site
MAC(s)	Macrolide(s)
Mef	The gene encoding macrolide efflux protein
c/i MLS	Constitutive/Inducible macrolide, lincosamide and streptogramin type-B
MPH	Macrolide 2'-phosphotransferase
mph	The gene encoding macrolide 2'-phosphotransferase enzyme
MRSA	Methicillin-resistant *Staphylococcus aureus*
msr	Gene encodes macrolide streptogramin resistance protein
ORF	Open reading frame
SDS	Sodium dodecyl sulphate

SOB	Super optimal broth
SOC	Super optimal broth with catabolite repression
S. aureus	*Staphylococcus aureus*
TAE	Tris acetic acid EDTA
TE	Tris EDTA
Tris	Trishydroxymethylaminomethane