



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

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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Modified Solid Phase Peptide Synthesis of Polymyxin E₁ Antibiotic Analogues Using Microwave Assisted Irradiation

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

"وَقُلْ رَبِّ زِدْنِي عِلْمًا"

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TO MY PARENTS,
MY FAMILY,
AND MY Colleagues.

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List of Abbreviations	
<i>Symbol</i>	<i>Description</i>
A.A	Amino Acid
ACOH	Acetic Acid
ACN	Acetic Anhydride
AMPs	Antimicrobial Peptides
Arg	L-Arginine
Asp	L-Aspartic Acid
Boc	Tert-Butyloxycarbonyl
BOP	Benzotriazol-1-yl -oxy-tri(dimethylamino) phosphonium hexafluorophosphate
BrOP	Bromotris(N-methylmethanaminato)-phosphorus hexafluorophosphate
Bzl	Benzyl
ClOP	Chlorotris(N-methylmethanaminato)-phosphorus hexafluorophosphate
DAB	2,4-Diaminobutyric Acid
DCC	Dicyclohexylcarbodiimide
DCM	Dichloromethane
DCHU	Dicyclohexylurea
DIC	N,N-Diisopropylcarbodiimide
DIEA	N,N-Diisopropylethylamine
DMAP	4-Dimethylaminopyridine

List of Abbreviations

DMF	Dimethylformamide
DMSO	Dimethylsulfoxide
DVB	Divinylbenzene
EDC	1-Ethyl-3-(3-Dimethylaminopropyl)-Carbodiimid
EDT	Ethanedithiol
ESI-MS	Electron Spray Ionization Mass Spectroscopy
EtOAc	Ethylacetate
EtOH	Ethanol
Et ₂ O	Diethylether
Fmoc	9-Fluorenylmethyloxycarbonyl
HATU	N-[(dimethylamino)-1H-1,2,3-triazolo[4,5-6]pyridin-ylmethylene]-N-methylmethanaminium hexafluorophosphate N-oxide
HBTU	N-[(1H-benzotriazol-1-yl)(dimethylammo)methylene]-N-methylmethanaminium hexafluorophosphate N-oxide
HCTU	O-(1H-6-chlorobenzotriazole-1-yl)-1,1,3,3-tetramethyluronium hexafluorophosphate
HF	Hydrofluoric Acid
Hmb	2-Hydroxy-4-methoxybenzyl
HMBA	4-Hydroxymethylbenzoic acid
HMPA	4-Hydroxymethylphenoxyacetyl
HOAt	1-hydroxy-7-azabenzotriazole

List of Abbreviations

HOBt	1-Hydroxybenzotriazole
HOSu	N-Hydroxysuccinimide
HPLC	High Performance Liquid Chromatography
IC ₅₀	Half Maximal Inhibitory Concentration
LC-MS	Liquid Chromatography-Mass Spectrometry
LD ₅₀	lethal dose
Leu	L-Leucine
LPPS	Liquid Phase Peptide Synthesis
LPS	Lipopolysaccharides
IR	Infra Red
MBH	4-Methylbenzhydramine
Met	Methionine
MHA	Methyl Heptanoic Acid
MHPA	4-Hydroxy-3-methoxyphenoxyacetyl
MOC	Methyl Octanoic Acid
Mtr	4-Methoxy-2,3,6-trimethylbenzenesulfonyl
NMM	N-Methylmorpholine
OBzl	Benzyl ester
OBu ^t	Tert-Butyl ester
OM	Outer Membrane
Pbf	2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulphonyl
PEG	Polyethyleneglycol