

List of Abbreviations

Abbreviations	Full Form
ATP	Adenosine triphosphate
ADP	Adenosine diphosphate
ADME	Absorption, Distribution, Metabolism, and Excretion
ADT	Agar Diffusion Test
BCG	Bacille Calmette Guerin
BBB	Blood-Brain Barrier
BLAST	Basic Local Alignment Search Tool
CFU	Colony Forming Units
COX	Cyclooxygenase
CPZ	Chlorpromazine
CHCl ₃	Chloroform
CDCl ₃	Deuterated Chloroform
CC ₅₀	Cytotoxic concentration required to kill 50% of the population
DOT	Directly Observed Treatment
DOTS	Directly Observed Treatment, Short-Course
DL	Druglikeness
DCCD	N, N-Dicyclohexylcarbodiimide
DMF	Dimethylformamide
DCM	Dichloromethane
DMSO	Dimethyl sulfoxide
EPS	Extrapyramidal side-effects

EMEM	Eagle's Minimal Essential Medium
Et ₂ O	Diethyl ether
Et ₃ N	Triethylamine
ELISA	Enzyme-linked immunosorbent assay
FAD	Flavin Adenine Dinucleotide
FICI	Fractional Inhibitory Concentration Index
HTS	High Throughput Screening
HIV	Human Immunodeficiency Virus
HBA	Hydrogen Bond Acceptor
HBD	Hydrogen Bond Donor
HQNO	2-heptyl-4-hydroxyquinoline-N-oxide
IC ₅₀	Inhibitory concentration required to kill 50% of the population
IMVs	Inverted Membrane Vesicles
K ₂ CO ₃	Potassium carbonate
KH ₂ PO ₄	Potassium dihydrogen phosphate
KOH	Potassium hydroxide
KI	Potassium iodide
LC ₅₀	Lethal concentration required to kill 50% of the population
<i>Mtb</i>	<i>Mycobacterium tuberculosis</i>
MDR-TB	Multi-Drug-Resistant Tuberculosis
MIC	Minimum Inhibitory Concentration
MABA	Microplate Alamar Blue Assay
MHA	Mueller Hinton Agar

MTT	3-(4,5-dimethyl-2-thiazolyl)-2,5-diphenyl-tetrazolium bromide
MD	Menadione
MeOH	Methanol
MgCl ₂	Magnesium chloride
NMR	Nuclear Magnetic Resonance
NDH-2	Type-2 NADH dehydrogenase
NAD	Nicotinamide Adenine Dinucleotide
NADP	Nicotinamide adenine dinucleotide phosphate
NaCl	Sodium chloride
ODCB	1,2-dichlorobenzene
PMF	Proton Motive Force
PAMPA	Parallel Artificial Membrane Permeability Assay
PDB	Protein Data Bank
PBL	Porcine Brain Lipid
Pe	Permeability
RMSD	Root Mean Square Deviation
SI	Selectivity Index
SAR	Structure-activity relationship
SEM	Standard Error of the Mean
TB	Tuberculosis
TGI	Total Growth Inhibition
TPZ	Trifluoperazine
TZ	Thioridazine
TLC	Thin-Layer Chromatography

TSA	Total Surface Area
TPSA	Topological Polar Surface Area
THF	Tetrahydrofuran
US-FDA	United States- Food and Drug Administration
UV	Ultraviolet
WHO	World Health Organization
XDR-TB	Extensively Drug-Resistant Tuberculosis
3D	Three-Dimensional
5-HT	5-hydroxytryptamine

List of Symbols

Symbols	Meaning
α	Alpha
β	Beta
δ	Delta
ϵ	Epsilon
$^{\circ}\text{C}$	Degree Celsius
\AA	Angstrom
$\text{\textcircled{C}}$	Copyright
g	Gram; Gravitational force
mg	Milligram
μg	Micro gram
ng	Nano gram
μM	Micro Mole
mmol	Milli Mole
mL	Milliliter
μL	Microliter
mV	Millivolt
h	Hour
s	Second; Singlet
nm	Nanometer
μm	Micrometer
mm	Millimeter
cm	Centimeter
ppm	Parts per million

rpm	Revolutions per minute
Kcal	Kilocalories
Hz	Hertz
MHz	Megahertz
J	Coupling constant
d	Doublet
m	Multiplet
dd	Doublet of doublet
<i>m/z</i>	Mass to charge ratio
%	Percent
pH	Potential of hydrogen
\leq	Less than or equal
<	Less than
>	More than
\pm	Plus or minus