

LIST OF ABBREVIATIONS

A	Ampere (s)
A ₂₈₀	Absorbance at 280 nanometers
A ₃₃₀	Absorbance at 330 nanometers
Å	Angstrom unit
α	Alpha
β	Beta
γ	Gamma
AA	Amino Acids
AAS	Atomic Absorption Spectroscopy
APS	Ammonium persulfate
A. U	Arbitrary units
AU	Absorbance unit
BCIP	5-Bromo-4-chloro-3-indolylphosphate
BLAST	Basic Local Alignment Search Tool
bp	Base pairs
BSA	Bovine serum albumin
°C	Degree celsius
CAPS	3-[Cyclohexylamino]-1-propanesulfonic acid
CD	Circular dichroism
cDNA	Complementary DNA
CFE	Cell Free Extract
cm	Centimeter (s)
Cu	Copper
d	Dimension
Da	Daltons
DBP	4,4'-Dichlorobenzophenone
DDA	Bis(p-chlorophenyl)acetic acid
DDD	1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane
DDE	1,1-bis-(4-chlorophenyl)-2,2-dichloroethene
DDMU	2-Chloro-1,1-bis(4-chlorophenyl)-ethene
DDNU	1,1'-(Ethenylidene)bis(4-chlorobenzene)
DDOH	2,2-Bis(p-chlorophenyl)ethanol
DDT	1,1,1-trichloro-2,2-bis-(p-chlorophenyl) ethane
DEPC	Diethylpyrocarbonate
dhl	dehydrohalogenase

DIG	Digoxigenin
DMSO	Dimethylsulfoxide
DMF	N, N'-dimethylformamide
DNA	deoxyribonucleic acid
dNTPs	Deoxy-nucleotide tri phosphate
DTT	Dithiothreitol
EDAC	N-(3-dimethylaminopropyl) N'-ethylcarbodiimide Hydrochloride
EDTA	Ethylene diamine tetra acetic acid
θ	Ellipticity
em	Emission
ESI	Electro spray Ionization
EtBr	Ethidiumbromide
ex	Excitation
Fig.	Figure (s)
FTIR	Fourier Transform Infra Red Spectroscopy
g	Gram (s)
g	Gravity
GC	Gas chromatography
GdmCl	Guanidium hydrochloride
GEMs	Genetically Engineered Microbes
Gly	Glycine
GuHCl	Guanidine hydrochloride
GSH	Glutathione (reduced form)
HCl	Hydrochloric acid
HNN	Hierarchical Neural Network
HPLC	High performance liquid chromatography
h	Hour (s)
I	Inhibitor concentration
id	Internal diameter
IPTG	Isopropyl- β -D- thiogalactopyranoside
IR	Infra red
kDa	Kilo Dalton
Ki	Inhibition/Inhibitory constant
Km	Substrate concentration at which half maximal velocity is Attained/ Michaelis-Menten constant
l/L	Liter (s)
LiCl	Lithium Chloride
LB	Luria Bertani (medium)
LC-MS	Liquid Chromatography-Mass Spectroscopy

LD	Lethal Dose
M	Molar concentration
m	Milli
mA	Milliampere (s)
max	Maximum
MALDI-TOF	Matrix-assisted laser desorption/ionisation-time of flight
MM	Minimal medium
mm	Milli metre
mg	Milligram (s)
MgCl ₂	Magnesium chloride
min	Minute (s)
mL	Milliliter (s)
mM	Millimolar
mol	Moles
MOPS	3-(N-morpholino)propanesulfonic acid
Mr	Molecular weight
µg	Microgram
µl / µL	Microliter (s)
µm	Micrometer
µM	Micro molar
µmol	Micromole (s)
NAD ⁺	Nicotinamide adenine dinucleotide
NADH	Nicotinamide adenine dinucleotide (reduced form)
NADP ⁺	Nicotinamide adenine dinucleotide phosphate
NADPH	Nicotinamide adenine dinucleotide phosphate (reduced form)
NBT	Nitroblue tetrazolium
NCBI	National Centre for Biotechnology Information
NIH	National Institute of Health
nm	Nanometer
ng	Nanogram
NMR	Nuclear magnetic resonance
PAGE	Polyacrylamide gel electrophoresis
PBSA	Protein Based Stabilizing Agent
PBS	Phosphate Buffered Saline
PCR	Polymerase chain reaction
PEG	Polyethylene glycol
%	Percent
pI	Isoelectric point
PMSF	Phenyl Methyl Sulphonyl Fluoride

pmole	Picomole
ppm	Parts per million
PSI	Pounds Per Square Inch.
PVDF	Polyvinilidene diflouride membrane
rDNA	Ribosomal DNA
Rf	Relative mobility
RNA	Ribonucleic acid
RP	Reverse phase
rpm	Rotations per minute
RT	Room temperature
S	Substrate
SDS	Sodium Dodecyl Sulfate
sec	Seconds
SSC	Saline sodium citrate
NaCl	Sodium chloride
NaOH	Sodium hydroxide
NaPO ₄	Sodium phosphate
OD	Optical density
TAE	Tris acetate ethylene diamine tetra acetic acid
TBS	Tris-buffer saline
TCA	Trichloroacetic acid
TE	Tris ethylene diamine tetra acetic acid
TEA	Triethylamine
TEMED	N, N, N', N', tetramethylethylenediamine/ N,N,N'N'-Tetramethyl 1, 2-diaminoethane
TFA	Trifluoroacetic acid
TLC	Thin Layer Chromatography
Tris	tris (hydroxymethyl) amino methane
U	Units
UV	Ultraviolet
UV-VIS	Ultraviolet-Visible
V	Velocity
V	Volts
Vmax	Velocity-maximum
vol	Volume
Vs	Versus
v/v	Volume by volume
λ	Wavelength
wt	Weight
WHO	World Health Organisation

w/v Weight by volume
w/w Weight/ weight
X-GAL 5-bromo-4-chloro-3-indolyl- β -D-galactopyranoside