

List of Abbreviations

2-DE	2 –dimensional gel electrophoresis
AAS	Atomic absorption spectrophotometer
Amp ^r	Ampicillin resistance
ATCC	American type culture collection
BER	Base excision repair
BLAST	Basic local alignment search tool
bp	Base pair
Cat ^r	Chloramphenicol resistance
cfu	Colony forming unit
CTAB	Cetyl trimethylammonium bromide
DGGE	Denaturing gradient gel electrophoresis
DR1	<i>Deinococcus radiodurans</i> R1
DSBs	Double stranded breaks
EDTA	Ethylene diamine tetra acetic acid
EMP	Embden–Meyerhof–Parnas pathway
H ₂ DCFDA	2',7'-dichlorodihydrofluorescein diacetate
ICP-AES	Inductively coupled plasma- Atomic Emission spectroscopy
IMAC	Immobilised metal affinity chromatography
IPTG	Isopropyl-1-thio-L-D-galactopyranoside
IR	Ionising radiation
kbp	Kilo-basepair
kDa	Kilo-dalton
kGy	Kilo Gray
Mol	Mole

MCO	Metal catalysed oxidation
MT	Metallothionein
MTCC	Microbial type culture collection
NER	Nucleotide excision repair
OD	Optimical density
PAGE	Polyacrylamide gel electrophoresis
PC	Carbonylated protein
PCR	Polymerase chain reaction
PPP	Pentose phosphate Pethway
RE	Restriction Endonuclease
ROS	Reactive Oxygen Speceis
rRNA	Ribosomal ribonucleic acid
SDS	Sodium dodecyl sulphate
SOD	Superoxide Dismutase
TAE	Tris Acetate EDTA
T-BARs	Thio-baarbituric acid reactive substances
TCA	Tricarboxylic acid
TE	Tris EDTA
Tris	Tris (hydroxymethyl) aminomethane
UV	Ultraviolet

Note: The full forms of several rarely used abbreviations have been described within the text