



ABBREVIATIONS

ATCC	American type culture collection
X-Gal	5-Bromo-4-chloro-3-indolyl- β -D galactopyranoside
IPTG	Isopropyl β -D thio galactopyranoside
LB	Luria broth
SDS	Sodium Dodecyl Sulphate
APS	Ammonium persulfate
Ori	Origin of replication
WT	Wild type
PPC	Phosphoenolpyruvate carboxylase
CS	Citrate synthase
PYC	Pyruvate carboxylase
ICL	Isocitrate lyase
ICDH	Isocitrate dehydrogenase
GDH	Glucose dehydrogenase
G-6-PDH	Glucose-6-phosphate dehydrogenase
GADH	Gluconate dehydrogenase
PPC	Phosphoenolpyruvate carboxykinase
PYC	Pyruvate carboxylase
PYK	Pyruvate kinase
ME	Malic enzyme
MDH	Malate dehydrogenase
LDH	Lactate dehydrogenase
POX	Glucanase peroxidase
APX	Ascorbate peroxidase
SOD	Superoxide dismutase
NR	Nitrate reductase

PDH	Pyruvate dehydrogenase
PFK	Phosphofructokinase
PTS	Phosphotransferase system
GFP	Green fluorescent protein
PQQ	Pyroloquinoline quinone
G-6-P	Glucose-6-phosphate
6-PG	6-phosphogluconate
PEP	Phosphoenolpyruvate
OAA	Oxaloacetate
ATP	Adenosine triphosphate
DNA	Deoxyribonucleic acid
cAMP	Cyclic adenosine monophosphate
NADH	Nicotinamide adenine dinucleotide (reduced)
NADP(H)	Nicotinamide adenine dinucleotide phosphate (reduced)
DTT	1, 4-Dithiothreitol
EMP	Embden–Meyerhof–Parnas pathway
TCA	Tricarboxylic acid
PPP	Pentose phosphate pathway
ETC	Electron transport chain
ED	Entner-Doudoroff
PSM	Phosphate solubilizing microorganisms
P/Pi	Phosphate / inorganic phosphate
HPLC	High performance liquid chromatography
BLAST	Basic local alignment search tool
PCR	Polymerase Chain Reaction
PAGE	Polyacrylamide Gel Electrophoresis
EDTA	Ethylene diamine tetra acetic acid
Tris	Tris (hydroxymethyl) aminomethane buffer

CTAB	Cetyl trimethylammonium bromide
PGPR	Plant Growth Promoting Rhizobacteria
RE	Restriction Endonuclease
nm	Nanometer
ng	Nanogram
kb	kilobase (s)
bp	base pair (s)
kDa	Kilodalton
rpm	Revolutions per minute
OD	Optical Density
DCW	Dry cell weight
mM/M	Millimolar/Molar
µl/ml	Microlitres/millilitres
Amp	Ampicillin
Km	Kanamycin
Str	Streptomycin
Tmp	Trimethoprim

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