

LIST OF ABBREVIATIONS

APS	- ammonium per sulphate
AMV-RT	- avian myeloblastosis virus reverse transcriptase
bp	- base pair
BSA	- bovine serum albumin
cDNA	- complementary deoxy-ribonucleic acid
CBB R-250	- coomassie brilliant blue
CPXI	- <i>cereus pterogonus</i> xylose isomerase
CoCl ₂	- cobalt chloride
CTAB	- hexadecyltrimethyl-ammonium bromide
Da	- dalton
DEPC	- diethyl pyrocarbonate
dNTP	- deoxynucleotide triphosphate
DNA	- deoxy-ribonucleic acid
DSC	- differential scanning calorimetry
DTT	- dithiothreitol
E _a	- activation energy
EDTA	- ethylene diamine tetra acetic acid
EPR	- electron paramagnetic resonance
gm	- gram
GI	- glucose isomerase
HCl	- hydrochloric acid
hr	- hour
H ₂ SO ₄	- sulphuric acid

HClO ₄	- perchloric acid
HNO ₃	- nitric acid
ICP-AES	- inductively coupled plasma - atomic emission spectroscopy.
K	- reaction rate constant
L	- litre
LNT	- liquid nitrogen temperature
M	- molar
mA	- milli amperes
min	- minute(s)
mg	- milligram
mM	- milli molar
MgCl ₂	- magnesium chloride
MnCl ₂	- manganese chloride
ml	- millilitre
mRNA	- messenger RNA
MW	- molecular weight
NaOH	- sodium hydroxide
ng	- nanogram
nm	- nanometer
OVXI	- <i>opuntia vulgaris xylose isomerase</i>
PCR	- polymerase chain reaction
pH	- hydrogen ion concentration
PMSF	- phenyl methyl sulphonyl fluoride
RNA	- ribonucleic acid
RT-PCR	- reverse transcriptase polymerase chain reaction

SDS	- sodium dodecyl sulphate.
<i>Taq</i>	- <i>Thermus aquaticus</i>
TAE	- tris acetate EDTA
TCA	- trichloro acetic acid
TEMED	- N, N, N', N' tetramethylethylenediamine
T _m	- melting temperature
TMB/H ₂ O ₂	- tetramethyl benzidine / hydrogen peroxide
Tris	- tris (hydroxyl methyl) amino methane
w/v	- weight / volume
V	- volts
V _e	- elution volume
V _o	- void volume
XI	- xylose isomerase
°C	- degree centigrade
µg	- micro gram
µl	- micro litre
HFCS	- high fructose corn syrup