

LIST OF ABBREVIATIONS

a. a	Amino acid
Bp	base pair (s)
DTT	Dithiothreitol
TFE	2,2,2 - trifluoroethanol
IPTG	Isopropyl β -D thio galactopyranoside
Kb	kilobase (s)
kDa	Kilodalton
LB	Luria broth
PCR	Polymerase chain reaction
PMSF	Phenylmethylsulfonyl fluoride
SD	Synthetic dextrose media
SUMO	Small ubiquitin like modifier
SDM	Site Directed Mutagenesis
PAGE	Polyacrylamide gel electrophoresis
Ub	Ubiquitin
UbWt	Wild type ubiquitin
EP42	Ubiquitin with four mutations. S20F, A46S, L50P and I61T
S20F	Serine to phenylalanine replacement at 20 th position of ubiquitin
A46S	Alanine to Serine replacement at 46 th position of ubiquitin
L50P	Leucine to Proline replacement at 50 th position of ubiquitin
I61T	Isoleucine to Threonine replacement at 61 st position of ubiquitin
SEM	Scanning Electron Microscopy
UPS	Ubiquitin proteasome system
μ g	Microgram
Wt	Wild type

ABBREVIATIONS FOR AMINO ACIDS

Amino Acid	Three Letter code	Single Letter code	Amino Acid	Three Letter code	Single Letter code
Alanine	Ala	A	Leucine	Leu	L
Arginine	Arg	R	Lysine	Lys	K
Asparagine	Asn	N	Methionine	Met	M
Aspartic acid	Asp	D	Phenylalanine	Phe	F
Cysteine	Cys	C	Proline	Pro	P
Glutamic acid	Glu	E	Serine	Ser	S
Glutamine	Gln	Q	Threonine	Thr	T
Glycine	Gly	G	Tryptophan	Trp	W
Histidine	His	H	Tyrosine	Tyr	Y
Isoleucine	Ile	I	Valine	Val	V