

List of Abbreviations

AP	: Apurinic/Apyrimidinic
APE1	: AP endonuclease 1
AD	: Alzheimer's disease
AT	: Ataxia telangiectasia
ATP	: Adenosine Triphosphate
BER	: Base excision repair
BS	: Bloom's syndrome
BuAdATP	: N2- (p-n-butylanilino)-2'-deoxyadenosine-5'-triphosphate
BuPdGTP	: N2- (p-n-butylphenyl)-2'-deoxyguanosine-5'-triphosphate
CAT	: Catalase
CS	: Cockayne Syndrome
dATP	: 2'-deoxyadenosine 5'- triphosphate
dCTP	: 2'-deoxycytidine 5'-triphosphate
ddTTP	: 2',3'- Dideoxythymidine-5'-triphosphate
dGTP	: 2' -deoxyguanosine 5'- triphosphate
DDW	: Double distilled water
DMSO	: Dimethyl sulphoxide
DNA	: Deoxyribonucleic acid
DSB	: Double strand break
DRPase	: 5'-2- deoxyribose-5- phosphate lyase
DRP	: 5'-2- deoxyribose-5- phosphate
DTT	: Dthiothreitol
FA	: Fanconi's anemia
FEN1	: ' flap ' structure specific endonuclease-1
GMP	: Guanosine-5'-monophosphate
HGP	: Hutchinson-Guilford progeria syndrome
HRR	: Homologous recombination repair

IR	Ionizing radiation
Kda	Kilodalton
MMR	Mismatch repair
MNNG	N-methyl-N'-nitro-N-nitrosoguanidine
NER	Nucleotide excision repair
NHEJ	Non-homologous end joining
PAGE	Polyacrylamide gel electrophoresis
PCNA	Proliferating nuclear antigen
PD	Parkinson's disease
PMSF	Phenylmethyl sulfonyl Flouride
Pols	Polymerases
Pol α	DNA polymerase α (alpha)
Pol β	DNA polymerase β (beta)
Pol δ	DNA polymerase δ (delta)
Pol ϵ	DNA polymerase ϵ (epsilon)
Pol γ	DNA polymerase γ (gamma)
POPOP	2,2'-p-Phenylene-bis [5-henyloxazole]
PPO	2,5-Diphenyl-1, 3-Oxazole
ROS	Reactive oxygen species
SOD	Superoxide dismutase
SSB	Single strand break
TCR	Transcription coupled repair
TTD	Trichothiodystrophy
TTP	thymidine 5'- triphosphate
UDS	Unscheduled DNA synthesis
WS	Werner syndrome
XP	Xeroderma pigmentosum
XRCC1	X-ray repair cross-complementing gene I