

1. Abbreviations

A	Adenine
Abl	Abelson leukaemia
ABTS	2,2'-Azino-di-[3-ethylbenzthiazoline sulfonate]
Akt	Ser/Thr protein kinase known as protein kinase B
AP-1	Activator protein 1
Apaf-1	Apoptotic protease activating factor
APC	Adenomatous Polyposis Coli
APS	Ammonium peroxydisulfate
ATM	Ataxia telangiectasia mutated
ATP	Adenosine triphosphate
ATR	Ataxia telangiectasia related
A.U.	Arbitrary units
Bax	Bcl-2 associated protein X
Bcl-2	B-cell lymphoma/leukaemia
bp	Base pair
BSA	Bovine serum albumin
C	Cytidine
CAK	Cdk-activating kinase
CCNU	N-(2-Chloroethyl)-N'-cyclohexyl-N'-nitrosourea
cdc	Cell-division cycle kinase
cdk	Cyclin dependent kinase
cDNA	Complementary DNA strand
ch2/ch3	Chromosome 2/ Chromosome 3
chk	Checkpoint kinase
CIP1	Cdk-interacting protein 1
CKI	Cycling dependent kinase inhibitors
CLL	B-cell chronic lymphocytic leukaemia
cpm	Counts per minute
CPT	Camptothecin
CPT-11	Irinotecan
CRC	Colorectal cancer
DAPI	4',6-Diamidino-2-phenylindole-2HCl
dATP	Deoxyadenosine 5'-triphosphate
dCTP	Deoxycytosine 5'-triphosphate
DEPC	Diethyl-pyrocabonate
dGTP	Deoxyguanosine 5'-triphosphate
DMEM	Dulbecco's MEM
DMSO	Dimethylsulfoxide
DNA	Deoxyribonucleic acid
dNTP	Nucleotide
DTT	Dithiothreitol
dTTP	Deoxythymidine 5'-triphosphate

dUTP	Deoxyuridine 5'-triphosphate
EDTA	Ethylenediaminetetraacetic acid
EGF	Epidermal growth factor
EGTA	Ethylene glycol bis-(β -aminoethyl ether) N, N, N', N'-tetracetic acid
ELISA	Enzyme linked immunosorbent assay
ERK	Extracellular signal-regulated kinase (MAP kinase or MAPK)
FACS	Fluorescence activated cell sorter
FCS	Fetal calf serum
5-FU	5-Fluorouracil
G	Guanine
G1	Gap 1 (rest phase of cell cycle before replication phase)
G2	Gap 2 (rest phase of cell cycle before mitosis)
Gadd45	Growth arrest and DNA damage inducible gene
hMLH1	Human Mut-L homologue-1
hMSH2	Human Mut-S homologue-2
hMSH3	Human Mut-S homologue-3
hMutL	Human Mut-L homologue
hMutS	Human Mut-S homologue
IAP	Survivin
kb	Kilobases
kDa	Kilodalton
KIP1	Kinase inhibitor protein 1
M	Molarity or Mitosis
MAP	Mitogen-activated protein
Mdm2	Murine double minute-2
MEK1/2	Mitogen-activated protein kinase kinases 1/2 (MAPK kinases or MKK)
μ M	Micromolar
mM	Millimolar
MMR	Mismatch repair
MNNG	N-Methyl-N'-nitro-N-nitrosoguanidine
mRNA	Messenger RNA
MTP	Microtiter plate module
MTT	3-(4,5-Dimethylthiazol-2-yl)-2,5-diphenyl-tetrazolium bromide
mut	Mutated
MutL, MutS, MutH	Components of the mismatch repair system in <i>E.coli</i>
N	Haploid DNA
2N	Diploid DNA
4N	Tetraploid DNA
8N	Octaploid DNA
NADH	Nicotinamide adenine dinucleotide-hydrogenated
NADPH	Nicotinamide adenine dinucleotide phosphate-hydrogenated

nM	Nanomolar
Noc	Nocodazole
NSCLC	Non-small cell lung carcinoma
OD	Optical density
PAGE	Polyacrylamide gel electrophoresis
PARP	Poly(ADP-ribose)polymerase
PBS	Phosphate buffered saline
PCR	Polymerase chain reaction
PD98059	2'-Amino-3'-methoxyflavone
PDH	Pyruvate dehydrogenase (lipoamide)
PI	Propidium iodide
PKC	Protein kinase C
PMSF	Phenylmethylsulfonyl fluoride
PUMA	p53 upregulated modulator of apoptosis
PVDF	Polyvinylidene fluoride
Raf	Member of the Ser/Thr family of protein kinases
Ras	Member of the Ser/Thr family of protein kinases
Rb	Retinoblastoma protein
RNA	Ribonucleic acid
rpm	Revolutions per minute
RT	Reverse-transcription
RT-PCR	Reverse-transcription polymerase chain reaction
S	Synthesis phase of the cell cycle
SCLC	Small cell lung carcinoma
SD	Standard deviation
SDS	Sodium dodecyl sulfate
Ser	Serine
SN-38	7-Ethyl-10-hydroxycamptothecin
SSC	Sodium chloride/ citrate
T	Thymine
TAE	Tris acetate-EDTA buffer
TBS	Tris buffered saline
TEMED	N,N,N',N'-Tetramethylethylenediamine
6TG	6-Thioguanine
Thr	Threonine
topo I	Topoisomerase I
TUNEL	Terminal deoxynucleotidyl transferase dUTP nick-end labeling
Tyr	Tyrosine
U0126	1,4-Diamino-2,3-dicyano-1,4-bis(2-aminophenylthio)butadiene
UCN-01	7-Hydroxystaurosporine
UV	Ultraviolet
Wee1	Tyrosine-specific protein kinase
wt	Wild-type

