

ABBREVIATIONS

-2ME	-	-2 methoxyestradiol
6-OHDA	-	6-hydroxydopamine
8-OHDG	-	8-hydroxydeoxyguanosine
AbP	-	Abaxial part
AbPh	-	Abaxial phloem
AbS	-	Abaxial side
AbS	-	Abaxial strand
ABTS	-	2,2'-azinobis-(3-ethylbenzothiazoline-6-sulfonic acid)
Abx	-	Abaxial xylem
Ad H	-	Adaxial hump
AdC	-	Adaxial cone
AdPh	-	Adaxial phloem
AdS	-	Adaxial side
Ads	-	Adaxial strand
Adx	-	Adaxial xylem
AIF	-	Apoptosis inducing factor
ALP	-	alkaline phosphatase
ALT	-	alanine aminotransferases
AO/EB	-	Acridine Orange/Ethidium Bromide
Apaf	-	Apoptotic protease activating factor 1
AST	-	aspartate aminotransferases
ATCC	-	American Type Culture Collection

ATP	-	Adenosine triphosphate
Au	-	Absorbance of unknown
Bax	-	Bcl2 associated X protein
Bcl-2	-	B-cell lymphoma 2
Bcl-6	-	B-cell lymphoma 6
Bcl-XL	-	B-cell lymphoma-extra large
Bid	-	BH3 interacting death domain protein
Bim	-	Bcl2 interacting mediator
BITC	-	Benzyl isothiocyanate
BrdU	-	5-bromo-2'-deoxyuridine
BSA	-	Bovine serum albumin
CBE	-	Cinnamon bark extract
CC	-	Column cells
CC	-	Central canal
CDC25 C	-	Cell Division Cycle 25C
CDK	-	Cyclin Dependent Kinase
CFU	-	Colony Forming Unit
cm	-	centimeter
CO	-	Cortex
Cot	-	Cotyledon
COX 2	-	Cyclo-oxygenase 2
CP	-	Carica papaya
Cr	-	Crystal zone
Cr	-	Crystal

Csc	-	Columnar endosperm
Csc	-	Columnar sclereids
Cu	-	Concentration of unknown
cu	-	cubic
Cu	-	Cuticle
DABCO	-	1,4-diazabicyclo[2.2.2]octane
DAPI	-	4',6-diamidino-2-phenylindole
DFF-45	-	DNA fragmentation factor
DMBA	-	Dimethylbenzanthracene
DMEM	-	Dulbeco's Modified Eagle Medium
DMSO	-	Dimethylsulfoxide
DNA	-	Deoxyribonucleic acid
DPPH	-	2,2-diphenyl -1-picrylhydrazyl
DR	-	Dilated ray
ED ₅₀	-	median effective dose
EDTA	-	Ethylenediaminetetraacetic acid
EETFG	-	Ethanol Extract of <i>Trigonella foenum-graecum</i>
EGFR	-	Epidermal Growth Factor Receptor
En	-	Endodermis
En	-	Endosperm
Ens	-	Endosperm
Ep	-	Epidermis
ESBL	-	Extended Spectrum Beta Lactamase
FAA	-	Formalin acetic acid ethyl alcohol

FBS	-	Foetal Bovine Serum
FITC	-	Fluorescein isothiocyanate
FSC	-	Forward Angle Scatter
g	-	gram
G0	-	Gap 0
G1	-	Gap 1
G2	-	Gap 2
GAE	-	Gallic Acid Equivalent
GR	-	Glutathione reductase
GST	-	Glutathione S-transferases
GT	-	Ground tissue
GT	-	Ground tissue
h	-	Hours
HA	-	serum hyaluronic acid
HEPES	-	4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid
HPLC	-	High Performance Liquid Chromatography
HPTLC	-	High Performance Thin Layer Chromatography
HPV	-	Human Papilloma Virus
HRAS	-	Harvey rat sarcoma
IC ₅₀	-	Half Maximal Inhibitory Concentration
IGFR	-	Insulin-like growth factor receptor
IKK	-	alpha kinase of IKB
IL-6	-	Interleukin 6
iNOS	-	inducible Nitric oxide synthase 2

INR	-	International Normalized Ratio
JC 1	-	5,5',6,6'-tetrachloro-1,1',3,3'-tetraethylbenzimidazolylcarbocyanine iodide
L	-	Litre
La	-	Lamina
LD ₅₀	-	median lethal dose
LDH	-	lactate dehydrogenase
LDL	-	Low Density Lipoprotein
M	-	Mitosis
MAP Kinase	-	Mitogen Activated Protein Kinase
MDM2	-	murine double minute2
mg	-	milligram
MIC	-	Minimum Inhibitory concentration
ml	-	milliliter
mm	-	millimeter
MMNG	-	methyl-N'nitro-N-nitrosoguanidine
MMP	-	matrix metallo proteinases
MPT	-	Mitochondrial Permeability Transition
MTCC	-	Microbial Type Culture Collection and Gene Bank
MTT	-	3-(4,5-Dimethylthiazol-2-yl)-2,5-Diphenyltetrazolium Bromide
MTT	-	3-(4,5-Dimethylthiazol-2-yl)-2,5Diphenyltetrazolium Bromide
n.d	-	not dated

NAC	-	N acetyl cysteine
NADH	-	Nicotinamide adenine dinucleotide Reduced
NFk B	-	Nuclear Factor Kappa B
ng	-	nanogram
nm	-	nanometer
NMBA	-	N-Nitroso-N-methyl-4-aminobutyric acid
NQQ	-	Nitroquinoline oxide
NQQ	-	Nitroquinolone
Nrf2	-	nuclear factor erythroid 2–related factor 2
OSCC	-	Oral Squamous Cell Carcinoma
P53	-	protein 53
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PARP	-	Poly (ADP-ribose) polymerase
PBS	-	Phosphate Buffered Saline
PCNA	-	Proliferating Cell Nuclear Antigen
Ph	-	Phloem
Ph R	-	Phloem ray
PI	-	Propidium Iodide
pikB	-	Phosphatidylinositol 3-kinase 2
PM	-	Palisade mesophyll
PMBC	-	Peripheral blood mononuclear cells
PS	-	Parenchyma strand with septa
PUMA	-	p53 up regulated modulator of apoptosis
PV	-	Primary vein

RECK	-	reversion inducing cysteine rich protein with kazal motifs
Myc	-	Myelocytomatosis
RNA	-	Ribonucleic acid
RNS	-	Reactive Nitrogen Species
ROS	-	Reactive oxygen species
Rpm	-	revolutions per minute
RT-PCR	-	Reverse Transcriptase Polymerase chain reaction
S	-	Synthesis
SC	-	Seed coat
SDH	-	succinate dehydrogenase
SE	-	Sieve element
SM	-	Spongy mesophyll
Spa	-	Septate parenchyma
SPSS	-	Statistical Package for the Social Sciences
sq	-	square
SV	-	Secondary vein
TAE	-	Tris base, acetic acid and EDTA
TBA	-	Tertiary Butyl Alcohol
TIMP	-	tissue inhibitors of metalloproteinases
TLC	-	Thin Layer Chromatography
TNF α	-	Tumor necrosis factor α
TPC	-	Total Phenol Content
TRAIL	-	Tumor Necrosis Factor-Related Apoptosis-Inducing Ligand
Tris	-	Tris(hydroxymethyl)aminomethane

TUNNEL	-	Terminal deoxynucleotidyl transferase (TdT) dUTP Nick-End Labeling
UV	-	Ultraviolet
v/v	-	volume/volume
VEGF-C	-	vascular endothelial growth factor-C
VI	-	Vein islet
VT	-	Vein termination
w/w	-	weight / weight
WHO	-	World Health Organization
X	-	Xylem
XO	-	Xanthine oxidase
γ -GT	-	gamma glutamyl transferase
$\Delta\psi_m$	-	Mitochondrial membrane potential
μg	-	microgram
μM	-	micromole