

List of Abbreviations

AJCC	: American Joint Committee on Cancer
ALP	: Alkaline phosphatase
APMA	: 4-aminophenylmercuric acetate
AP-1	: Activator protein-1
APS	: Ammonium per sulphate
AUC	: Area under curve
α	: Alpha
BGN	: Benzyl-N-acetyl- α -D-galactosaminide
BSA	: Bovine serum albumin
CNBr	: Cyanogen bromide
CMP	: Cytidine monophosphate
CR	: Complete responders
DDW	: Double distilled water
DMSO	: Dimethyl sulphoxide
DNA	: Deoxyribonucleic acid
DUSP1	: Dual specificity phosphatase 1
<i>ECAD</i>	: E-cadherin
EDTA	: Ethylene diamine tetraacetic acid
EGFR	: Epidermal growth factor receptor
ELISA	: Enzyme linked immunosorbent assay
EMT	: Epithelial mesenchymal transition
ER	: Endoplasmic reticulum
FUT	: Fucosyl transferase
GBM	: Glioblastoma
GSC	: Glioblastoma stem cells
GST	: Glutathione S-transferase
H ₂ SO ₄	: Sulphuric acid
HBsAg	: Hepatitis B surface antigen
HCl	: Hydrochloric acid

H3F3A	: H3 histone family 3A
HIV	: Human immunodeficiency virus
H ₂ O ₂	: Hydrogen peroxide
HPV	: Human papilloma virus
HRP	: Horse radish peroxidase
IDV	: Integrated density value
IRES	: Internal ribosomal entry site
kDa	: Kilo Dalton
KH ₂ PO ₄	: Potassium dihydrogen orthophosphate
JNK	: c-Jun N-terminal kinase
LTA	: <i>Lotus tetragonolobus</i>
LN	: Lymph node
μ	: Micro
MAM	: <i>Macckia amurensis</i>
MAPK	: Mitogen - activated protein kinase
MgCl ₂	: Magnesium chloride
miRNA	: Micro RNA
MMP	: Matrix metalloproteinase
mRNA	: Messenger Ribonucleic acid
4-MU	: 4-Methylumbelliferone
NaCl	: Sodium chloride
Na ₂ HPO ₄	: Disodium hydrogen orthophosphate
NaN ₃	: Sodium azide
NANA	: N-acetylneuraminic acid
NaOH	: Sodium hydroxide
nM	: Nanomolar
NO	: Nitric oxide
NO ₂	: Nitrite
NO ₃	: Nitrate
NP-40	: Nonidet -P40
NR	Non-responders

NS	: Non-significant
OAZ1	: Ornithine decarboxylase antizyme 1
O.D.	: Optical density
OPC	: Oral precancerous conditions
OSCC	: Oral squamous cell carcinoma
OGG1	: 8 -Oxoguanine DNA glycosylase
PAGE	: Polyacrylamide gel electrophoresis
PBS	: Phosphate buffer saline
PCR	: Polymerase chain reaction
PNPP	: p-Nitrophenyl phosphate
PT	: Pre-treatment
RNA	: Ribonucleic acid
RNS	: Reactive nitrogen species
ROC	: Receiver's Operating Characteristics
RPM	: Revolutions per minute
RT-PCR	: Reverse transcriptase polymerase chain reaction
SAT	: Spermine -N1-acetyltransferase
SDS	: Sodium dodecyl sulphate
SEM	: Standard error of mean
Sh	: Small hairpin
SNA	: <i>Sambucus nigra</i>
SOD	: Superoxide dismutase
S100P	: S100 calcium-binding protein P
ST	: Sialyl transferase
TBA	: Thiobarbituric acid
TBST	: Tris buffered saline with Tween-20
TCA	: Trichloroacetic acid
TEMED	: N, N, N', N' Tetramethylethylenediamine
TH	: Tobacco habituates
TNH	: Tobacco non-habituates
TNM	: Tumor node metastasis

TP	: Total protein
TPA	: 12-O-tetradecanoylphorbol-13-acetate
TRE	: TPA response element
TSA	: Total sialic acid
UV	: Ultra violet
WHO	: World Health Organization
ZnSO ₄	: Zinc sulphate