



Effect of Human Bone Marrow Derived Mesenchymal Stem Cells on Squamous Cell Carcinoma Cell Line

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List of Abbreviations

APAF: Apoptotic protease activating factor
ATP: Adenosine triphosphate
Bcl2: Beta cell lymphoma 2
BIRC5: Baculoviral inhibitor of apoptosis repeat-containing 5
BM: Bone marrow
BMSCs: Bone marrow stem cells
bp: Base pair
CDE: Cell cycle-dependent element
cDNA: Complementary Deoxyribonucleic Acid
CFU-Fs: Colony forming unit fibroblasts
CHR: Cell cycle genes homology region
CPC: Chromosomal passenger complex
CT: Computed tomography
Ct: Cycle threshold
CTP: Cytidine triphosphate
CYT c: Cytochrome c
DEPC: Diethylpyrocarbonate
DMEM: Dulbecco's modified Eagle's medium
DNA: Deoxyribonucleic acid
DNase: Deoxyribonuclease
dNTP: Deoxynucleoside triphosphate
DPCs: Dental pulp cells
DR: Death receptor
dTTP: Deoxythymidine triphosphate
EDTA: Ethylene diamine tetraacetic acid
EMT: Epithelial to mesenchymal transition
ERK: Extracellular signal- regulated kinase
ESCs: Embryonic stem cells

FBS: Fetal bovine serum

FCM: Flow cytometry

FLK-1: Fetal Liver Kinase-1

GAPDH: Glyceraldehyde-3-phosphate dehydrogenase

GC: Number of G`s and C`s in the primer as a percentage of the total bases.

GTC: Guanidine thiocyanate

GTP: Guanosine triphosphate

HEp2: Human- epidermoid- laryngeal carcinoma

HEpG2: hepatocellular carcinoma cell line

HPRI: Human Placental Ribonuclease Inhibitor

HPV: Human papilloma virus

HSCs: Hematopoietic stem cells

IAP: Inhibitor of apoptosis

IFN-B: Interferon Beta

IL-8: Interleukin- 8

INCENP: Inner centromere protein

iPS: induced pluripotent stem cells

IκB: inhibitor of kappa B

KS: Kaposi`s sarcoma

MAPK/ ERK: Ras-Raf-mitogen-activated protein kinase /extracellular signal-regulated kinase

MAPK: Mitogen-activated protein kinase

MMLV: Moloney Murine Leukemia virus

MNC: Mononuclear cell layer

MOMP: Mitochondrial outer membrane permeabilization

MRI: Magnetic resonance imaging

mRNA: Messenger ribonucleic acid

MSCs: Mesenchymal stem cells

MTT: Mosmann`s tetrazole test/ methyl thiazol tetrazolium

NF- κ B: nuclear factor - kappa B

NK: Natural killer cells

PBS: Phosphate buffer saline

pH: Hydrogen ion concentration

PI3K: Phosphoinositide 3-kinase

QPCR: Quantitative polymerase chain reaction

QRT-PCR: Quantitative reverse transcription polymerase chain reaction.

Rb: Retinoblastoma

RING: Really Interesting New Gene

RNA: Ribonucleic acid

RNase: Ribonuclease

rpm: Rounds per minute

RQ: Relative quantification

RT-PCR: Reverse transcription polymerase chain reaction

SCC: Squamous cell carcinoma

SCF: Stem cell factor

SH2: Src Homology 2

SH3: Src Homology 3

SHED: Stem Cells from Human Exfoliated Deciduous

SMAC/DIABLO: Second mitochondria-derived activator of caspase/direct
IAP binding protein with low pH

SPSS: Statistical Package for Social Science

T34A: Threonine to Alanine

TC: Therapeutic cloning

TGF- β : Transforming growth factor-beta

TNF- α : Tumor necrosis factor-alpha

TNM: Tumor size node metastasis

UADT: Upper aerodigestive tract

VCAM: Vascular cell adhesion molecule

VEGF: Vascular endothelial growth factor

Wnt: Wingless-type MMTV integration site family member

β- ME: Beta-mercaptoethanol