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LIST OF ABBREVIATIONS

3D	3-dimensional
BMP	bone morphogenetic protein
BSA	bovine serum albumin
°C	degree celsius
cm ³	cubic centimeter
chr	chromosome
DMEM	Dulbecco's modified Eagle's medium
ELISA	enzyme-linked immunosorbent assay
ECM	extracellular matrix
FGF	fibroblast growth factor
FCS	fetal calf serum
GAG	glycosaminoglycan
GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
GlcN	glucosamine

GalNAc *N*-acetylgalactosamine

GlcA glucuronic acid

GlcNAc *N*-acetylglucosamine

gm gram

h hour

HA hyaluronan

HABP hyaluronan binding protein

H&E hematoxylin and eosin

HAS hyaluronan synthase

H₂SO₄ sulfuric acid

IGF insulin like growth factor

IL-1 interleukin-1

ITS Insulin-transferrin-sodium selenite media

supplement

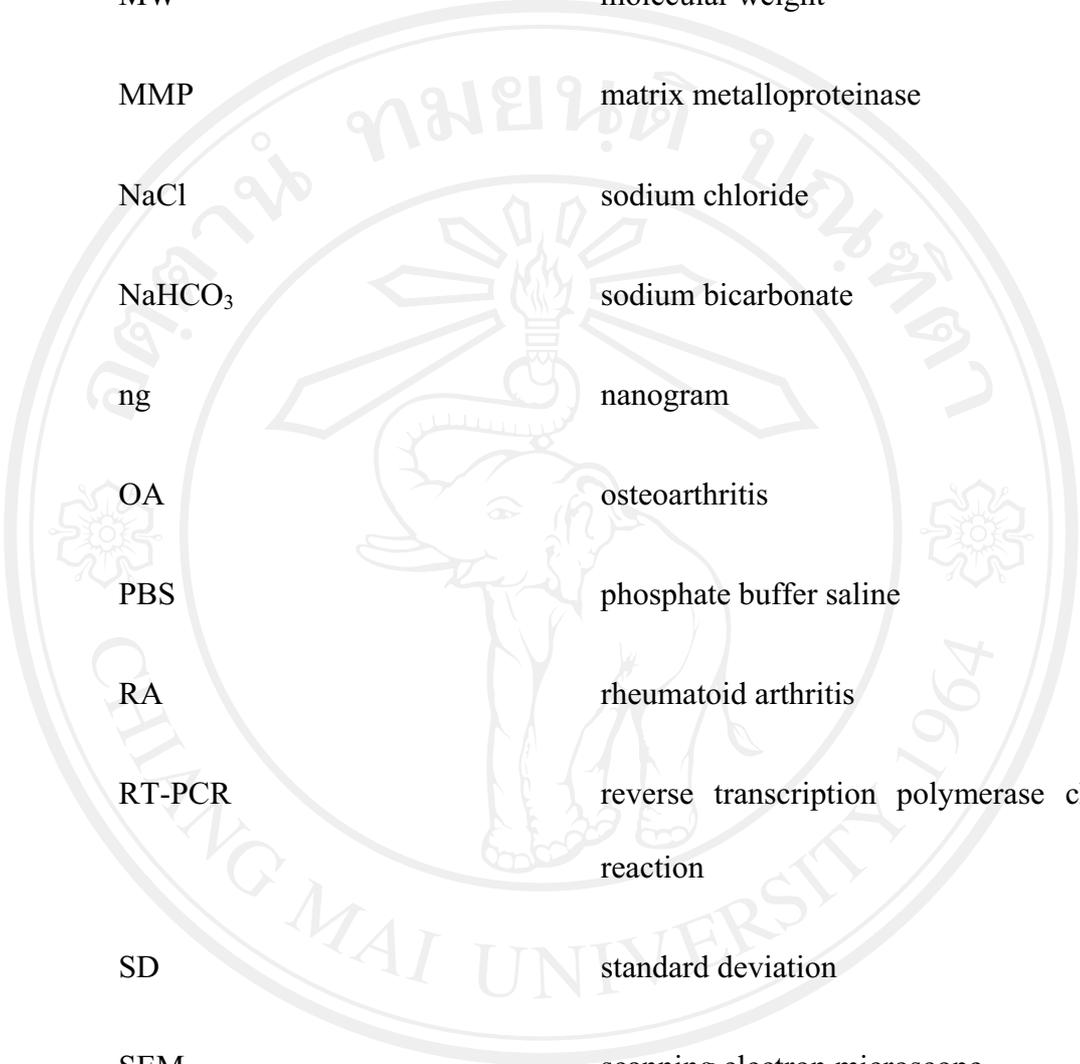
kDa kilo Dalton

L liter

M molar

ml milliliter

mg milligram



MSCs	mesenchymal stem cells
MW	molecular weight
MMP	matrix metalloproteinase
NaCl	sodium chloride
NaHCO ₃	sodium bicarbonate
ng	nanogram
OA	osteoarthritis
PBS	phosphate buffer saline
RA	rheumatoid arthritis
RT-PCR	reverse transcription polymerase chain reaction
SD	standard deviation
SEM	scanning electron microscope
μg	microgram
μl	microliter
w/v	weight by volume
w/w	weight by weight

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