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#### **List of Abbreviations and Symbols**

 $\alpha$ -MEM = Alpha-minimum essential medium

 $\mu g = Microgram$ 

 $\mu l$  = Microliter

 $\mu M = Micromolar$ 

°C = Degree celcius

ALP = Alkaline phosphatase

ANOVA = One-way analysis of variance

ATCC = Amerrican Type Culture Collection

BMP = Bone Morphogenic protein

BMSCs = Bone marrow stem cells

Cat No. = Catalog number

CLSM = Confocal laser scanning microscope

COX = Cyclooxygenase

COX-1 = Cyclooxygenase-1

COX-2 = Cyclooxygenase-2

cm = centimeter

d. = day

DMSO = Dimethyl sulfoxide

ECM = Extracellular matrix

ELISA = enzyme-linked immunosorbent assay

FBS = Fetal bovine serum

FDA =Fluorescein diacetate

Fig. = Figure

g = gravitation force

g. = gram

hr. = hour, hours

L = Liter

#### **List of Abbreviations and Symbols (Continued)**

M = Molar

mg. = Milligram

min = minutes

ml = Milliter

mM = Millimolar

mm. = millimeter

mol = mole

MSCs = Mesenchymal stem cells

MW = Molecular weight

N = number

NaOH = Sodium hydroxide

Nm = Nanometer

OD = Optical density

PBS = Phosphate buffer saline

PGs = Prostaglandins

 $PGE_2$  = Prostaglandin  $E_2$ 

RIA = radioimmunoassay

rpm = Round per minute

RT = room temperature

s. = seconds

SD = Standard deviation

SE = Standard error

SEM = Scanning electron microscope

TMB = Tetramethyl benzidine

Vol = volume

W/V = weight by volume