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ABBREVIATIONS AND SYMBOLS

%	percent
α	alpha
ALP	alkaline phosphatase
β	beta
$^{\circ}\text{C}$	degree Celcius
cm^2	square centimeter
CTX	collagen C-telopeptide
DMSO	dimethyl sulfoxide
DNA	deoxyribonucleic acid
EC_{50}	50 percent effective concentration
ECM	extracellular matrix
ER(S)	estrogen receptor (S)
ER α	estrogen receptor subtype alpha
ER β	estrogen receptor subtype beta
e.g.	example grati (Latin) for examples
<i>et al.</i>	<i>et. alli</i> (Latin) and others people
<i>etc.</i>	et cetera (Latin) and others things
hER α	human estrogen receptor subtype alpha
hER β	human estrogen receptor subtype beta
g	gram
H_2CO_3	carbonic acid

HCO ₂ ⁻	bicarbonate
hFOB	human fetal osteoblast cell
HPLC	high performance liquid chromatography
HRT	hormone replacement therapy
IP	7-isopropoxyisoflavone
kDa	kilodalton
L, l	liter
LBD	ligand binding domain
M	molar
MW	molecular weight
mg	milligram
min	minute (s)
ml	milliliter
mm ²	square millimeter
MTT	3-(4, 5-dimethylthiazol-2-yl)-2, 5 diphenyltetrazolium bromide
μg	microgram
μl	microliter
ng	nanogram
nm	nanometer
OC	osteocalcin
OD	optical density
OP	osteopontin

OPG	osteoprotegerin
ONPG	ortho-nitrophenyl- β -D-galactopyranoside
ONP	ortho-nitrophenol
RANK	receptor activator of nuclear factor, kappa-B
RANKL	receptor activator of nuclear factor, kappa-B Ligand
rpm	revolutions per minute
SC	synthetic complete
SD	synthetic dextrose
SD	standard deviation
sec	second (s)
SERM	selective estrogen receptor modulator
SRC1	steroid receptor co-activator 1
TGF- β	transforming growth factor- β
TIF2	transcriptional intermediary factor 2
TLC	thin layer chromatography
Trp	L-tryptophan
v/v	percent “volume in volume” express the number of milliliters of an active constituent in 100 milliliters of solution

w/v

percent “weight in volume” express the number of gram of an active constituent in 100 milliliters of solution, and is used regardless of whether water or another liquid is the solvent

YNB

yeast nitrogen base without amino acids

YPD

yeast extract peptone dextrose