

Parathyroid Hormone (PTH) Active Protein | PTH active protein

Active Parathyroid Hormone (PTH)

CATALOG # AAA148151	REACTIVITY Rat	APPLICATIONS Activity Assay, Cell Culture
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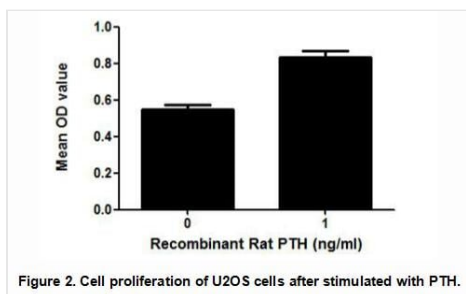
PRODUCT SYNONYMS

Parathyroid Hormone (PTH); Active Parathyroid Hormone (PTH); iPTH; Intact Parathyroid Hormone; Parathormone; Parathyrin; PTH active protein

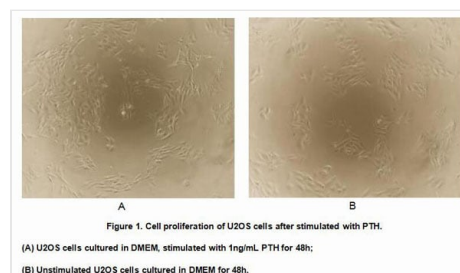
PRODUCT SPECIFICATIONS

Reactivity	Rat
Purity/Purification	> 90%
Form/Format	Freeze-dried powder
Sequence Length	115
Applicable Applications for PTH active protein	Activity Assay, Cell Culture
Tag	Two N-terminal Tags, His-tag and MBP-tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Ala32~Gln115
Isoelectric Point	5.8

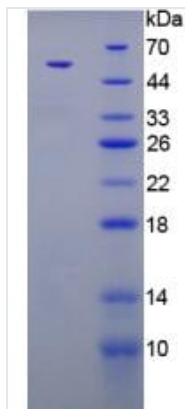
IMAGES



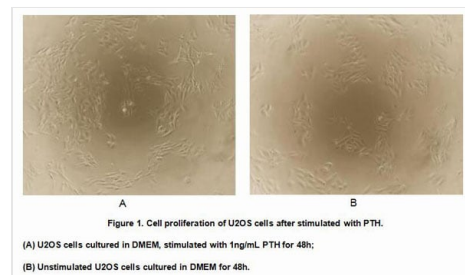
Application Data



Application Data



SDS-PAGE



Activity

PTH (Parathyroid hormone) is a hormone secreted by the parathyroid glands that is important in bone remodeling. As reported, osteoblast-like cell lines, such as ROS 17/2.8, UMR106, SaOS, U2OS, MG63, that exhibit PTHR1, respond with increased proliferation to PTH. Rat PTH shares similarities with human PTH in amino acid sequence with the identity of 71.3%. Thus, a proliferation assay of rat recombinant PTH was conducted using U2OS cells. Briefly, U2OS cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of PTH. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10uL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37 degree C. Proliferation of U2OS cells after incubation with PTH for 48h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant PTH for 48h. The result was shown in Figure 2. It was obvious that PTH increased cell viability of U2OS cells.

ADDITIONAL INFORMATION

Product Categories/Family for PTH active protein	Metabolic pathway ; Endocrinology ; Hormone metabolism
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NCBI AND UNIPROT INFORMATION

NCBI GI #	8394100
NCBI GeneID	24694
NCBI Accession #	NP_058740.1
NCBI GenBank Nucleotide #	NM_017044.1
UniProt Accession #	P04089; Q63473
Molecular Weight	Predicted Molecular Weight: 59.4kDa Accurate Molecular Weight: 59kDa
NCBI Official Full Name	parathyroid hormone
NCBI Official Synonym Full Names	parathyroid hormone
NCBI Official Symbol	Pth
NCBI Official Synonym Symbols	Pth1; Pthr1; PTH-(1-84)
NCBI Protein Information	parathyroid hormone
UniProt Protein Name	Parathyroid hormone
UniProt Gene Name	Pth
UniProt Synonym Gene Names	PTH

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

