

Parathyroid Hormone (PTH) Active Protein | PTH active protein

Active Parathyroid Hormone (PTH)

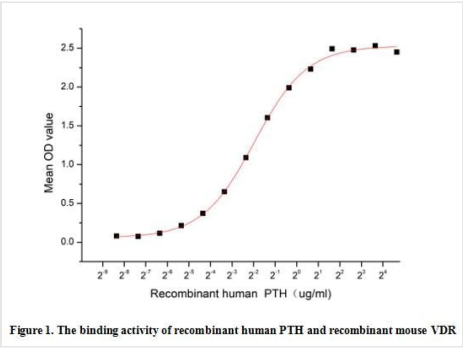
CATALOG # AAA161795	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Parathyroid Hormone (PTH); Active Parathyroid Hormone (PTH); Parathyroid Hormone; iPTH; Intact Parathyroid Hormone; Parathormone; Parathyrin4; PTH active protein

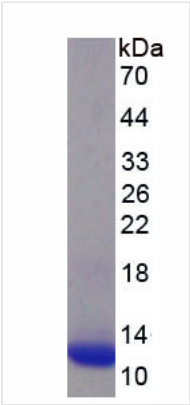
PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Arg31~Gln1 15
Applicable Applications for PTH active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	9.1
Research Area	Metabolic pathway, Endocrinology, Hormone metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months



Bioactivity

Parathyroid hormone (PTH) is an 84-amino-acid peptide hormone that is secreted by the parathyroid gland. PTH plays an osteogenic role by acting directly on mesenchymal stem cells, cells with an osteoblastic lineage, osteocytes, and T cells. It also participates as an osteoclast by indirectly acting on osteoclast precursor cells and osteoclasts and directly acting on T cells. PTH is major endocrine regulators of vitamin D metabolism. It proves, with data, this hormone a potent down-regulator of VDR. A functional binding ELISA assay was conducted to detect the interaction of recombinant human PTH and recombinant mouse VDR. Briefly, PTH was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to VDR-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-PTH pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human PTH and recombinant mouse VDR was shown in Figure 1, the EC50 for this effect is 0.26 ug/mL.



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for PTH active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4506267
NCBI GeneID	5741
NCBI Accession #	NP_000306.1
NCBI GenBank Nucleotide #	NM_000315.2
UniProt Accession #	P01270; Q4VB48; Q9UD38
Molecular Weight	12,861 Da
NCBI Official Full Name	parathyroid hormone preproprotein
NCBI Official Synonym Full Names	parathyroid hormone
NCBI Official Symbol	PTH
NCBI Official Synonym Symbols	PTH1
NCBI Protein Information	parathyroid hormone; parathyrin; prepro-PTH; parathormone; parathyroid hormone 1; preproparathyroid hormone
UniProt Protein Name	Parathyroid hormone
UniProt Gene Name	PTH
UniProt Synonym Gene Names	PTH
UniProt Entry Name	PTHY_HUMAN

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.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/parathyroid-hormone-ptb/161795>