

# Recombinant human PTH protein

Catalog Number: ATGP3317

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

32-115aa

### UniProt No.

P01270

### NCBI Accession No.

NP\_000306

### Alternative Names

PTH, PTH1

## PRODUCT SPECIFICATION

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### Molecular Weight

9.55 kDa (85aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 2mM EDTA

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Measured by its ability to induce cAMP accumulation in MC3T3/E1 mouse preosteoblast cells. The ED50 range  $\leq$  50ng/ml.

### Tag

Non-Tagged

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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## Description

Human parathyroid hormone (hPTH) is an 84 amino acid residue peptide and one of the main regulators in maintenance of calcium homeostasis. It acts primarily on kidney and bone cells stimulating calcium back resorption or calcium mobilization, respectively. The whole mechanism is still under discussion, but low-dose hPTH triggers cyclic AMP-dependent protein kinase in some populations of bone cells bearing PTH receptors, which stimulates the proliferation of osteoblasts. Human parathyroid hormone (amino acids 32-115) was overexpressed in *E. coli* and purified to apparent homogeneity by using conventional column chromatography techniques

## Amino acid Sequence

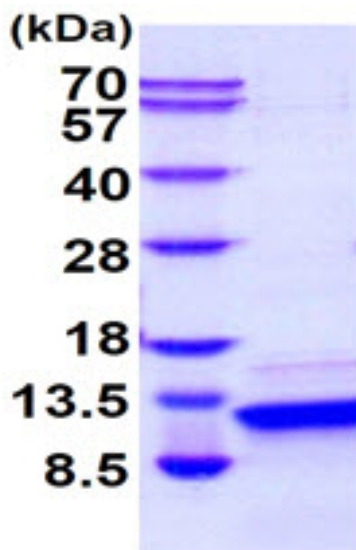
MSVSEIQLMH NLGKHLNSME RVEWLRKKLQ DVHNFVALGA PLAPRDAGSQ RPRKKEDNVL VESHEKSLGE ADKADVNVLT KAKSQ

## General References

Hodsman AB. et al. (2003) *J. Clin. Endocrinol. Metab.* 88(11), 5212-20.  
Wingender E., et al. (1989) *J. Biol. Chem.* 264(8),4367-73.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)

## Biological Activity

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