Recombinant human PTH protein

Catalog Number: ATGP3317

PRODUCT INFORMATION

Expression system
E.coli

Domain
32-115aa

UniProt No.
P01270

NCBI Accession No.
NP_000306

Alternative Names
PTH, PTH1

PRODUCT SPECIFICATION

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 ≤ 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

Recombinant human PTH protein

Catalog Number: ATGP3317

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

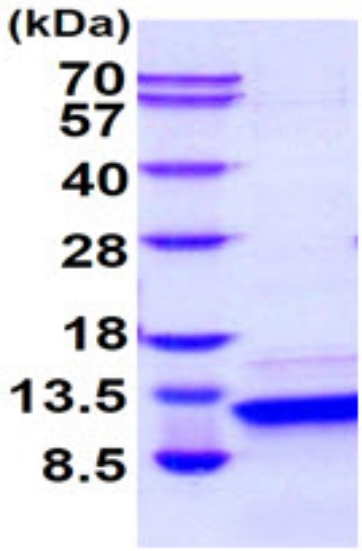
MSVSEIQLMH NLGKHLNSME RVEWLRKKLQ DVHNFVALGA PLAPRDAGSQ RPRKKEDNVL VESHEKSLGE ADKADVNVLT KAKSQ

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



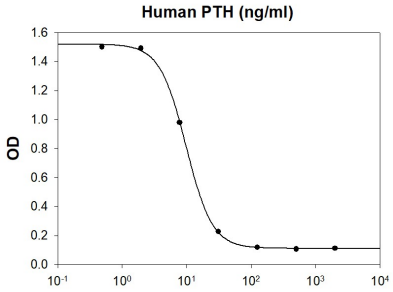
15% SDS-PAGE (3ug)

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

Biological Activity

Recombinant human PTH protein

Catalog Number: ATGP3317



Human PTH Measured by its ability to induce cAMP accumulation in MC3T3/E1 mouse preosteoblast cells. The ED50 range ≤ 50 ng/ml.