Parathyroid Hormone 1-34
Human, Recombinant (rHuPTH1-34)
Expressed in E. coli
Cat. No. CRP0864
Lot. No. (See product label)

PRODUCT INFORMATION

Description: Polypeptide hormones secreted by the parathyroid glands, which promote release of calcium from bone to extracellular fluid by activating osteoblasts and inhibiting osteoclasts, indirectly promote increased intestinal absorption of calcium, and promote renal tubular reabsorption of calcium and increased renal excretion of phosphates. It is a major regulator of bone metabolism. Secretion of parathyroid hormone increases when the level of calcium in the extracellular fluid is low. Its action is opposed by calcitonin.

Amino-Acid Sequence: 34aa, non-glycosylated
M. W. : 4,117.8Da
Recombinant: Expressed in E. coli
Purity: >97% as determined by SDS-PAGE and HPLC.
Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation: Lyophilized from a 0.2mm filtered concentrated (1mg/ml) solution in 20mMPB, pH7.0, containing 4% mannitol.
Specific Activity: Fully biologically active when compared to standard. The activity calculated by UMR106 cell/cAMP method corresponding to a specific activity of 1.0 x 10^4 Units/mg.

Endotoxin: Less than 1EU/mg of rHuPTH1-34 as determined by LAL method.

Reconstitution: Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤20°C. Further dilutions should be made in appropriate buffered solutions.

Storage: This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

REFERENCES

GENE INFORMATION

Gene Name: PTH
Synonyms: parathormone; parathyrin; Parathyroid hormone precursor; parathyroid hormone
mRNA Refseq: NM_000315
Protein Refseq: NP_000306
MIM: 168450
GeneID: 5741
Chromosome Location: 11p15.3-p15.1
Pathway: Neuroactive ligand-receptor interaction
Function: hormone activity; parathyroid hormone receptor binding activity

FOR RESEARCH USE ONLY