

PTH

Recombinant Human Parathyroid Hormone 1-34

Catalog No.	CSI20135A CSI20135B CSI20135C	Quantity:	20 µg 100 µg 1.0 mg
Alternate Names:	PTH1		
Description:	<p>Parathyroid hormone (PTH) is a single polypeptide of 84 amino acids. It is a critical hormone in the regulation of Ca^{++} homeostasis, secreted by the parathyroid glands, which promotes release of calcium from bone to extracellular fluid by activating osteoblasts and inhibiting osteoclasts, indirectly promotes increased intestinal absorption of calcium, and promotes 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. The amino terminal (1-34) fragment of parathyroid hormone, called PTH (1-34) reproduces all the activity of the full length mature hormone and has been used therapeutically for treatment of osteoporosis.</p> <p>The Recombinant Human Parathyroid Hormone 1-34 is a single non-glycosylated polypeptide chain containing 34 amino acids.</p>		
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.		
Gene ID:	5741		
Source:	<i>E. coli</i>		
Molecular Weight:	~4.1 kDa		
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.0.		
Purity:	>97% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	Less than 1EU/µg of rHuPTH1-34 as determined by LAL method.		
Biological Activity:	Fully biologically active when compared to the standard. The ED_{50} is determined by its ability to induce cAMP accumulation in mouse MC3T3E1 cells is less than 50 ng/ml.		
Specific Activity:	>2.0 x 10 ⁴ Units/mg		
Amino Acid Sequence:	SVSEIQLMHN LGKHLNSMER VEWLRKKLQD VHNF		
Reconstitution:	<p>Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.</p>		
Storage & Stability:	<p>The lyophilized protein is stable at 2-8°C. Upon receipt, store desiccated at -20°C. After 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 -80°C. For long term storage of reconstituted protein, it is recommended that a carrier protein such as 0.1% BSA or HSA be added. This depends on the particular application.</p> <p>Avoid repeated freeze/thaw cycles.</p>		

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