

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Parathyroid hormone (PTH) is a single polypeptide of 84 amino acids. It is a critical hormone in the regulation of Ca^{2+} homeostasis and is secreted by the parathyroid glands. These glands promote the release of calcium from bone into the blood stream by activating osteoblasts and inhibiting osteoclasts. Secretion of PTH increases when the level of calcium in the extracellular fluid is low. When there is more Ca^{2+} in the blood, there is increased intestinal absorption of calcium, renal tubular reabsorption of calcium and increased renal excretion of phosphates. Therefore, PTH is a major regulator of bone metabolism.

Catalog Number	3110-05N
Product Name	PTH 1-84 (15N), Human Recombinant Human Parathyroid Hormone 1-84 (¹⁵ N)
Source	<i>Escherichia coli</i>
MW	~9.5 kDa (84 amino acids)
Sequence	SVSEIQLMHN LGKHLNSMER VEWLRKKLQD VHNFVALGAP LAPRDAGSQR PRKKEDNVLV ESHEKSLGEA DKADVNVLTAKSQ
Accession Number	P01270
Purity	>97% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by its ability to induce cAMP accumulation in murine MC3T3E1 cells is less than 50 ng/ml, corresponding to a specific activity of $>2.0 \times 10^4$ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.