

PTH
Catalog # PVGS1011**Specification**

PTH - Product Information

Primary Accession [P01270](#)
Species
Human

Sequence
Ser32-Gln115

Purity
> 95% as analyzed by SDS-PAGE

Endotoxin Level
< 1 EU/ µg of protein by LAL method

Expression System
E. coli

Theoretical Molecular Weight
~9.4 kDa

Formulation **Lyophilized from a 0.2 µm filtered solution of 10mM HAc-NaAc, 150mM NaCl, 5% Mannitol, pH 4.0.**

Reconstitution
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in distilled water up to 100 µg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

PTH - Additional Information

Gene ID 5741

Other Names
Parathyroid hormone, PTH, Parathormone, Parathyrin, PTH

Target Background
Parathyroid Hormone (PTH) is the most important endocrine regulator of calcium and phosphorus concentration in extracellular fluid. Parathyroid Hormone (PTH) is secreted from cells of the parathyroid glands and finds Parathyroid Hormone's major target cells in bone and kidney. Like most other protein hormones, Parathyroid Hormone (PTH) is synthesized as a preprohormone. After intracellular processing, the mature hormone is packaged within the Golgi into secretory

vesicles, the secreted into blood by exocytosis. Parathyroid Hormone (PTH) is secreted as a linear protein of 84 amino acids. Recombinant Human Parathyroid Hormone (PTH) produced in E. coli is a single, non-glycosylated, polypeptide chain containing 84 amino acids.

PTH - Protein Information

Name PTH {ECO:0000303|PubMed:35932760, ECO:0000312|HGNC:HGNC:9606}

Function

Parathyroid hormone elevates calcium level by dissolving the salts in bone and preventing their renal excretion (PubMed:11604398, PubMed:35932760). Acts by binding to its receptor, PTH1R, activating G protein-coupled receptor signaling (PubMed:18375760, PubMed:35932760). Stimulates [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblastic cells (PubMed:21076856).

Cellular Location

Secreted

PTH - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PTH - Images