



PTH

Catalog # PVGS1011

Product Information

Primary Accession P01270
Species Human

Sequence Ser32-Gln115

Purity > 95% as analyzed by SDS-PAGE

Endotoxin Level

Expression System E. coli

Theoretical Molecular Weight ~9.4 kDa

Formulation Lyophilized from a 0.2 Im 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 g/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.

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 con- centration 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.

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:<u>11604398</u>, PubMed:<u>35932760</u>). Acts by binding to its receptor, PTH1R, activating G protein-coupled receptor signaling (PubMed:<u>18375760</u>, PubMed:<u>35932760</u>). Stimulates

[1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in

osteoblastic cells (PubMed:<u>21076856</u>).

Cellular Location Secreted

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.