

Anti-Parathyroid Hormone (PTH) (N-Terminal) Antibody

Recombinant Rabbit Monoclonal Antibody Catalog # AH13466

Product Information

Application	IHC-P, IF, FC
Primary Accession	<u>P01270</u>
Other Accession	<u>37045</u>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit / IgG, kappa
Clone Names	PTH/1717R
Calculated MW	12861

Additional Information

Gene ID	5741
Other Names	hPTH; Parathormone; Parathyrin; Parathyroid hormone 1 (PTH1); Parathyroid hormone (PTH)
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1.0ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Parathyroid Hormone (PTH) (N-Terminal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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>).

Background

Epitope of this MAb maps in the N-terminus of PTH, a hormone produced by the parathyroid gland that regulates the concentration of calcium and phosphorus in extracellular fluid. This hormone elevates blood Ca2+ levels by dissolving the salts in bone and preventing their renal excretion. It is produced in the parathyroid gland as an 84 amino acid single chain polypeptide. It can also be secreted as N-terminal truncated fragments or C-terminal fragments after intracellular degradation, as in case of hypercalcemia. Defects in this gene are a cause of familial isolated hypoparathyroidism (FIH); also called autosomal dominant hypoparathyroidism or autosomal dominant hypocalcemia. FIH is characterized by hypocalcemia and hyperphosphatemia due to inadequate secretion of parathyroid hormone. Symptoms are seizures, tetany and cramps. FIH exist both as autosomal dominant and recessive forms of hypoparathyroidism.

Images



Formalin-fixed, paraffin-embedded human Parathyroid stained with PTH Recombinant Rabbit Monoclonal Antibody (PTH/1717R).

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