

Parathyroid Hormone (PTH) (N-Terminal) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM604]

Catalog # AH12149

Product Information

Application	IHC, IF, FC
Primary Accession	P01270
Other Accession	5741 , 37045
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Clone Names	SPM604
Calculated MW	12861

Additional Information

Gene ID	5741
Other Names	Parathyroid hormone, PTH, Parathormone, Parathyrin, PTH
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Parathyroid Hormone (PTH) (N-Terminal) Antibody - With BSA and Azide 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: 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

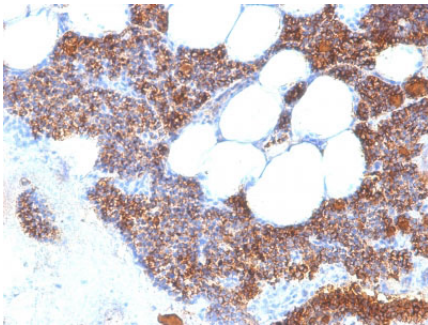
Background

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 Ca^{2+} 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.

References

Watson, P.H. and Hanley, D.A. 1993. Parathyroid hormone: regulation of synthesis and secretion. Clin. Invest. Med. 16: 58-77. |

Images



Formalin-fixed, paraffin-embedded human Parathyroid stained with PTH Monoclonal Antibody (SPM604).

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