10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Mouse Monoclonal Antibody [Clone PTH/1174 ]
Catalog # AH12155

## Product Information

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|---|---|
| **Application** | IHC, IF, FC |
| **Primary Accession** | P01270 |
| **Other Accession** | 5741, 37045 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | Mouse / IgG2b, kappa |
| **Clone Names** | PTH/1174 |
| **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) (C-Terminal) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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|---|---|
| **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 |

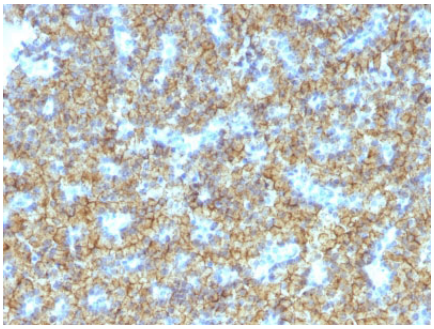
## Background

Epitope of this MAb maps in the C-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.

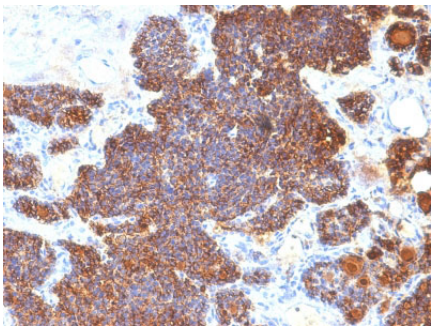
## References

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 (PTH/1174).



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