

PTHrP Antibody

Rabbit Polyclonal Antibody Catalog # ABV11033

Specification

PTHrP Antibody - Product Information

Application WB **Primary Accession** P12272 Other Accession AAA60359 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 20194

PTHrP Antibody - Additional Information

Gene ID 5744

Other Names

Parathyroid Hormone-related Protein

Target/Specificity

PTHrP

Antibody Form

Liquid

Appearance

Colorless liquid

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions

PTHrP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PTHrP Antibody - Protein Information

Name PTHLH {ECO:0000303|PubMed:20170896, ECO:0000312|HGNC:HGNC:9607}

Function



Neuroendocrine peptide which is a critical regulator of cellular and organ growth, development, migration, differentiation and survival and of epithelial calcium ion transport (PubMed: <a $href="http://www.uniprot.org/citations/12538599" target="_blank">12538599, PubMed:35932760, PubMed:$ href="http://www.uniprot.org/citations/3616618" target=" blank">3616618). Acts by binding to its receptor, PTH1R, activating G protein-coupled receptor signaling (PubMed: 19674967, PubMed:35932760). Regulates endochondral bone development and epithelial-mesenchymal interactions during the formation of the mammary glands and teeth (By similarity). Required for skeletal homeostasis (PubMed: 12538599). Promotes mammary mesenchyme differentiation and bud outgrowth by modulating mesenchymal cell responsiveness to BMPs (PubMed: 12538599). Up-regulates BMPR1A expression in the mammary mesenchyme and this increases the sensitivity of these cells to BMPs and allows them to respond to BMP4 in a paracrine and/or autocrine fashion (By similarity). BMP4 signaling in the mesenchyme, in turn, triggers epithelial outgrowth and augments MSX2 expression, which causes the mammary mesenchyme to inhibit hair follicle formation within the nipple sheath (By similarity). Promotes colon cancer cell migration and invasion in an integrin alpha-6/beta-1dependent manner through activation of Rac1 (PubMed:20637541).

Cellular Location Secreted. Cytoplasm. Nucleus

Tissue Location

Ubiquitous. Also expressed in the mammary gland.

PTHrP Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PTHrP Antibody - Images

PTHrP Antibody - Background

Parathyroid Hormone-like related Protein (PTHrP) is a member of the Parathyroid hormone family that is expressed in the mammary gland. It is known as a potent inhibitor of chondrocyte maturation. PTHrP is expressed by periarticular perichondrial cells and exerts its biological activity on PP-R expressing cells. During endochondral bone development PTHrP plays a major role in suppressing the onset of hypertrophic differentiation. It is also responsible for most cases of humoral hypercalcemia of malignancy. The antibody recognizes ~9.8 kDa of human PTHrP protein.