

PTH-rP Polyclonal Antibody

Catalog # AP73973

Specification

PTH-rP Polyclonal Antibody - Product Information

Application	WB
Primary Accession	<u>P12272</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Clonality	Polyclonal

PTH-rP Polyclonal Antibody - Additional Information

Gene ID 5744

Other Names Parathyroid hormone-related protein (PTH-rP) (PTHrP) (Parathyroid hormone-like protein) (PLP) [Cleaved into: PTHrP[1-36]; PTHrP[38-94]; Osteostatin (PTHrP[107-139])]

Dilution WB~~WB 1:500-2000, ELISA 1:10000-20000

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

PTH-rP Polyclonal 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:12538599, PubMed:35932760, PubMed:3616618). Acts by binding to its receptor, PTH1R, activating G protein-coupled receptor signaling (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, DubMed:12538599, PubMed:<a href="http://www.uniprot.org/citations/1253



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-1-dependent manner through activation of Rac1 (PubMed:20637541).

Cellular Location Secreted. Cytoplasm. Nucleus

Tissue Location Ubiquitous. Also expressed in the mammary gland.

PTH-rP Polyclonal Antibody - Protocols

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

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

PTH-rP Polyclonal Antibody - Images



PTH-rP Polyclonal Antibody - Background

Neuroendocrine peptide which is a critical regulator of cellular and organ growth, development, migration, differentiation and survival and of epithelial calcium ion transport. Regulates endochondral bone development and epithelial-mesenchymal interactions during the formation of the mammary glands and teeth. Required for skeletal homeostasis. Promotes mammary mesenchyme differentiation and bud outgrowth by modulating mesenchymal cell responsiveness to



BMPs. Upregulates 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. 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-1- dependent manner through activation of Rac1.