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PTH-rP Polyclonal Antibody

Catalog # AP73973

Product Information

Application	WB
Primary Accession	P12272
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20194

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℃

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: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-1- dependent manner

through activation of Rac1 (PubMed:20637541).

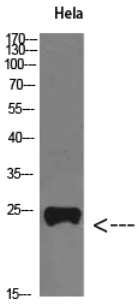
Cellular Location Secreted. Cytoplasm. Nucleus

Tissue Location Ubiquitous. Also expressed in the mammary gland.

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.

Images



Western Blot analysis of Hela cells using PTH-rP Polyclonal Antibody diluted at 1:800. Secondary antibody was diluted at 1:20000