

# PTH-rP Polyclonal Antibody

Catalog # AP73973

## Product Information

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<b>Application</b>	WB, IHC-P
<b>Primary Accession</b>	<a href="#">P12272</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	20194

## Additional Information

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<b>Gene ID</b>	5744
<b>Other Names</b>	Parathyroid hormone-related protein (PTH-rP) (PTHRP) (Parathyroid hormone-like protein) (PLP) [Cleaved into: PTHrP[1-36]; PTHrP[38-94]; Osteostatin (PTHRP[107-139])]
<b>Dilution</b>	WB~~WB 1:500-2000, ELISA 1:10000-20000 IHC-P~~N/A
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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<b>Name</b>	PTHLH {ECO:0000303   PubMed:20170896, ECO:0000312   HGNC:HGNC:9607}
<b>Function</b>	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="#">12538599</a> , PubMed: <a href="#">35932760</a> , PubMed: <a href="#">3616618</a> ). Acts by binding to its receptor, PTH1R, activating G protein-coupled receptor signaling (PubMed: <a href="#">19674967</a> , PubMed: <a href="#">35932760</a> ). Regulates endochondral bone development and epithelial-mesenchymal interactions during the formation of the mammary glands and teeth (By similarity). Required for skeletal homeostasis (PubMed: <a href="#">12538599</a> ). Promotes mammary mesenchyme differentiation and bud outgrowth by modulating mesenchymal cell responsiveness to BMPs (PubMed: <a href="#">12538599</a> ). 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](https://pubmed.ncbi.nlm.nih.gov/20637541/)).

**Cellular Location**

Secreted. Cytoplasm. Nucleus

**Tissue Location**

Ubiquitous. Also expressed in the mammary gland.

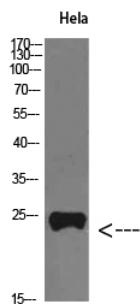
## Background

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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

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

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