

## ARG56411 anti-PTH LH antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes PTH LH
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PTH LH
Species	Human
Immunogen	Recombinant protein of Human PTH LH.
Conjugation	Un-conjugated
Alternate Names	Parathyroid hormone-related protein; PTH-rP; PLP; PTHrP[107-139]; PTHRP; Parathyroid hormone-like protein; PTHR; PTHrP; HHM; BDE2

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A549	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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### Database links

[GeneID: 24695 Rat](#)

[GeneID: 5744 Human](#)

[Swiss-port # P12272 Human](#)

[Swiss-port # P13085 Rat](#)

### Gene Symbol

PTHLH

### Gene Full Name

parathyroid hormone-like hormone

### Background

The protein encoded by this gene is a member of the parathyroid hormone family. This hormone, via its receptor, PTHR1, regulates endochondral bone development and epithelial-mesenchymal interactions during the formation of the mammary glands and teeth. It is responsible for most cases of humoral hypercalcemia of malignancy, and mutations in this gene are associated with brachydactyly type E2 (BDE2). Alternatively spliced transcript variants have been found for this gene. There is also evidence for alternative translation initiation from non-AUG (CUG and GUG) start sites, downstream of the initiator AUG codon, resulting in nuclear forms of this hormone. [provided by RefSeq, Nov 2013]

### Function

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.

Osteostatin is a potent inhibitor of osteoclastic bone resorption. [UniProt]

### Calculated Mw

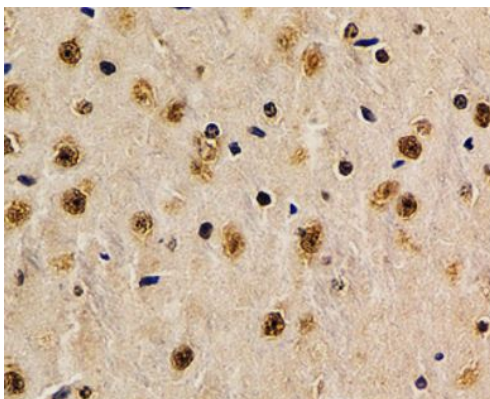
20 kDa

### PTM

There are 3 principal secretory forms, called PTHrP[1-36], PTHrP[38-94], and osteostatin (PTHrP[107-139]) arising from endoproteolytic cleavage of the initial translation product. Each of these secretory forms is believed to have one or more of its own receptors that mediates the normal paracrine, autocrine and endocrine actions.

## Images

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ARG56411 anti-PTHLH antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain stained with ARG56411 anti-PTHLH antibody at 1:200 dilution.

ARG56411 anti-PTHLH antibody WB image

Western blot: A549 cell lysate stained with ARG56411 anti-PTHLH antibody.

