

## Product datasheet

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# ARG56411 anti-PTHLH antibody

Package: 100 μl Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes PTHLH

Tested Reactivity Hu, Ms, Rat
Tested Application IHC-P, WB
Host Rabbit
Clonality Polyclonal

Isotype IgG

Target Name PTHLH
Species Human

Immunogen Recombinant protein of Human PTHLH.

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

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]

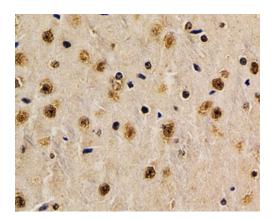
Calculated Mw 20 kDa

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

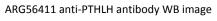
paracrine, autocrine and endocrine actions.

#### **Images**

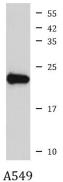


#### ARG56411 anti-PTHLH antibody IHC-P image

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



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



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