

**PTHLH Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7336a**

**Specification**

---

**PTHLH Antibody (N-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">P12272</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	10-41

**PTHLH Antibody (N-term) - Additional Information**

**Gene ID** 5744

**Other Names**

Parathyroid hormone-related protein, PTH-rP, PTHrP, Parathyroid hormone-like protein, PLP, PTHrP[1-36], PTHrP[38-94], Osteostatin, PTHrP[107-139], PTHLH, PTHRP

**Target/Specificity**

This PTHLH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 10-41 amino acids from the N-terminal region of human PTHLH.

**Dilution**

WB~~1:1000

IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PTHLH Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PTHLH Antibody (N-term) - 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 BMPRI1A 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

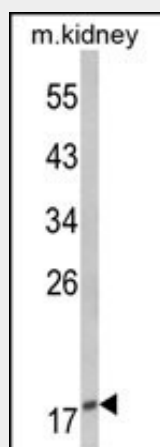
Ubiquitous. Also expressed in the mammary gland.

#### PTHLH Antibody (N-term) - Protocols

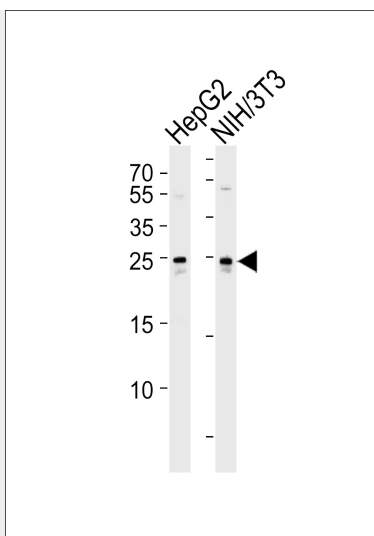
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

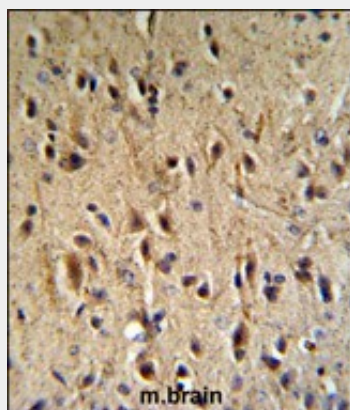
#### PTHLH Antibody (N-term) - Images



Western blot analysis of PTHLH Antibody (N-term) (Cat. #AP7336a) in mouse kidney tissue lysates (35ug/lane). PTHLH (arrow) was detected using the purified Pab.



Western blot analysis of lysates from HepG2 mouse NIH/3T3 cell line (from left to right), using PTHLH Antibody (N-term) (Cat. #AP7336a). AP7336a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



PTHLH Antibody (N-term) (Cat. #AP7336a) IHC analysis in formalin fixed and paraffin embedded mouse brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PTHLH Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

### **PTHLH Antibody (N-term) - Background**

PTHLH is a member of the parathyroid hormone family. This hormone regulates endochondral bone development and epithelial-mesenchymal interactions during the formation of the mammary glands and teeth. This hormone is involved in lactation possibly by regulating the mobilization and transfer of calcium to the milk. The receptor of this hormone, PTHR1, is responsible for most cases of humoral hypercalcemia of malignancy.

### **PTHLH Antibody (N-term) - References**

Trynka,G., Zhernakova,A. Gut 58 (8), 1078-1083 (2009) Nakao,A., Kajiya,H. J. Dent. Res. 88 (6), 551-556 (2009) Iwamura,M., Hellman,J. Urology 48 (2), 317-325 (1996) Fenton,A.J., Kemp,B.E. Endocrinology 129 (6), 3424-3426 (1991)

### **PTHLH Antibody (N-term) - Citations**

- [Animal and cellular models of hepatocellular carcinoma bone metastasis: establishment and characterisation.](#)

- [Subcutaneous preconditioning increases invasion and metastatic dissemination in mouse colorectal cancer models.](#)