

**LNPEP Antibody (N-Term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP10272a****Specification**

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**LNPEP Antibody (N-Term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q9UIQ6</a>
Other Accession	<a href="#">P97629</a> , <a href="#">Q8C129</a> , <a href="#">NP_005566.2</a> , <a href="#">NP_787116.2</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	23-52

**LNPEP Antibody (N-Term) - Additional Information****Gene ID** 4012**Other Names**

Leucyl-cystinyl aminopeptidase, Cystinyl aminopeptidase, Insulin-regulated membrane aminopeptidase, Insulin-responsive aminopeptidase, IRAP, Oxytocinase, OTase, Placental leucine aminopeptidase, P-LAP, Leucyl-cystinyl aminopeptidase, pregnancy serum form, LNPEP, OTASE

**Target/Specificity**

This LNPEP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 23-52 amino acids from the N-terminal region of human LNPEP.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**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**

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

**LNPEP Antibody (N-Term) - Protein Information**

**Name** LNPEP

**Synonyms** OTASE

**Function** Release of an N-terminal amino acid, cleaves before cysteine, leucine as well as other amino acids. Degrades peptide hormones such as oxytocin, vasopressin and angiotensin III, and plays a role in maintaining homeostasis during pregnancy. May be involved in the inactivation of neuronal peptides in the brain. Cleaves Met-enkephalin and dynorphin. Binds angiotensin IV and may be the angiotensin IV receptor in the brain.

**Cellular Location**

Cell membrane; Single-pass type II membrane protein Note=In brain only the membrane-bound form is found. The protein resides in intracellular vesicles together with GLUT4 and can then translocate to the cell surface in response to insulin and/or oxytocin Localization may be determined by dileucine internalization motifs, and/or by interaction with tankyrases

**Tissue Location**

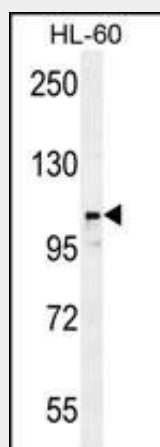
Highly expressed in placenta, heart, kidney and small intestine. Detected at lower levels in neuronal cells in the brain, in skeletal muscle, spleen, liver, testes and colon

**LNPEP Antibody (N-Term) - Protocols**

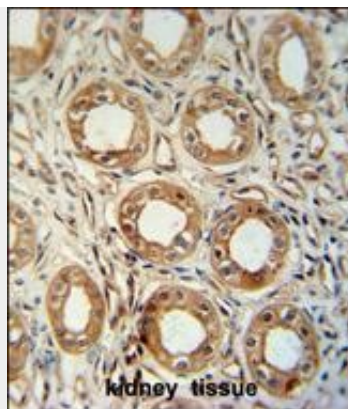
Provided below are standard protocols that you may find useful for product applications.

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

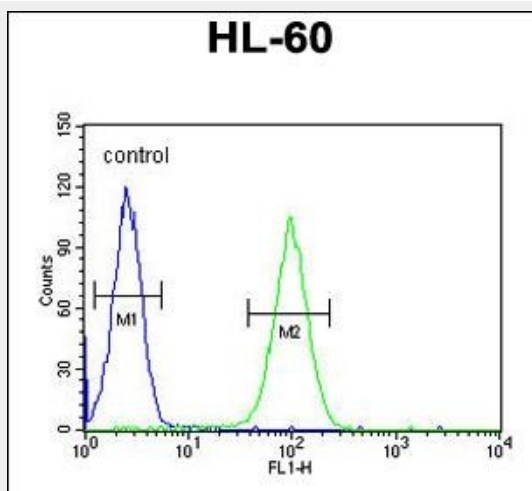
**LNPEP Antibody (N-Term) - Images**



LNPEP Antibody (N-Term) (Cat. #AP10272a) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the LNPEP antibody detected the LNPEP protein (arrow).



LNPEP antibody (N-Term) (Cat. #AP10272a) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the LNPEP antibody (N-Term) for immunohistochemistry. Clinical relevance has not been evaluated.



LNPEP Antibody (N-Term) (Cat. #AP10272a) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### LNPEP Antibody (N-Term) - Background

This gene encodes a zinc-dependent aminopeptidase that cleaves vasopressin, oxytocin, lys-bradykinin, met-enkephalin, dynorphin A and other peptide hormones. The protein can be secreted in maternal serum, reside in intracellular vesicles with the insulin-responsive glucose transporter GLUT4, or form a type II integral membrane glycoprotein. The protein catalyzes the final step in the conversion of angiotensinogen to angiotensin IV (AT4) and is also a receptor for AT4. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq].

### LNPEP Antibody (N-Term) - References

Georgiadou, D., et al. J. Immunol. 185(3):1584-1592(2010)  
Williams, P.J., et al. Placenta 31(5):448-455(2010)  
Landau, R., et al. Neuro Endocrinol. Lett. 31(1):63-66(2010)  
Johnson, M.P., et al. Hum. Genet. 126(5):655-666(2009)

Saveanu, L., et al. Science 325(5937):213-217(2009)