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LNPEP Antibody (N-Term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10272a

Specification

LNPEP Antibody (N-Term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q9UIQ6
Other Accession	P97629, Q8C129, NP_005566.2, NP_787116.2
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

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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

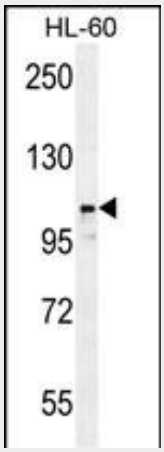
Tissue Location
Highly expressed in placenta, heart, kidney and small intestine. Detected at lower levels in neuronal cells in the brain, in skeletal muscle, spleen, liver, testes and colon

LNPEP Antibody (N-Term) - Protocols

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

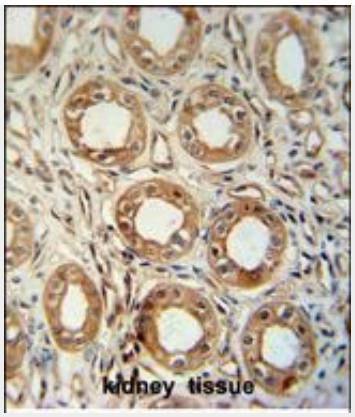
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LNPEP Antibody (N-Term) - Images

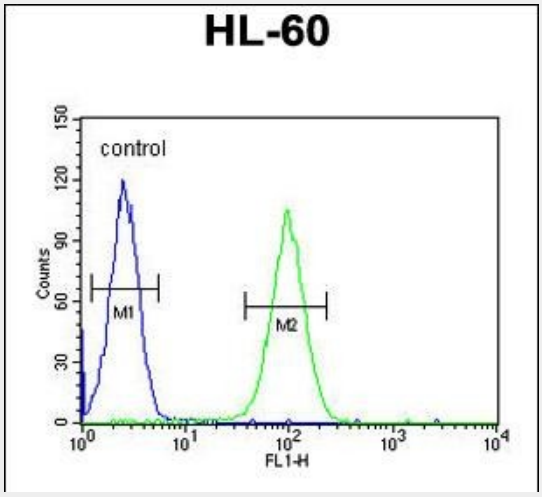


LNPEP Antibody (N-Term) (Cat. #AP10272a) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the LNPEP antibody detected the LNPEP protein (arrow).

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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)