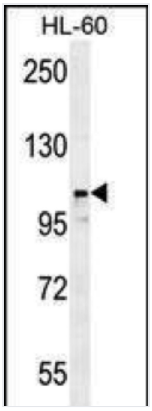
LNPEP Antibody – Rabbit Polyclonal

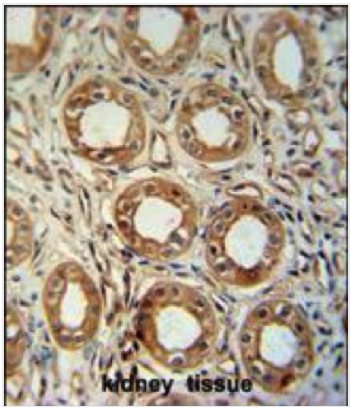
PRODUCT OVERVIEW

Product Name	LNPEP, Polyclonal Antibody
Full Product Name	LNPEP, NT (LNPEP, OTASE, Leucyl-cystinyl aminopeptidase, Insulin-regulated membrane aminopeptidase, Insulin-responsive aminopeptidase, Oxytocinase, Placental leucine aminopeptidase, Leucyl-cystinyl aminopeptidase, pregnancy serum form) (MaxLight 550)
Product Gene Name	anti-LNPEP antibody
Product Synonym Names	LNPEP; OTASE; Leucyl-cystinyl aminopeptidase; Insulin-regulated membrane aminopeptidase; Insulin-responsive aminopeptidase; Oxytocinase; Placental leucine aminopeptidase; Leucyl-cystinyl aminopeptidase; pregnancy serum form
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight550.
Purity/Purification	Purified by Protein A and Peptide Affinity Chromatography.
Specificity	Recognizes human LNPEP.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight550 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	117,349 Da
Chromosome Location	Chromosome: 5; NC_000005.9 (96271346..96365115). Location: 5q15
OMIM	151300
3D Structure	ModBase 3D Structure for Q9UIQ6
Immunogen	KLH-conjugated synthetic peptide mapping to a fragment of residues within amino acids 23-52 in the N-terminal region of human LNPEP. Species sequence homology: mouse, rat
Conjugate	MaxLight550
Note	Preservative Free
Product Categories/Family for anti-LNPEP antibody	Antibodies; Enzymes; Protease (Proteinase; Peptidase)
Applications Tested/Suitable for anti-LNPEP antibody	Immunohistochemistry (IHC) Paraffin, Western Blot (WB), Flow Cytometry (FC/FACS), FLISA
Application Notes for anti-LNPEP antibody	Applications are based on unconjugated antibody.
Related Product Information for anti-LNPEP antibody	MBS6316632 is an antibody targeting LNPEP. Also known as LNPEP, NT (LNPEP, OTASE, Leucyl-cystinyl aminopeptidase, Insulin-regulated membrane aminopeptidase, Insulin-responsive aminopeptidase, Oxytocinase, Placental leucine aminopeptidase, Leucyl-cystinyl aminopeptidase, pregnancy serum form) (MaxLight 550). Reactive in Human. Host: Rabbit.

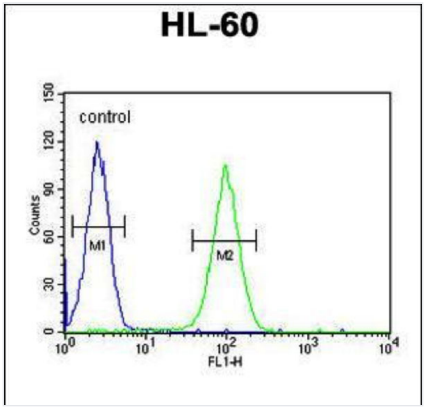
Product References and Citations for anti-LNPEP antibody	1. Georgiadou, D., et al. J. Immunol. 185(3):1584-1592(2010). 2. Williams, P.J., et al. Placenta 31(5):448-455(2010). 3. Landau, R., et al. Neuro Endocrinol. Lett. 31(1):63-66(2010). 4. Johnson, M.P., et al. Hum. Genet. 126(5):655-666(2009). 5. Saveanu, L., et al. Science 325(5937):213-217(2009).
Other Notes	Small volumes of anti-LNPEP antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-LNPEP antibody
Western Blot analysis in HL-60 cell line lysates (35ug/lane) usingMBS644388. This demonstrates that 037841detected the LNPEP protein (arrow).



Immunohistochemistry (IHC) of anti-LNPEP antibody
Immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue using MBS644388 followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MBS644388 for immunohistochemistry.



Flow Cytometry (FC/FACS) of anti-LNPEP antibody
Flow cytometric analysis of HL-60 cells (right histogram) using MBS644388 compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for LNPEP. It may not necessarily be applicable to this product.

NCBI GI #	61742777
NCBI GeneID	4012
NCBI Accession #	NP_005566.2
NCBI Related Accession #	NP_787116.2
UniProt Primary Accession #	Q9UIQ6
UniProt Secondary Accession #	O00769; Q15145; Q59H76; Q9TNQ2; Q9TNQ3; Q9UIQ7
UniProt Related Accession #	Q9UIQ6
GenBank Nucleotide #	NM_005575.2

NCBI Official Full Name	leucyl-cystinyl aminopeptidase isoform 1
NCBI Official Synonym Full Names	leucyl/cystinyl aminopeptidase
NCBI Official Symbol	LNPEP
NCBI Official Synonym Symbols	CAP; IRAP; PLAP; P-LAP
UniProt Protein Name	Leucyl-cystinyl aminopeptidase
UniProt Synonym Protein Names	Insulin-regulated membrane aminopeptidase; Insulin-responsive aminopeptidase; IRAP; Oxytocinase; OTase; Placental leucine aminopeptidase
Protein Family	Leucyl-cystinyl aminopeptidase
UniProt Gene Name	LNPEP
UniProt Synonym Gene Names	OTASE; Cystinyl aminopeptidase; IRAP; OTase; P-LAP
UniProt Entry Name	LCAP_HUMAN
NCBI Protein Information	leucyl-cystinyl aminopeptidase; otase; oxytocinase; vasopressinase; AT (4) receptor; angiotensin IV receptor; insulin-regulated aminopeptidase; placental leucine aminopeptidase; insulin-responsive aminopeptidase; insulin-regulated membrane aminopeptidase
NCBI Summary for LNPEP	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, Jul 2008]
UniProt Comments for LNPEP	IRAP: a leucyl/cystinyl aminopeptidase. A type II membrane protein and secreted. Resides in intracellular vesicles together with GLUT4 and can then translocate to the cell surface in response to insulin and/or oxytocin. 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. Three alternatively spliced isoforms have been described. Protein type: EC 3.4.11.3; Protease; Membrane protein, integral Chromosomal Location of Human Ortholog: 5q15 Cellular Component: cytoplasmic vesicle membrane; membrane; perinuclear region of cytoplasm; lysosomal membrane; integral to plasma membrane; extracellular region; plasma membrane; intracellular; cytosol Molecular Function: zinc ion binding; metallopeptidase activity; aminopeptidase activity Biological Process: antigen processing and presentation of peptide antigen via MHC class I; protein polyubiquitination; cell-cell signaling; antigen processing and presentation of exogenous peptide antigen via MHC class I, TAP-independent; antigen processing and presentation of exogenous peptide antigen via MHC class I; protein catabolic process; female pregnancy; proteolysis
Research Articles on LNPEP	**1.** S1 specificity pocket of the aminopeptidases that generate antigenic peptides.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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