

### **LNPEP Antibody (C-Terminus)**

**Rabbit Polyclonal Antibody** Catalog # ALS15667

### **Specification**

## **LNPEP Antibody (C-Terminus) - Product Information**

IHC, IF, WB Application **Primary Accession 09UI06** Reactivity Human Host Rabbit Clonality **Polyclonal** Calculated MW 117kDa KDa

# **LNPEP Antibody (C-Terminus) - Additional Information**

#### **Gene ID 4012**

#### **Other Names**

Leucyl-cystinyl aminopeptidase, Cystinyl aminopeptidase, 3.4.11.3, 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

Human LNPEP. At least three isoforms are known to exist; this antibody will detect all three isoforms. Despite its predicted molecular weight, LNPEP often migrates at 165kD in SDS-PAGE.

#### **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

#### **Precautions**

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

# **LNPEP Antibody (C-Terminus) - 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**

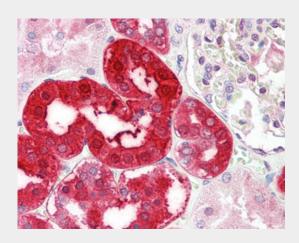
Highly expressed in placenta, heart, kidney and small intestine. Detected at lower levels in neuronal cells in the brain, in skeletal muscle, spleen, liver, testes and colon

### **LNPEP Antibody (C-Terminus) - Protocols**

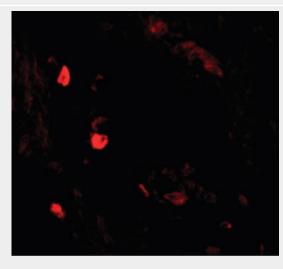
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **LNPEP Antibody (C-Terminus) - Images**

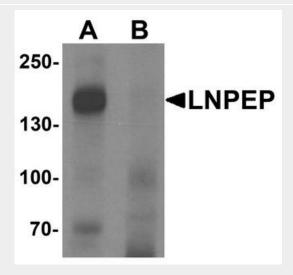


Anti-LNPEP antibody IHC staining of human kidney.





Immunofluorescence of LNPEP in human lung tissue with LNPEP antibody at 20 ug/ml.



Western blot analysis of LNPEP in human lung tissue lysate with LNPEP antibody at 1 ug/ml in (A)...

# **LNPEP Antibody (C-Terminus) - Background**

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.

# **LNPEP Antibody (C-Terminus) - References**

Rogi T.,et al.J. Biol. Chem. 271:56-61(1996). Laustsen P.G.,et al.Biochim. Biophys. Acta 1352:1-7(1997). Rasmussen T.E.,et al.Eur. J. Biochem. 267:2297-2306(2000). Matsumoto H.,et al.Eur. J. Biochem. 268:3259-3266(2001). Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.