

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Leucyl-cystinyl Aminopeptidase/LNPEP in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human (rh) ENPEP, rhLRAP, and rhARTS1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Leucyl-cystinyl Aminopeptidase/LNPEP Arg133-Gly552 Accession # Q9UIQ6
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunoprecipitation	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

LNPEP (also known as P-LAP, CAP, IRAP, and Oxytocinase) is a 165-175 kDa member of the oxytocinase subfamily, M1 family of zinc metallopeptidases. It is widely expressed after cell stimulation and is found on endothelial cells, trophoblasts, skeletal muscle cells, neurons, adipocytes, and renal distal tubule epithelium. LNPEP cleaves vasopressin and oxytocin and serves as a receptor for AngIV. Human LNPEP is a 1025 amino acid (aa) type II transmembrane glycoprotein (SwissProt #:Q9UIQ6). It contains a 110 aa cytoplasmic region (aa 1-110) plus an 894 aa extracellular domain (aa 132-1025) that contains a peptidase M1 region (aa 168-552). There are multiple potential splice variants. There are two alternative start sites at Met15 and Met20, and the cytoplasmic tail undergoes phosphorylation at Tyr70 and Ser80. LNPEP is reportedly forms homodimers. Proteolytic cleavage between Phe154Ala155 generates a 150-155 kDa soluble form. Over aa 133-552, human LNPEP shares 89% aa sequence identity with mouse LNPEP.

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