

## DESCRIPTION

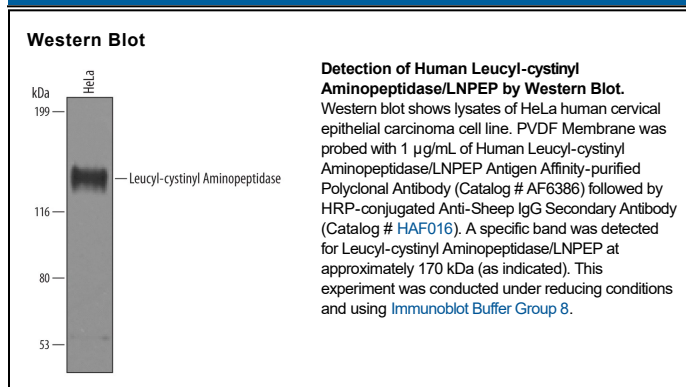
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Leucyl-cystinyl Aminopeptidase/LNPEP in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human (rh) ENPEP, rhLRAP, and rhARTS1 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human Leucyl-cystinyl Aminopeptidase/LNPEP Arg133-Gly552 Accession # Q9UIQ6
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with recombinant human Leucyl-cystinyl Aminopeptidase/LNPEP

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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 metalloproteinases. 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.