

# Human LAMP5 Protein

Cat. No. LAM-HM105

## Description

<b>Source</b>	Recombinant Human LAMP5 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Glu30-Glu235.
<b>Accession</b>	Q9UJQ1-1
<b>Molecular Weight</b>	The protein has a predicted MW of 24.17 kDa. Due to glycosylation, the protein migrates to 30-40 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

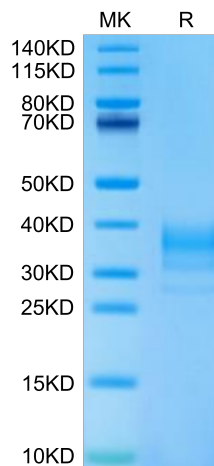
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Lysosome-associated membrane protein 5 (LAMP5) is a mammalian ortholog of the *Caenorhabditis elegans* protein, UNC-46, which functions as a sorting factor to localize the vesicular GABA transporter UNC-47 to synaptic vesicles. LAMP5 deficiency led to a larger intensity-dependent increase of wave I, II and V peak amplitude of auditory brainstem response. LAMP5 plays a pivotal role in sensorimotor processing in the brainstem and spinal cord.

## Assay Data

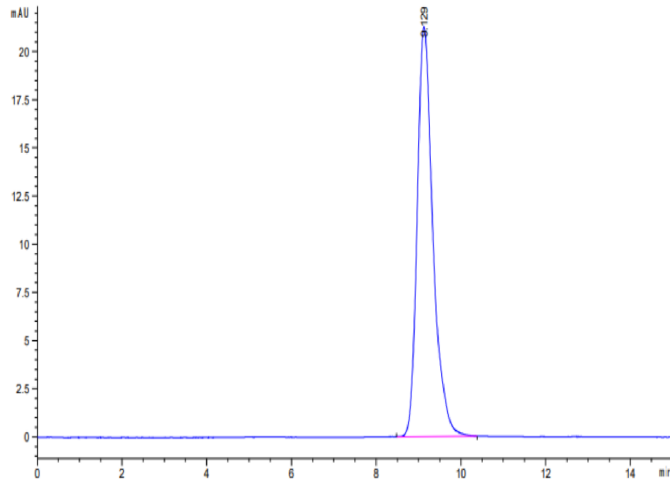
### Tris-Bis PAGE



Human LAMP5 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Human LAMP5 is greater than 95% as determined by SEC-HPLC.