

## **Product datasheet for TP727724**

## OriGene Technologies, Inc.

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## **Lamp1 Mouse Recombinant Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant Mouse Lysosome-associated Membrane Glycoprotein 1/LAMP-1/CD107a (C-

6His)

C-His

Species: Mouse

Expression cDNA Clone

**ne** Leu25-Asn370

or AA Sequence:

Tag:

**Buffer:** Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.

**Note:** Recombinant Mouse Lysosome-associated Membrane Glycoprotein 1 is produced by our

Mammalian expression system and the target gene encoding Leu25-Asn370 is expressed with

a 6His tag at the C-terminus.

**Stability:** 12 months from date of despatch

Locus ID: 16783 UniProt ID: <u>P11438</u>

Summary: Lysosomal associated membrane protein 1 (LAMP1) is an approximately 120 kDa

transmembrane glycoprotein that is a major protein component of lysosomal membranes. Mature mouse LAMP1 consists of a 346 amino acid (aa) intralumenal domain (ECD), a 24 aa transmembrane segment, and a 12 aa cytoplasmic tail. Its lumenal domain is organized into two heavily N-glycosylated regions separated by a Ser/Pro-rich linker that carries a minor amount of O-linked glycosylation. Within the lumenal domain, mouse LAMP1 shares approximately 64% and 82% aa sequence identity with human and rat LAMP1, respectively. The sorting of LAMP1 to lysosomes relies on a tyrosine motif in the cytoplasmic tail. In cytotoxic T cells and mast cells, LAMP1 is expressed in the membranes of intracellular granules that contain effector molecules such as perforin, granzymes, eicosanoids, and histamine. A glycoform of LAMP1 known as M150 is expressed on the surface of activated macrophages where it promotes T cell co-stimulation and a Th1 biased immune response. Exposure of epithelial cells to pathogenic Neisseria bacteria induces the redistribution of LAMP1 to the cell surface where it can be cleaved by the Neisseria IgA1 protease.