

**DESCRIPTION**

|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human LAMP1/CD107a Luminal Domain in Western blots. In Western blots, less than 1% cross-reactivity with recombinant mouse LAMP1 is observed. |
| <b>Source</b>             | Polyclonal Sheep IgG  |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human LAMP1/CD107a Luminal Domain<br>Ala28-Asn380<br>Accession # P11279                               |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.                            |

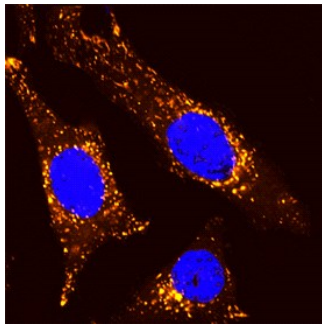
**APPLICATIONS**

**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.

|                            | <b>Recommended Concentration</b> | <b>Sample</b>                                 |
|----------------------------|----------------------------------|---|
| <b>Western Blot</b>        | 0.1 µg/mL                        | Recombinant Human LAMP1/CD107a Luminal Domain |
| <b>Immunocytochemistry</b> | 5-15 µg/mL                       | See Below                                     |

**DATA**

**Immunocytochemistry**



**LAMP1/CD107a in HeLa Human Cell Line.**  
LAMP1/CD107a was detected in formaldehyde fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human LAMP1/CD107a Luminal Domain Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF4800) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (orange; Catalog # NL999) and counterstained with DAPI (blue). Specific staining was localized to lysosomes. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

**PREPARATION AND STORAGE**

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.2 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  |
| <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**

LAMP1 (Lysosome-associated membrane protein-1; also CD107a) is a 100-130 kDa member of the LAMP family of glycoproteins. It is expressed in lysosomal and plasma membranes of macrophages, NK and T-cells, and with LAMP2, is essential for the formation of phagolysosomes. On the cell surface, it also presents carbohydrates to selectins. Mature human LAMP1 is a 389 amino acid (aa) type I transmembrane glycoprotein. It contains a 354 aa luminal/extracellular domain (ECD) (aa 28-381) and a 12 aa cytoplasmic tail (aa 405-416). The ECD has two large looping regions (aa 28-193 and 227-381) plus multiple N- and O-linked glycosylation sites. There is one potential splice variant that shows a 26 aa substitution in the signal sequence. Over aa 28-380, human LAMP1 shares 64% aa identity with mouse LAMP1.