

**KD-Validated Anti-LAMP1 /CD107a Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI2050****Specification****KD-Validated Anti-LAMP1 /CD107a Rabbit Monoclonal Antibody - Product Information**

|                   |                                                                                                                                                                                                                 |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application       | WB, ICC                                                                                                                                                                                                         |
| Primary Accession | <a href="#">P11279</a>                                                                                                                                                                                          |
| Reactivity        | Human                                                                                                                                                                                                           |
| Clonality         | Monoclonal                                                                                                                                                                                                      |
| Isotype           | Rabbit IgG                                                                                                                                                                                                      |
| Calculated MW     | Predicted, 45 kDa , observed, 120 kDa                                                                                                                                                                           |
| Gene Name         | KDa                                                                                                                                                                                                             |
| Aliases           | LAMP1                                                                                                                                                                                                           |
|                   | CD107a; Lysosome-Associated Membrane Glycoprotein 1; Lysosome-Associated Membrane Protein 1; CD107 Antigen-Like Family Member A; LAMP-1; Lysosomal-Associated Membrane Protein 1; CD107a Antigen; LGP120; LAMPA |
| Immunogen         | A synthesized peptide derived from human LAMP1                                                                                                                                                                  |

**KD-Validated Anti-LAMP1 /CD107a Rabbit Monoclonal Antibody - Additional Information**

|                                                                                                                                                                                                          |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| Gene ID                                                                                                                                                                                                  | 3916 |
| Other Names                                                                                                                                                                                              |      |
| Lysosome-associated membrane glycoprotein 1, LAMP-1, Lysosome-associated membrane protein 1, CD107 antigen-like family member A, CD107a, LAMP1 {ECO:0000303 PubMed:23632890, ECO:0000312 HGNC:HGNC:6499} |      |

**KD-Validated Anti-LAMP1 /CD107a Rabbit Monoclonal Antibody - Protein Information**

**Name** LAMP1 {ECO:0000303|PubMed:23632890, ECO:0000312|HGNC:HGNC:6499}

**Function**

Lysosomal membrane glycoprotein which plays an important role in lysosome biogenesis, lysosomal pH regulation, autophagy and cholesterol homeostasis (PubMed:<a href="http://www.uniprot.org/citations/37390818" target="\_blank">37390818</a>). Acts as an important regulator of lysosomal lumen pH regulation by acting as a direct inhibitor of the proton channel TMEM175, facilitating lysosomal acidification for optimal hydrolase activity (PubMed:<a href="http://www.uniprot.org/citations/37390818" target="\_blank">37390818</a>). Also plays an important role in NK-cells cytotoxicity (PubMed:<a href="http://www.uniprot.org/citations/2022921" target="\_blank">2022921</a>, PubMed:<a href="http://www.uniprot.org/citations/23632890" target="\_blank">23632890</a>). Mechanistically, participates in cytotoxic granule movement to the cell surface and perforin trafficking to the lytic granule (PubMed:<a href="http://www.uniprot.org/citations/23632890" target="\_blank">23632890</a>). In addition, protects NK-cells from degranulation-associated

damage induced by their own cytotoxic granule content (PubMed:<a href="http://www.uniprot.org/citations/23847195" target="\_blank">23847195</a>). Presents carbohydrate ligands to selectins (PubMed:<a href="http://www.uniprot.org/citations/7685349" target="\_blank">7685349</a>).

#### Cellular Location

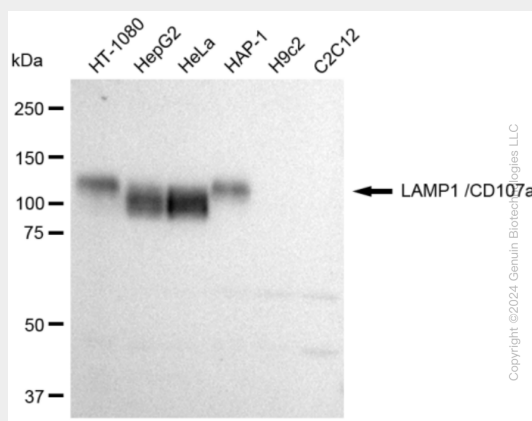
Lysosome membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Late endosome membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein. Cytolytic granule membrane; Single-pass type I membrane protein. Note=This protein shuttles between lysosomes, endosomes, and the plasma membrane (By similarity). Colocalizes with OSBPL1A at the late endosome (PubMed:16176980). {ECO:0000250|UniProtKB:P05300, ECO:0000269|PubMed:16176980, ECO:0000269|PubMed:17897319}

### KD-Validated Anti-LAMP1 /CD107a Rabbit Monoclonal Antibody - Protocols

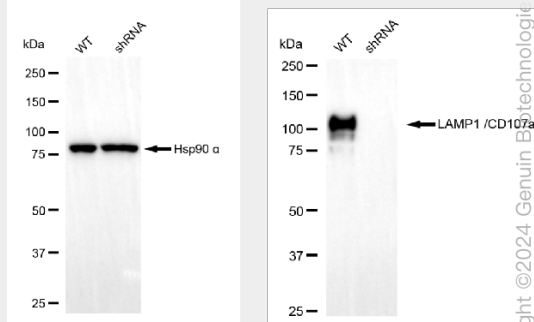
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

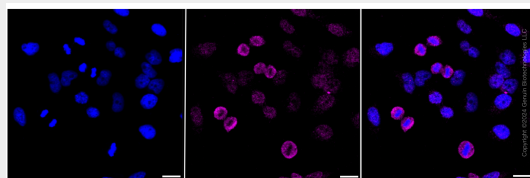
### KD-Validated Anti-LAMP1 /CD107a Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-LAMP1 /CD107a antibody (Cat#AGI2050). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-LAMP1 /CD107a antibody (Cat#AGI2050, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-LAMP1 /CD107a antibody (Cat#AGI2050). LAMP1 /CD107a expression in wild type (WT) and LAMP1 /CD107a shRNA knockdown (KD) HT-1080 cells with 30  $\mu$ g of total cell lysates. GAPDH serves as a loading control. The blot was incubated with anti-LAMP1 /CD107a antibody (Cat#AGI2050, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of HeLa cells with LAMP1 /CD107a antibody (Cat#AGI2050, 1:1,000). Nuclei were stained blue with DAPI; LAMP1 /CD107a was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20  $\mu$ m.