

ARG43342 anti-CD107b / LAMP2b antibody

Package: 50 µg
Store at: -20°C

Summary

| | |
|---------------------|---|
| Product Description | Rabbit Polyclonal antibody recognizes CD107b / LAMP2b |
| Tested Reactivity | Hu, Ms |
| Tested Application | ICC, IHC-P, WB |
| Specificity | The antibody reacts to LAMP2b isoform and has a cross-reactivity to LAMP2c isoform (64% homology). |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | CD107b / LAMP2b |
| Species | Human |
| Immunogen | A 17-amino acid synthetic peptide within the last 50 amino acids of Human CD107b / LAMP2b isoform. |
| Conjugation | Un-conjugated |
| Alternate Names | CD antigen CD107b; LAMPB; CD107b; LGP110; Lysosome-associated membrane glycoprotein 2; LAMP-2; CD107 antigen-like family member B; Lysosome-associated membrane protein 2 |

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|-------------|
| | ICC | 10 µg/ml |
| | IHC-P | 5 µg/ml |
| | WB | 1 - 2 µg/ml |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Positive Control | HepG2 | |
| Observed Size | 100 ~ 120 kDa (glycosylated) | |

Properties

| | |
|---------------------|---|
| Form | Liquid |
| Purification | Affinity purification with immunogen. |
| Buffer | PBS and 0.02% Sodium azide. |
| Preservative | 0.02% Sodium azide |
| Concentration | 1 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated |

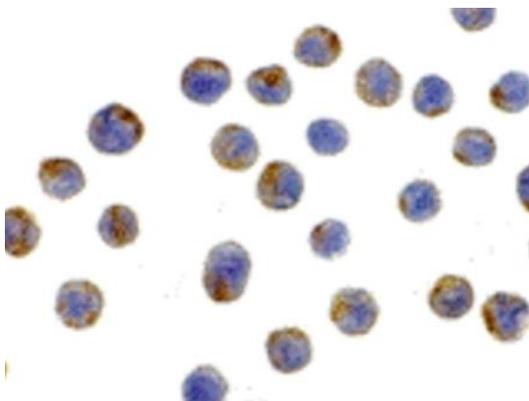
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

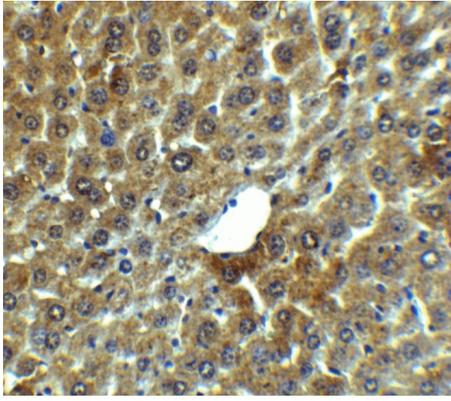
| | |
|-----------------------|---|
| Gene Symbol | LAMP2 |
| Gene Full Name | lysosomal-associated membrane protein 2 |
| Background | The protein encoded by this gene is a member of a family of membrane glycoproteins. This glycoprotein provides selectins with carbohydrate ligands. It may play a role in tumor cell metastasis. It may also function in the protection, maintenance, and adhesion of the lysosome. Alternative splicing of this gene results in multiple transcript variants encoding distinct proteins. [provided by RefSeq, Jul 2008] |
| Function | <p>Plays an important role in chaperone-mediated autophagy, a process that mediates lysosomal degradation of proteins in response to various stresses and as part of the normal turnover of proteins with a long biological half-life (PubMed:8662539, PubMed:11082038, PubMed:18644871, PubMed:24880125, PubMed:27628032). Functions by binding target proteins, such as GAPDH and MLLT11, and targeting them for lysosomal degradation (PubMed:8662539, PubMed:11082038, PubMed:18644871, PubMed:24880125). Plays a role in lysosomal protein degradation in response to starvation (By similarity). Required for the fusion of autophagosomes with lysosomes during autophagy (PubMed:27628032). Cells that lack LAMP2 express normal levels of VAMP8, but fail to accumulate STX17 on autophagosomes, which is the most likely explanation for the lack of fusion between autophagosomes and lysosomes (PubMed:27628032). Required for normal degradation of the contents of autophagosomes (PubMed:27628032). Required for efficient MHCII-mediated presentation of exogenous antigens via its function in lysosomal protein degradation; antigenic peptides generated by proteases in the endosomal/lysosomal compartment are captured by nascent MHCII subunits (PubMed:20518820). Is not required for efficient MHCII-mediated presentation of endogenous antigens (PubMed:20518820).</p> <p>[Isoform LAMP-2C]: Modulates chaperone-mediated autophagy. Decreases presentation of endogenous antigens by MHCII. Does not play a role in the presentation of exogenous and membrane-derived antigens by MHCII. [UniProt]</p> |
| Calculated Mw | 45 kDa |
| PTM | O- and N-glycosylated; some of the 16 N-linked glycans are polylactosaminoglycans. [UniProt] |
| Cellular Localization | Cell membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein. Cytoplasmic vesicle, autophagosome membrane. Note=This protein shuttles between lysosomes, endosomes, and the plasma membrane. [UniProt] |

Images



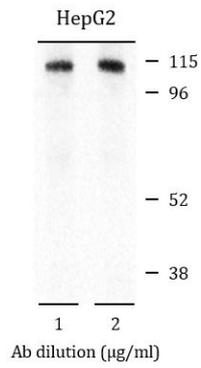
ARG43342 anti-CD107b / LAMP2b antibody ICC image

Immunocytochemistry: HepG2 cells stained with ARG43342 anti-CD107b / LAMP2b antibody at 10 µg/ml dilution.



ARG43342 anti-CD107b / LAMP2b antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse liver tissue stained with ARG43342 anti-CD107b / LAMP2b antibody at 5 $\mu\text{g}/\text{ml}$ dilution.



ARG43342 anti-CD107b / LAMP2b antibody WB image

Western blot: HepG2 cell lysate stained with ARG43342 anti-CD107b / LAMP2b antibody at 1 $\mu\text{g}/\text{ml}$ (left) and 2 $\mu\text{g}/\text{ml}$ (right) dilution.