

ARG52327
anti-CD107a / LAMP1 antibody [5H6]Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [5H6] recognizes CD107a / LAMP1
Tested Reactivity	Hu, Bov
Species Does Not React With	Ms, Rat
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	5H6
Isotype	IgG1
Target Name	CD107a / LAMP1
Species	Human
Immunogen	Recombinant full length human LAMP1 expressed in and purified from E. coli
Conjugation	Un-conjugated
Alternate Names	LGP120; CD107a; LAMPA; CD antigen CD107a; Lysosome-associated membrane glycoprotein 1; CD107 antigen-like family member A; LAMP-1; Lysosome-associated membrane protein 1

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:500 - 1:2000
	WB	1:5000 - 1:10000
Application Note	Specific for the ~100k LAMP1 protein * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

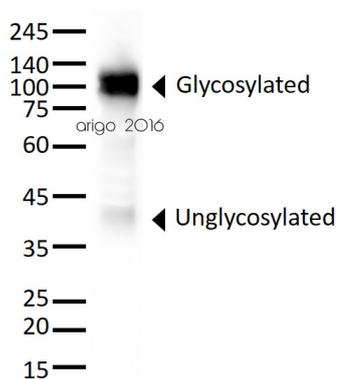
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	PBS and 10 mM Sodium azide
Preservative	10 mM Sodium azide
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

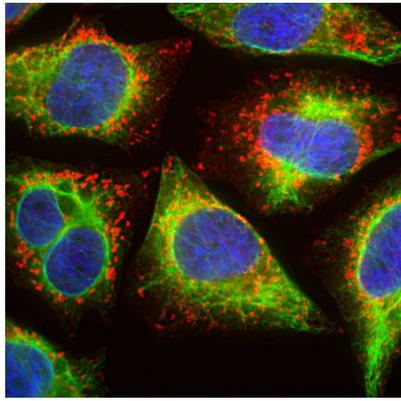
Database links	GeneID: 281897 Bovine GeneID: 3916 Human Swiss-port # P11279 Human Swiss-port # Q05204 Bovine
Gene Symbol	LAMP1
Gene Full Name	lysosomal-associated membrane protein 1
Background	Lysosomal Associated Membrane Protein1 (LAMP1) is a protein that is localized primarily in lysosomes but may also be present on late endosomes and the plasma membrane. LAMP1 antibodies are therefore widely used as lysosome markers. It has recently been suggested that lysosomes are activated in microglia in the progression of multiple system atrophy (MSA) and thus play a key role in its pathology (Makioka et al., 2012).
Highlight	Related Antibody Duos and Panels: ARG30310 Endosome, Lysosome, Peroxisome Marker Antibody Panel (Catalase, Caveolin1, Clathrin heavy chain, LAMP1) Related products: LAMP1 antibodies ; LAMP1 Duos / Panels ; Anti-Mouse IgG secondary antibodies ; Related poster download: Organelle Markers & Loading Control
Research Area	Cancer antibody; Cell Death antibody; Controls and Markers antibody; Developmental Biology antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody; Lysosome Marker antibody
Calculated Mw	45 kDa
PTM	O- and N-glycosylated; some of the 18 N-linked glycans are polylactosaminoglycans. The glycosylation of N-76 is essential for Lassa virus entry into cells.

Images



ARG52327 anti-CD107a / LAMP1 antibody [5H6] WB image

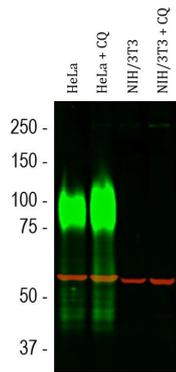
Western blot: 30 µg of HeLa cell lysate stained with ARG52327 anti-CD107a / LAMP1 antibody [5H6] at 1:5000 dilution.



ARG52327 anti-CD107a / LAMP1 antibody [5H6] ICC/IF image

Immunofluorescence: HeLa cells were treated with 50 μ M of chloroquine, an inhibitor of autophagy, for 16 hours prior to staining. Cells stained with ARG52327 anti-CD107a / LAMP1 antibody [5H6] (red) at 1:500 dilution, and costained with [ARG52468](#) anti-Vimentin antibody (green) at 1:10000 dilution. DAPI (blue) for nuclear staining.

Clone 5H6 reveals vesicular staining of LAMP1 protein accumulated in swollen lysosomes, while the Vimentin antibody specifically labels the intermediate filament network in these cells.



ARG52327 anti-CD107a / LAMP1 antibody [5H6] WB image

Western blot: Cells were untreated or treated with 50 μ M of chloroquine (CQ), an inhibitor of autophagy, for 24 hours. HeLa, HeLa + CQ, NIH/3T3 and NIH/3T3 + CQ (left to right) cell lysates stained with ARG52327 anti-CD107a / LAMP1 antibody [5H6] (green) at 1:10000 dilution. The smeared band between 75-120 kDa corresponds to variably glycosylated forms of the LAMP1 protein detected only in the Human cells, this antibody does not recognize the rodent LAMP1 homologue.

The same blot was stained with [ARG10757](#) anti-Hsp 60 antibody (red) at 1:20000 dilution.