

Monoclonal Antibody to CD107b / LAMP2 - FITC

Alternate names:	LAMP-2, LAMP-2C, LAMPB, Lysosome-associated membrane glycoprotein 2
Catalog No.:	AM05893FC-N
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	Lysosomes are membrane-bound organelles found within the cytoplasm of most cells, which contain hydrolytic enzymes and act as the major compartment for heterophagic and autophagic digestion. Members of the lysosomal-associated membrane protein family (LAMPS) are believed to play an important role in protecting the lysosomal membrane from protease degradation and are involved in lectin-mediated cell adhesion. Evidence shows that CD107b is involved in the lysosomal uptake of cytosolic proteins and the endocytic pathway and human studies have revealed a correlation between the level of surface expression of CD107b on tumour cells and their metastatic potential.
Uniprot ID:	P13473
NCBI:	NP_002285.1
GeneID:	3920
Host / Isotype:	Mouse / IgG1
Clone:	AC17
Immunogen:	MDCK (Madin-Darby Canine Kidney) cells
Format:	State: Liquid Ig fraction Purification: Affinity chromatography on Protein G Buffer System: Phosphate buffered saline pH7.4, 0.09% Sodium Azide (NaN ₃), 1% Bovine Serum Albumin Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow Cytometry: Use 10 µl of the suggested working dilution to label 1x10 ⁶ cells in 100 µl. Membrane permeabilisation is required. Clone AC17 has been shown as suitable for use in Electron Microscopy (1). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises canine CD107b, otherwise known as LAMP-2, a 95kDa heavily-glycosylated type I integral lysosomal glycoprotein, shown to share high N-terminal amino acid sequence homology with human, mouse and rat CD107b. Species: Human, Canine, Mink. Other species not tested.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
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Storage: Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
This product is photosensitive and should be protected from light.
Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf life: one year from despatch.

General Readings:

1. Nabi IR, Le Bivic A, Fambrough D, Rodriguez-Boulan E. An endogenous MDCK lysosomal membrane glycoprotein is targeted basolaterally before delivery to lysosomes. *J Cell Biol.* 1991 Dec;115(6):1573-84. PubMed PMID: 1757463.
2. Nabi IR, Rodriguez-Boulan E. Increased LAMP-2 polylactosamine glycosylation is associated with its slower Golgi transit during establishment of a polarized MDCK epithelial monolayer. *Mol Biol Cell.* 1993 Jun;4(6):627-35. PubMed PMID: 8374171.
3. Jou TS, Leung SM, Fung LM, Ruiz WG, Nelson WJ, Apodaca G. Selective alterations in biosynthetic and endocytic protein traffic in Madin-Darby canine kidney epithelial cells expressing mutants of the small GTPase Rac1. *Mol Biol Cell.* 2000 Jan;11(1):287-304. PubMed PMID: 10637309.
4. Ihrke G, Bruns JR, Luzio JP, Weisz OA. Competing sorting signals guide endolyn along a novel route to lysosomes in MDCK cells. *EMBO J.* 2001 Nov 15;20(22):6256-64. PubMed PMID: 11707397.
5. Fukuda M. Lysosomal membrane glycoproteins. Structure, biosynthesis, and intracellular trafficking. *J Biol Chem.* 1991 Nov 15;266(32):21327-30. PubMed PMID: 1939168.

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