

**DATASHEET**

**CD107a Mouse Monoclonal Antibody(C3663)**

CAT. NO. AMA03275

**KEY FEATURES**

Target	CD107a	Source / Host	Mouse
Reactivity	Human, Monkey	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

**BACKGROUND**

Lysosomal membrane glycoprotein which plays an important role in lysosome biogenesis, lysosomal pH regulation, autophagy and cholesterol homeostasis . 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 . Also plays an important role in NK-cells cytotoxicity . Mechanistically, participates in cytotoxic granule movement to the cell surface and perforin trafficking to the lytic granule . In addition, protects NK-cells from degranulation-associated damage induced by their own cytotoxic granule content . Presents carbohydrate ligands to selectins .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200
IF/ICC	1:10 - 1:50

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Mouse monoclonal antibody to CD107a
Specificity	Recognizes endogenous levels of CD107a protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human CD107a. The exact sequence is proprietary.
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 44 kD; Observed: 95-120 kD
Form/Buffer	Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Lysosome-associated membrane glycoprotein 1; LAMP-1; Lysosome-associated membrane protein 1; CD107 antigen-like family member A; CD107a
Gene Symbol	LAMP1
Entrez Gene	3916(Human)
SwissProt	P11279(Human)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

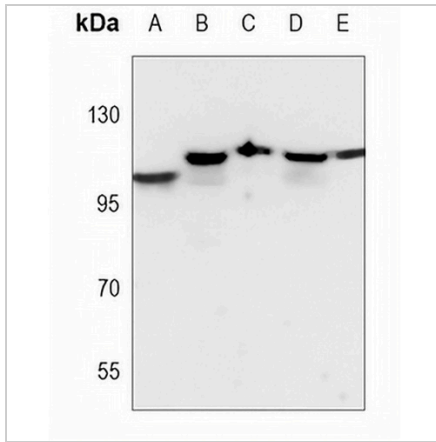
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

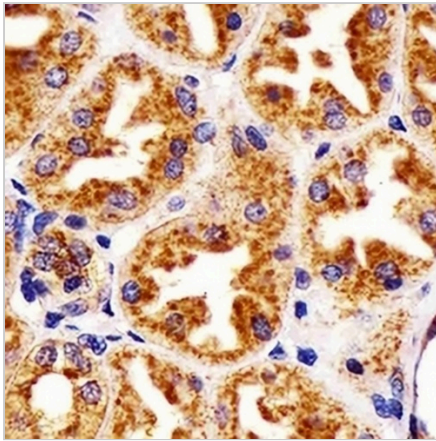
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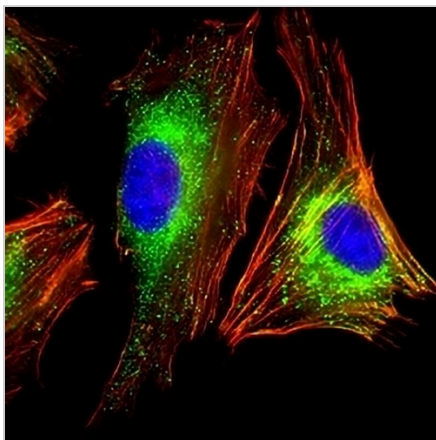
**DATA**



Western blot analysis of CD107a expression in A431 (A), HeLa (B), Jurkat (C), HT1080 (D), COS7 (E) whole cell lysates. (Predicted band size: 44 kD; Observed band size: 95-120 kD)



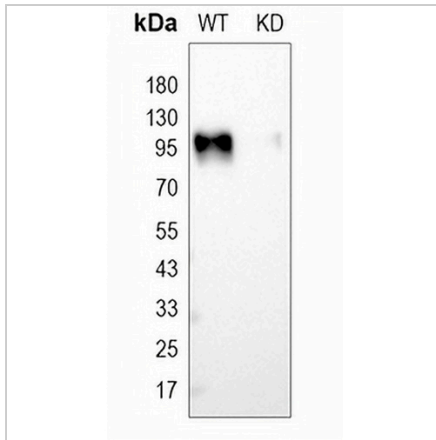
Immunohistochemical analysis of CD107a staining in human kidney formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CD107a staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 555 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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**DATA (CONTINUED)**

Western blot analysis of CD107a expression in wild type (WT) and knockdown (KD) HT1080 cell lysates.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.