

Product Data Sheet

FITC anti-human CD107a (LAMP-1)

Catalog # / Size: 328605 / 25 tests
328606 / 100 tests

Clone: H4A3

Isotype: Mouse IgG1, κ

Workshop Number: P PR-63; BP 473; P P008

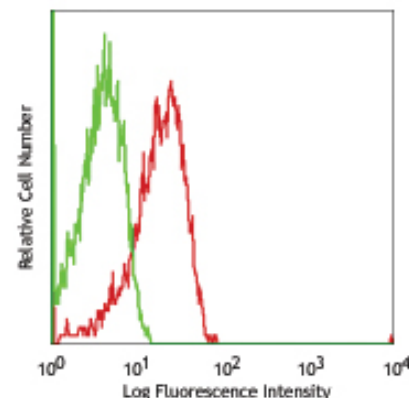
Immunogen: Human adult adherent peripheral blood cells

Reactivity: Human, **Cross-Reactivity:** African Green, Baboon, Chimpanzee, Pigtailed Macaque, Rhesus

Preparation: The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Thrombin-activated human peripheral blood platelets were stained with CD107a (clone H4A3) FITC (red histogram) or mouse IgG1, κ FITC (green histogram).

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 μ l to 5 μ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 μ l staining volume or per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

Application Notes: Additional reported applications (for the relevant formats) include: Western blotting, immunohistochemical staining², immunofluorescence^{5,7}, and immunoprecipitation⁵.

Application References:

1. Misse D, et al. 1999. *Blood* 93:2454.
2. Furuta K, et al. 2001. *Am. J. Pathol.* 159:449. (IHC)
3. Watanabe A, et al. 2011. *J. Biol. Chem.* 286:10702. PubMed
4. Baron Gaillard CL, et al. 2011. *Mol. Cell. Biol.* 22:5459. PubMed
5. Hauck CR and Meyer TF. 1997. *FEBS Lett.* 405:86. (IF, IP)
6. De Keersmaecker B, et al. 2012. *J. Virol.* 86:9351. PubMed
7. Knodler LA, et al. 2010. *P. Natl. Acad. Sci. USA.* 107:17733. (IF)

Description: CD107a, also known as Lysosome-Associated Membrane Protein 1 (LAMP-1) or LGP-120, is a 110-140 kD type I membrane glycoprotein. The mature CD107a is heavily glycosylated from a 40 kD core protein. It is expressed by activated platelets, activated lymphocytes, macrophages, epithelial cells, endothelial cells, and some tumor cells. This molecule is located on the luminal side of lysosomes and has been suggested to play a role in the protection of lysosomes membrane from lysosomal hydrolases. Upon activation, CD107a is transferred to the cell membrane surface. It plays a role in cell adhesion and regulation of tumor metastasis, and mediates autoimmune disease progression. CD107a is a ligand for galactin and E-selectin.

Antigen References:

1. Sarafian V, et al. 2006. *Arch. Dermatol. Res.* 298:7381.
2. Schlossman SF, et al. 1995. *Leukocyte Typing V: White Cell Differentiation Antigens*. New York: Oxford University Press.
3. Sawada R, et al. 1993. *J. Biol. Chem.* 268:12675.
4. Chen JW, et al. 1988. *J. Biol. Chem.* 263:8754.
5. Chen JW, et al. 1986. *Biochem. Soc. Symp.* 51:97112.

Related Products:

Product	Clone	Application
FITC Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.