Technical Data Sheet

FITC Mouse Anti-Human CD107a

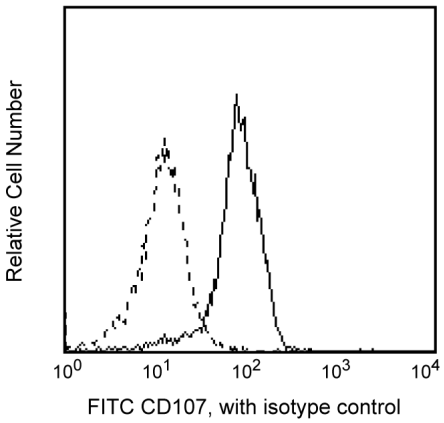
Product Information

Material Number:	**555800**
Alternate Name:	LAMP-1
Size:	100 tests
Vol. per Test:	20 µl
Clone:	H4A3
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	V P008
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with the heavily glycosylated 110 kDa lysosomal-associated membrane protein, LAMP-1. LAMP-1 is a widely expressed intracellular antigen. It is also expressed on the surface of activated platelets, PHA-activated lymphocytes and some tumor cell lines, including U937 and KG1a. LAMP-1 has been shown to be a ligand for E-selectin-mediated cell adhesion. LAMP-1 and LAMP-2 (CD107b) are carriers for poly-N-acetyllactosamines, and are able to display sialyl Le[x] termini.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of activated platelets analyzed on a FACScan (BDIS, San Jose, CA)

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.
Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Intracellular staining (flow cytometry)	Routinely Tested

Recommended Assay Procedure:
We routinely test this antibody on the fixed and permeabilized Jurkat cells by flow cytometry with Cytofix/Cytoperm (Cat. No. 554714) for fixation and permeabilization.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554714	BD Cytofix/Cytoperm Fixation/Permeablization Kit	250 tests	(none)
555748	FITC Mouse IgG1, κ Isotype Control	100 tests	MOPC-21

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10e6 cells in a 100-µl experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Schlossman SF, Boumsell L, Gilks W, et al, ed. *Leukocyte Typing V: White Cell Differentiation Antigens.* New York: Oxford University Press; 1995.(Clone-specific)

Chen JW, Cha Y, Yuksel KU, Gracy RW, August JT. Isolation and sequencing of a cDNA clone encoding lysosomal membrane glycoprotein mouse LAMP-1. Sequence similarity to proteins bearing onco-differentiation antigens. *J Biol Chem.* 1988; 263(18):8754-8758.(Biology)

Febbraio M, Silverstein RL. Identification and characterization of LAMP-1 as an activation-dependent platelet surface glycoprotein. *J Biol Chem.* 1990; 265(30):18531-18537.(Biology)

Sawada R, Lowe JB, Fukuda M. E-selectin-dependent adhesion efficiency of colonic carcinoma cells is increased by genetic manipulation of their cell surface lysosomal membrane glycoprotein-1 expression levels. *J Biol Chem.* 1993; 268(17):12675-12681.(Biology)