

Technical Data Sheet

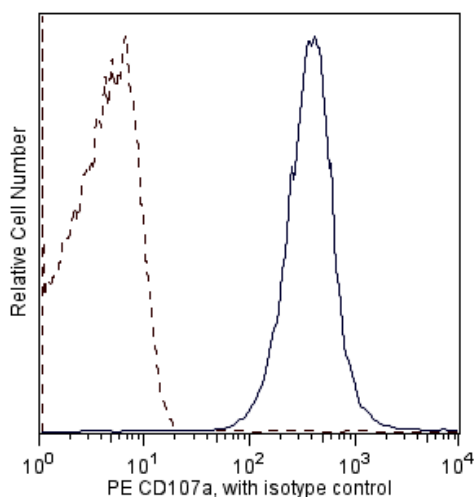
PE Rat anti-Mouse CD107a

Product Information

Material Number:	558661
Alternate Name:	LAMP-1
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	1D4B
Immunogen:	Plasma membrane fraction of mouse embryo NIH 3T3 cell line
Isotype:	Rat (SD) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 1D4B antibody recognizes CD107a (Lysosome-Associated Membrane Protein 1, LAMP-1), one of the two major glycoproteins in lysosome membranes which are useful markers to distinguish lysosomes from other organelles. Mouse CD107a consists of a 40-kDa core protein which is heavily glycosylated to form heterogeneous mature glycoprotein of 110-140 kDa. It is principally expressed in epithelial cells and macrophages in a variety of organs in normal and Beige mutant mice. Several lines of evidence suggest that cell-surface mouse and human LAMP-1 glycoproteins, the expression of which may correlate with malignant transformation, participate in intercellular adhesion and adhesion to extracellular matrix.

**Flow cytometric analysis of PE-conjugated anti-mouse CD107a on mouse splenocytes.**

Murine splenocytes were permeabilized with BD Cytofix/Cytoperm™ fixation/permeabilization buffer (Cat. No. 554722) and then stained with either PE anti-CD107a (clone 1D4B, Cat. No. 558661, solid line) or a PE rat IgG2a isotype control (catalog number 553930, dashed line). Intracellular staining was analysed by flow cytometry performed on a BD FACSCalibur™ System. The histograms were derived from the gated events based on light scattering characteristics of viable splenocytes.

Preparation and Storage

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were 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
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
554722	Fixation and Permeabilization Solution	125 ml	(none)

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 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.
- For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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References

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- Chen JW, Murphy TL, Willingham MC, Pastan I, August JT. Identification of two lysosomal membrane glycoproteins. *J Cell Biol.* 1985; 101(1):85-95. (Immunogen)
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