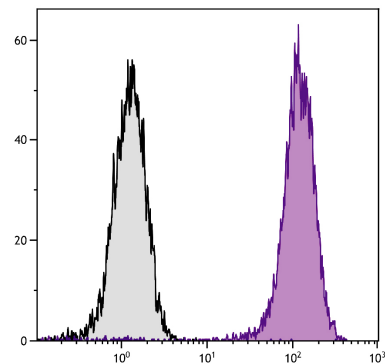




Mouse Anti-Human CD107a

Cat. No.	Format	Size
9835-01	Purified (UNLB)	0.1 mg
9835-02	Fluorescein (FITC)	100 tests
9835-02S	Fluorescein (FITC)	25 tests
9835-08	Biotin (BIOT)	100 tests
9835-09	R-phycoerythrin (PE)	100 tests
9835-09S	R-phycoerythrin (PE)	25 tests
9835-13	Spectral Red [®] (SPRD)	100 tests
9835-26	Pacific Blue [™] (PACBLU)	100 tests
9835-31	Alexa Fluor [®] 647 (AF647)	100 tests



Human T cell leukemia cell line Jurkat was intracellularly stained with Mouse Anti-Human CD107a-PE (SB Cat. No. 9835-09).

Overview

Clone	H4A3
Isotype	Mouse (BALB/c) IgG _{1κ}
Immunogen	Human adherent peripheral blood cells
Specificity	Human/Rhesus/African Green Monkey/Pigtail Macaque/Sooty Mangabey CD107a; Mr 100-120 kDa
Alternate Name(s)	LAMP-1, lysosome-associated membrane protein 1
Workshop	V P008; VI PR-63

Description

CD107a, also known as lysosomal-associated membrane protein 1 (LAMP-1), is a heavily glycosylated type I transmembrane protein that constitutes the major sialoglycoproteins on lysosomal membranes. It is a ligand for galactin, an S-type lectin present in extracellular matrix, through its recognition of acetyllactosamine oligosaccharide chains, and is a ligand for E-selectin-mediated cell adhesion. CD107a is expressed by activated T cells, macrophages, dendritic cells, activated platelets, tonsillar epithelium, and some tumor cell lines, including U937 and KG1a. It is also a widely expressed intracellular antigen. LAMP-1 may function in protecting the inner surface of the lysosomal membrane by forming a barrier to lysosomal hydrolases. The upregulation of both CD107a and CD107b on the surface of tumor cell lines has been associated with their enhanced metastatic potential where they may increase adhesion to extracellular matrix and endothelium.

Applications

FC – Quality tested ^{1,12-19,21,22}
 IHC-FS – Reported in literature ²
 IHC-PS – Reported in literature ^{3,4}
 ICC – Reported in literature ^{5-10,20}
 EM – Reported in literature ¹
 IP – Reported in literature ^{1,5,6}
 WB – Reported in literature ¹¹
 Purification – Reported in literature ¹

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 1 μg/10 ⁶ cells
	FITC, BIOT, PE, SPRD, PACBLU and AF647 conjugates	10 μL/10 ⁶ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL	

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT), Pacific Blue™ (PACBLU), and Alexa Fluor® 647 (AF647) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

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