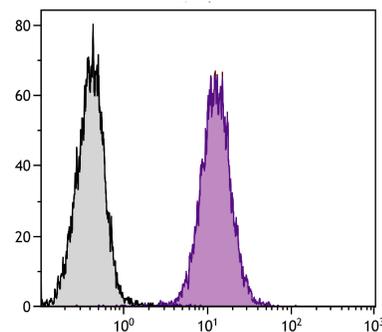




## Rat Anti-Mouse CD107a

Cat. No.	Format	Size
1920-01	Purified (UNLB)	0.5 mg
1920-02	Fluorescein (FITC)	0.5 mg
1920-11	Allophycocyanin (APC)	0.1 mg
1920-30	Alexa Fluor <sup>®</sup> 488 (AF488)	0.1 mg
1920-31	Alexa Fluor <sup>®</sup> 647 (AF647)	0.1 mg



Mouse Mφ cells were intracellularly stained with Rat Anti-Mouse CD107a-APC (SB Cat. No. 1920-11).

### Overview

<b>Clone</b>	1D4B
<b>Isotype</b>	Rat (Sprague Dawley) IgG <sub>2aκ</sub>
<b>Immunogen</b>	Plasma membrane fraction of mouse embryo NIH/3T3 cell line
<b>Specificity</b>	Mouse CD107a; Mr 110-140 kDa
<b>Alternate Name(s)</b>	LAMP-1, lysosomal-associated membrane protein 1

### Description

CD107a, also known as lysosomal-associated membrane protein 1 (LAMP-1), is a heavily glycosylated type I transmembrane protein that constitutes one of the two major sialoglycoproteins on lysosomal membranes that can be used to distinguish lysosomes from other organelles. 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 principally expressed in epithelial cells and macrophages in a variety of organs in normal and beige mutant mice. It may function in protecting the inner surface of the lysosomal membrane by forming a barrier to lysosomal hydrolases.

### Applications

FC – Quality tested <sup>16-18</sup>  
 IHC-FS – Reported in literature <sup>3</sup>  
 IHC-PS – Reported in literature <sup>4,5</sup>  
 ICC – Reported in literature <sup>1,6-10</sup>  
 EM – Reported in literature <sup>11</sup>  
 IP – Reported in literature <sup>1</sup>  
 WB – Reported in literature <sup>12,13</sup>  
 ELISA – Reported in literature <sup>14</sup>  
 Purification – Reported in literature <sup>1,15</sup>

### Working Dilutions

<b>Flow Cytometry</b>	Purified (UNLB) antibody	≤ 1 μg/10 <sup>6</sup> cells
	FITC, AF488, and AF647 conjugates	≤ 1 μg/10 <sup>6</sup> cells
	APC conjugate	≤ 0.2 μg/10 <sup>6</sup> 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

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- The purified (UNLB) antibody is supplied as 0.5 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 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Alexa Fluor<sup>®</sup> 488 (AF488) and Alexa Fluor<sup>®</sup> 647 (AF647) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

## Warning

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

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