**FITC Rat Anti-Mouse CD107a**

**Product Information**

- **Material Number:** 553793
- **Alternate Name:** LAMP-1
- **Size:** 0.5 mg
- **Concentration:** 0.5 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 ≤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.

**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:**

This antibody conjugate has been tested by intracellular immunofluorescent staining (≤ 1 µg/million cells, using the Cytofix/Cytoperm™ Kit, Cat. no. 554714) with flow cytometric analysis to assure specificity and reactivity.

**Suggested Companion Products**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>554714</td>
<td>BD Cytofix/Cytoperm Fixation/Permeabilization Kit</td>
<td>250 tests</td>
<td>(none)</td>
</tr>
<tr>
<td>553929</td>
<td>FITC Rat IgG2a, κ Isotype Control</td>
<td>0.25 mg</td>
<td>R35-95</td>
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**Product Notices**

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. 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.

**References**