

**DESCRIPTION**

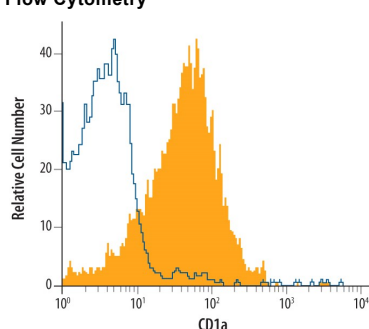
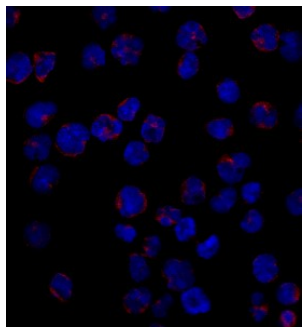
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CD1a in direct ELISAs. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) CD1d is observed and no cross-reactivity with rhCD1b or rhCD1e is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 703217
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human CD1a Asp19-Val300 (predicted) Accession # P06126
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**

<p><b>Flow Cytometry</b></p>  <p><b>Detection of CD1a in MOLT-4 Human Cell Line by Flow Cytometry.</b> MOLT-4 human acute lymphoblastic leukemia cell line was stained with Mouse Anti-Human CD1a Monoclonal Antibody (Catalog # MAB7076, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B).</p>	<p><b>Immunocytochemistry</b></p>  <p><b>CD1a in MOLT-4 Human Cell Line.</b> CD1a was detected in immersion fixed MOLT-4 human acute lymphoblastic leukemia cell line using Mouse Anti-Human CD1a Monoclonal Antibody (Catalog # MAB7076) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to surface and cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

CD1a is a 49 kDa transmembrane glycoprotein in the CD1 family of glycolipid antigen-presenting MHC-like molecules. CD1a contains one Ig-like domain in its extracellular region. It is expressed by most nonhuman mammals but not by mice or rats. Complexes of CD1a with β2-microglobulin and endogenous glycolipids are constitutively expressed on antigen presenting cells, cortical thymocytes, and Langerhans cells. CD1a is a target of autoreactive Th22 helper T cells in the skin.