

**DESCRIPTION**

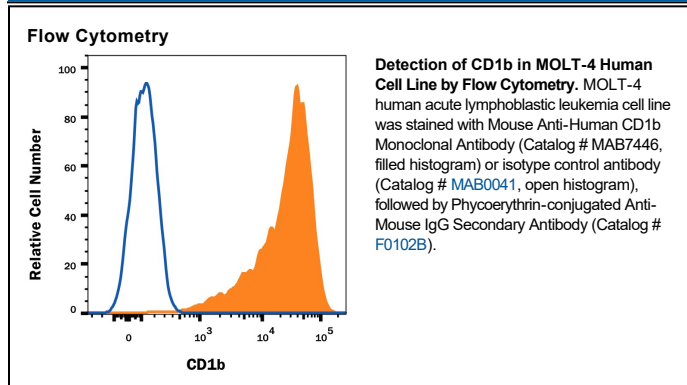
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human CD1b in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) CD1a, rhCD1c, rhCD1d, rhCD1e, recombinant mouse (rm) CD1d1, or rmCD1d2 is observed.                    |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 737249   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human CD1b<br>Ser18-Ser303<br>Accession # P29016  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*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> | 0.25 µg/10 <sup>6</sup> cells  | 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**



**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.<br>*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**

CD1b is an approximately 40-50 kDa transmembrane glycoprotein in the CD1 family of glycolipid antigen-presenting MHC-like molecules. CD1b associates with β2-microglobulin in endosomes and the Golgi where it facilitates the processing of glycolipids for their presentation by other CD1 family proteins. CD1b is expressed by most nonhuman mammals but not by mice or rats. It contains one Ig-like domain in its extracellular region. Alternate splicing of human CD1b generates an additional isoform that lacks 55 amino acids of the Ig-like domain.