

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse MDL-1/CLEC5A. In ELISAs, approximately 50% cross-reactivity with recombinant human MDL-1 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 226402
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	BaF3 mouse pro-B cell line transfected with mouse MDL-1/CLEC5A
<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	RAW 264.7 mouse monocyte/macrophage cell line
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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

MDL-1 is an approximately 40 kDa transmembrane glycoprotein belonging to the C-type lectin superfamily (CLEC5A). MDL-1 is expressed on immature myeloid cells, monocytes, macrophages, dendritic cells, neutrophils, NK cells, and osteocytes. It contains a charged lysine in the transmembrane region that enables it to associate with DAP12 and deliver an activating signal. MDL-1 mediates inflammatory responses during autoimmune arthritis and upon binding to Dengue and Japanese encephalitis viruses. The extracellular domain (ECD) of MDL-1 contains a juxtamembrane stalk region and one C-type lectin domain. Within the ECD, mouse and human MDL-1 share 67% amino acid sequence identity. In mouse, alternative splicing generates a short isoform with a 25 aa deletion in the stalk region.