

## DESCRIPTION

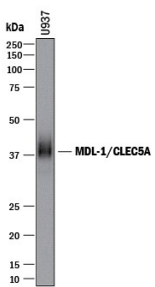
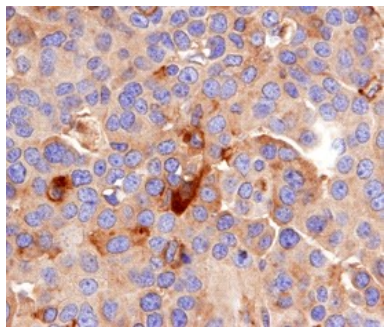
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human MDL-1/CLEC5A in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant mouse MDL-1 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human MDL-1/CLEC5A Tyr26-Lys188 Accession # Q9NY25
<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 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	Human peripheral blood monocytes
<b>Immunohistochemistry</b>	5-15 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>Western Blot</b></p>  <p><b>Detection of Human MDL-1/CLEC5A by Western Blot.</b> Western blot shows lysates of U937 human histiocytic lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human MDL-1/CLEC5A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2384) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for MDL-1/CLEC5A at approximately 37-40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>MDL-1/CLEC5A in Human Joint.</b> MDL-1/CLEC5A was detected in formalin fixed paraffin-embedded sections of human rheumatoid arthritis joint using Goat Anti-Human MDL-1/CLEC5A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2384) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membranes of monocyte colony cells in rheumatoid arthritis joint. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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, human and mouse MDL-1 share 67% amino acid sequence identity.