

DESCRIPTION

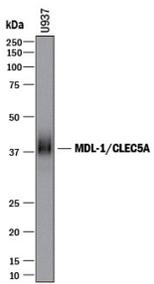
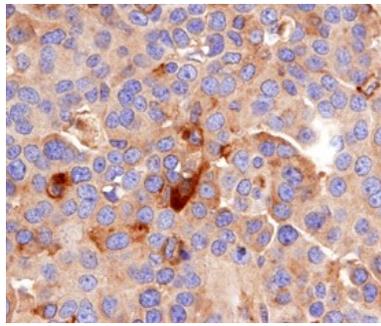
Species Reactivity	Human
Specificity	Detects human MDL-1/CLEC5A in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant mouse MDL-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma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

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Flow Cytometry	0.25 µg/10 ⁶ cells	Human peripheral blood monocytes
Immunohistochemistry	5-15 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Human MDL-1/CLEC5A by Western Blot. 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>Immunohistochemistry</p>  <p>MDL-1/CLEC5A in Human Joint. 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 & 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 Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
--	---

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.