

DESCRIPTION

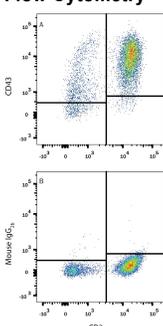
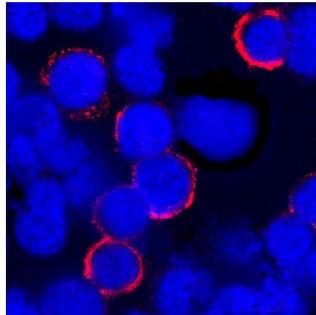
Species Reactivity	Human
Specificity	Detects human CD43. Stains human CD43-transfected cells but not irrelevant transfectants.
Source	Monoclonal Mouse IgG _{2B} Clone # 290111
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human CD43 Ser20-Pro400 Accession # P16150
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
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunocytochemistry	8-25 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>Flow Cytometry</p>  <p>Detection of CD43 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human CD3ε APC-conjugated Monoclonal Antibody (Catalog # FAB100A) and either (A) Mouse Anti-Human CD43 Monoclonal Antibody (Catalog # MAB2038) or (B) Mouse IgG_{2B} Flow Cytometry Isotype Control (Catalog # MAB0041) followed by Phycoerythrin-conjugated Anti-Hamster IgG Secondary Antibody. View our protocol for Staining Membrane-associated Proteins.</p>	<p>Immunocytochemistry</p>  <p>CD43 in Human PBMCs. CD43 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Mouse Anti-Human CD43 Monoclonal Antibody (Catalog # MAB2038) at 25 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 plasma membrane. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

CD43, also known as Leukosialin and Sialophorin and Ly-48 in mouse, is a 100-105 kDa type I transmembrane sialylated mucin that is expressed on most leukocytes and some tumor cells. Notably, the membrane expression of CD43 seems to be a characteristic of leukocytes, while cytoplasmic expression without membrane insertion occurs in endothelium and select epithelia. While CD43 restricts leukocyte adhesion and modulates T cell activation, these activities are context specific. CD43 can both induce and protect against apoptosis, and can either promote or block cell adhesion. Mature CD43 shows 49% amino (aa) sequence identity between human and mouse.