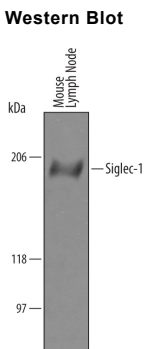
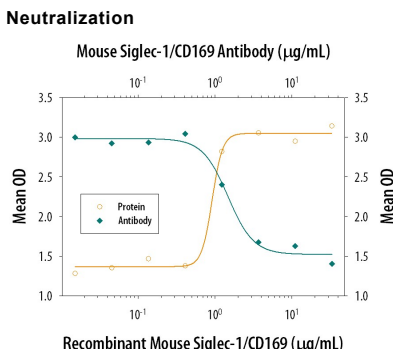


DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse Siglec-1/CD169 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant human (rh) Siglec-1 is observed and less than 1% cross-reactivity with rhSiglec-2 and recombinant mouse Siglec-2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Siglec-1/CD169 Thr20-Leu1639 Accession # Q62230
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Neutralization	Measured by its ability to neutralize Siglec-1/CD169-mediated adhesion of human red blood cells. Kelm, S. <i>et al.</i> (1994) <i>Current Biology</i> 4:965. The Neutralization Dose (ND ₅₀) is typically 1-5 µg/mL in the presence of 5 µg/mL Recombinant Mouse Siglec-1/CD169 Fc Chimera.	

DATA	
<p>Western Blot</p>  <p>Detection of Mouse Siglec-1/CD169 by Western Blot. Western blot shows lysates of mouse lymph node tissue. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Mouse Siglec-1/CD169 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5610) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Siglec-1/CD169 at approximately 180-190 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Neutralization</p>  <p>Cell Adhesion Mediated by Siglec-1/CD169 and Neutralization by Mouse Siglec-1/CD169 Antibody. Cell Adhesion Mediated by Siglec-1/CD169 and Neutralization by Mouse Siglec-1/CD169 Antibody. Recombinant Mouse Siglec-1/CD169 Fc Chimera (Catalog # 5610-SL), immobilized onto a microplate, supports the adhesion of human red blood cells in a dose-dependent manner (orange line). Adhesion elicited by Recombinant Mouse Siglec-1/CD169 Fc Chimera (5 µg/mL) is neutralized (green line) by increasing concentrations of Sheep Anti-Mouse Siglec-1/CD169 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5610). The ND₅₀ is typically 1-5 µg/mL.</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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Siglecs are sialic acid specific I-type lectins that belong to the immunoglobulin superfamily. Structurally, they are transmembrane proteins with an N-terminal Ig-like V-set domain followed by varying numbers of Ig-like C2-set domains (1, 2). Mouse Siglec-1, also known as sialoadhesin and CD169, is a 175-185 kDa glycoprotein that consists of a 1619 amino acid (aa) extracellular domain (ECD) with one Ig-like V-set domain and 16 Ig-like C2-set domains, a 21 aa transmembrane segment, and a 35 aa cytoplasmic domain (3, 4). Within the ECD, mouse Siglec-1 shares 73% and 83% aa sequence identity with human and rat Siglec-1, respectively. Alternate splicing generates a soluble form of the ECD and a soluble isoform that is truncated following the first three Ig-like domains (3). Siglec-1 expression is restricted to lymph node and spleen macrophages and some tissue macrophages (4). The adhesive function of Siglec-1 is supported by the N-terminal Ig-like domain which shows a selectivity for α -2,3-linked sialic acid residues (4-6). Siglec-1 binds a number of sialylated molecules including the mannose receptor, MGL1, MUC1, PSGL-1, and different glycoforms of CD43 (7-10). Its binding capacity can be masked by endogenous sialylated molecules (11, 12). The sialylated and sulfated N-linked carbohydrates that modify Siglec-1 itself are required for ligand binding (7, 8). Siglec-1 is expressed on dendritic cells following rhinovirus exposure, and these DC promote T cell anergy (13). It is also induced on circulating monocytes during systemic sclerosis and HIV-1 infection (14-16). Siglec-1 can trap HIV-1 particles for trans-infection of permissive cells (15).

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