

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-1.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Siglec-1/CD169 Thr20-Leu1639 Accession # Q62230
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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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