

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Siglec-6 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 1004337
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Chinese Hamster Ovary cell line, CHO-derived human Siglec-6 Gln27-Ser331 Accession # O43699
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.

Immunohistochemistry 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 (Sialic acid binding Ig-like Lectins) are I-type (Ig-type) lectins that belong to the Ig superfamily. They are characterized by an N-terminal Ig-like V-type domain which mediates sialic acid binding, followed by varying numbers of Ig-like C2-type domains (1-4). Eleven human Siglecs (Siglec-1 through 11) have been cloned and characterized. Within these eleven, there are at least two groups, one of which is termed the CD33-related group. CD33-related Siglecs include CD33/Siglec-3 and Siglec-5 through 11 (1, 3). To date, no Siglec has been shown to recognize any cell surface ligand other than sialic acid. This suggests that interactions with glycans containing this carbohydrate are important in mediating the biological functions of Siglecs. The cDNA of human Siglec-6 (also known as OB-BP1 and CD33L), encodes a putative 442 amino acid (aa) protein that contains a 15 aa signal peptide, a 321 aa extracellular region, a 21 aa transmembrane region (TM), and an 85 aa cytoplasmic tail (5, 6). The extracellular region contains one N-terminal V-type Ig-like domain followed by two Ig-like C2-type domains. The cytoplasmic domain has one immunoreceptor tyrosine-based inhibition motif (ITIM). At least three additional isoforms exist, all of which encode an additional 11 aa's at the N-terminus, likely due to the utilization of an alternate start site. Two of the three isoforms also show splicing. One isoform shows a 16 aa in-frame deletion in the second C2-like domain, while the other shows a deletion of the TM and cytoplasmic region, thus potentially generating a soluble form (6-9). Siglec-6 is found on B cells and in placenta, and would seem to have a restricted specificity for the sialyl Tn antigen (6, 10).

PRODUCT SPECIFIC NOTICES

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