

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 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.