DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Siglec-16 in direct ELISAs. In flow cytometry, detects human Siglec-16, but not human Siglec-11, in transfected HEK293 cells.
Source	Monoclonal Mouse IgG$_{2B}$ Clone # 706045
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human Siglec-16 peptide Accession # A6NMB1
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and 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.*

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10^6 cells	HEK293 Human Cell Line Transfected with Human Siglec-16 and eGFP

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

Siglec-16 (Sialic acid-binding Ig-like lectin 16) is a 58-60 kDa member of the CD33-related SIGLEC family of proteins. It is expressed on macrophages and microglia, and based on Siglec-11, likely binds to an α2,8-linked sialic acid motif. Although Siglec-16 is assumed to have arisen from a Siglec-11 gene duplication and conversion, it is not an inhibitory receptor but an activating one, and possesses a transmembrane (TM) Lys that interacts with DAP12. Mature human Siglec-16 is a 465 amino acid (aa) type I TM glycoprotein. It contains a 418 aa extracellular region (aa 17-434) that shows one V-type (aa 19-122) plus three C2-type (aa 147-424) Ig-like domains, and a short 26 aa cytoplasmic tail. Notably, Siglec-16 exists as a pseudogene in approximately 50% of surveyed population. There is no Siglec-16 counterpart in either rodent or distant primate such as Rhesus monkey. The extracellular domain (ECD) of human Siglec-16 shares 94% aa identity with the ECD of human Siglec-11.

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