Datasheet for ABIN2666859

Siglec E Protein (AA 20-355, C-Term) (Fc Tag)

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Overview

Quantity:	100 µg
Target:	Siglec E (Siglece)
Protein Characteristics:	AA 20-355, C-Term
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Siglec E protein is labelled with Fc Tag.
Application:	Flow Cytometry (FACS), Immunohistochemistry (IHC)

Product Details

Purity:	> 95 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg of protein as determine by the LAL method.

Target Details

Target:	Siglec E (Siglece)
Alternative Name:	Siglec E (Siglece Products)
Background:	Siglecs (sialic acid binding Ig-like lectins) are type I membrane proteins with an extracellular region containing a sialic acid binding V-set Ig-like domain at the N-terminus, followed by

Target Details

	varying numbers of C2-set Ig domains. The cytoplasmic tails of all siglecs have one or more tyrosines within potential signalling motifs. Siglecs are widely expressed on hematopoietic cells, often in a cell-type-specific manner. Their ligands, sialic acids, are negatively charged monosaccharides found on cell-surface glycoproteins and glycolipids. Studies suggest that siglecs may participate in cell-cell interactions or act as receptors for the entry of viral or bacterial pathogens. In addition, the presence of immunoreceptor tyrosine-based inhibitory motifs (ITIM) in their cytoplasmic domain indicates that these molecules may play a role in the suppression of immunoreceptor signaling. The siglecs can be classified into two subgroups, with Siglec-1, -2, and -4 as one group and a Siglec-3/CD33-related subgroup (Siglec-3, and -5 through -13) as the second. Siglec E is a mouse CD33-related siglec that selectively regulates early recruitment of neutrophils to the lung in acute lung inflammation induced by lipopolysaccharide. Siglec E-deficient mice exhibit exaggerated neutrophil recruitment that is reversible by using a blockade of the β2 integrin, CD11b. In addition, sialidase treatment of fibrinogen reverses the suppressive effect of Siglec E on CD11b signaling, suggesting that sialic acid recognition by Siglec E is required for its inhibitory function. These findings indicate that Siglec E is an important negative regulator of neutrophil recruitment to the lung and β2 integrin-dependent signaling.
Molecular Weight:	This 570 amino acid recombinant protein has a predicted molecular mass of approximately 63 kDa. The protein migrates at about 80 - 90 kDa by SDS-PAGE in DTT-reducing conditions and about 180 - 200 kDa in non-reducing conditions. The predicted N-terminal a

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Biological activity: Recombinant mouse Siglec E is able to agglutinate human red blood cells with an ED50 of 0.625 - 2.5 µg/ml.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Reconstitution:	For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10 µg/mL in sterile buffer (PBS, HPBS, DPBS, and EBSS) containing carrier protein such as 1 % BSA or HSA. After dilution, the cytokine can be stored between 2 °C and 8 °C for one month or from -20 °C to -70 °C for up to 3 months.

Handling

Concentration:	100 µg/mL
Buffer:	0.22 µm filtered protein solution is in PBS.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	-20 °C
Storage Comment:	Unopened vial can be stored between 2°C and 8°C for three months, at -20°C for six months, or at -70°C for one year.