



Goat Anti-Human SIGLEC10 Polyclonal Antibody [Functional Grade] (CABT-Z893G)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Detects human Siglec-10 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human (rh) Siglec-5 is observed and less than 1% cross-reactivity with rhSiglec-2, rhSiglec-3, rhSiglec-7, rhSiglec-9, and recombinant mouse Siglec-F is observed.
Immunogen	Recombinant human Siglec-10, Met17-Thr546.
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Immunogen affinity purified
Conjugate	Functional Grade
Applications	WB, FC, BL, Neut
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Format	Lyophilized
Size	100 µg
Buffer	PBS with Trehalose. Endotoxin Level <0.1 EU per 1 µg of the antibody by the LAL method.
Preservative	None
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 6 months, -20 to -70 °C under sterile conditions after

reconstitution. 1 month, 2 to 8 °C under sterile conditions after reconstitution.

Ship	Wet ice
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BACKGROUND

Introduction

The human Siglec-10 cDNA encodes a 697 amino acid (aa) precursor that includes a 16 aa signal sequence, a 534 aa extracellular domain (ECD), a 21 aa transmembrane segment, and a 126 aa cytoplasmic domain. The ECD contains one Ig-like V-type domain and four Ig-like C2-type domains, while the cytoplasmic domain contains two immunoreceptor tyrosine-based inhibitory motifs (ITIM). Five splice variants of human Siglec-10 differ in their deletions within the ECD. A potentially secreted sixth variant contains the Ig-like V-type domain followed by a 45 aa substitution. Within the ECD, human Siglec-10 is most closely related to Siglec-5 (42% aa sequence identity). It shares 63% aa sequence identity with mouse Siglec-G. Siglec-10 is expressed on eosinophils, neutrophils, monocytes, and B cells with some splice variants predominating in particular cell types and tissue locations. It is up-regulated on eosinophils in mouse models of allergic respiratory inflammation. Siglec-10 binds sialated proteins and lipids in alpha 2,3 or alpha 2,6 linkage and shows a preference for GT1b gangliosides. This binding can be modulated by cis interactions of Siglec-10 with sialated molecules expressed on the same cell. When tyrosine phosphorylated, the cytoplasmic ITIMs interact with phosphatases SHP-1 and SHP-2 to propagate inhibitory signals.

Keywords	SIGLEC10;sialic acid binding Ig-like lectin 10; SLG2;PRO940;SIGLEC-10;sialic acid-binding Ig-like lectin 10
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GENE INFORMATION

Gene Name	SIGLEC10
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Entrez Gene ID	89790
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UniProt ID	B7ZL06
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