



Goat Anti-Human SIGLEC11 Polyclonal Antibody [Functional Grade] (CABT-Z894G)

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

PRODUCT INFORMATION

Specificity	Detects human Siglec-11 in direct ELISAs and Western blots. In direct ELISA and Western blots, approximately 20% cross-reactivity with recombinant human (rh) Siglec-10 is observed and less than 5% cross-reactivity with rhSiglec-2, -3, -5, -6, -7, -9 and recombinant mouse Siglec-F is observed.
Immunogen	Recombinant human Siglec-11, Asn17-His543 (Glu84Ala, Lys145Gln).
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
------	---------

BACKGROUND

Introduction

Mature human Siglec-11 consists of a 534 amino acid (aa) extracellular domain (ECD), a 23 aa transmembrane segment, and a 114 aa cytoplasmic domain. The ECD contains one Ig-like V-set domain, and three Ig-like C2-set domains. The cytoplasmic domain contains two immunoreceptor tyrosine-based inhibitory motifs (ITIMs). A splice variant of Siglec-11 has a deletion of nearly 100 aa in the extracellular juxtamembrane region. Among siglecs, the ECD of Siglec-11 is most closely related to that of Siglec-10 (82% aa sequence identity). The cytoplasmic domains of these proteins are only 20% identical. Siglec-11 is closely related to the pseudogenes Siglec-14 and Siglec-16. Human Siglec-11 shares 90%-96% aa sequence identity with Siglec-11 from great apes. Rodent orthologs of Siglec-11 have not been identified. In human, Siglec-11 is expressed in tissue macrophages, brain microglia, and inflammatory site monocytes. Strong microglial expression is specific to humans, as it is less prominent or absent in chimpanzees and orangutans. Siglec-11 forms 180 kDa disulfide-linked dimers. It shows a strong binding preference for sialic acid in alpha 2-8 linkage which is unusual for siglecs. A conserved arginine in the Ig-like V-set domain only partially contributes to Siglec-11 ligand recognition, in contrast to its being required in other siglecs. Tyrosine phosphorylation of the cytoplasmic region of Siglec-11 promotes association with the phosphatases SHP-1 and SHP-2.

Keywords	SIGLEC11;sialic acid binding Ig-like lectin 11;sialic acid-binding Ig-like lectin 11;siglec-11
----------	--

GENE INFORMATION

Gene Name	SIGLEC11
-----------	----------

Entrez Gene ID	114132
----------------	------------------------

UniProt ID	Q96RL6
------------	------------------------
