

Siglec-2/CD22 Protein, Human (FITC, HEK293, Fc)

Cat. No.:	HY-P78541
Synonyms:	CD22 molecule; CD22; Siglec-2; B-cell receptor CD22; BL-CAM; SIGLEC2; SIGLEC2FLJ22814
Species:	Human
Source:	HEK293
Accession:	P20273 (D20-R687)
Gene ID:	933
Molecular Weight:	130-140 kDa

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	N/A.
Storage & Stability	Stored at -80°C for 1 year, protect from light. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	<p>Siglec-2/CD22 Protein serves as a crucial mediator in B-cell interactions, potentially playing a role in the localization of B-cells within lymphoid tissues. Known for its ability to bind sialylated glycoproteins, including CD45, it exhibits a preference for alpha-2,6-linked sialic acid. The sialic acid recognition site may be masked by cis interactions with sialic acids on the same cell surface. During the immune response, ligand-induced tyrosine phosphorylation suggests its involvement in the regulation of B-cell antigen receptor signaling. The protein's multifaceted role encompasses positive regulation through interaction with Src family tyrosine kinases, while concurrently acting as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains to block signal transduction through dephosphorylation of signaling molecules. Siglec-2/CD22 predominately exists as a monomer of isoform CD22-beta and can also form a heterodimer with a shorter isoform. Its intricate interactions with key molecules such as PTPN6/SHP-1, LYN, SYK, PIK3R1/PIK3R2, PLCG1, GRB2, INPP5D, and SHC1, especially upon phosphorylation, highlight its pivotal role in orchestrating complex signaling networks within B-cells. Further research is essential to unravel the precise molecular pathways and functional consequences of Siglec-2/CD22 in B-cell regulation and immune responses.</p>
-------------------	---

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA