

PE Human CD22 Protein (C-Fc)

Catalog Number:	803701, 803702
Size:	25 ug, 100 ug
Target Name:	CD22, SIGLEC2, BL-CAM
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	Flow Cytometry
Format:	Liquid, PE
Expression Host:	CHO
Species:	Human
Sources:	Human CD22 protein (Asp20-Arg687) with C-terminus Fc tag is expressed in CHO cells and conjugated to PE.
Accession Number:	P20273
Molecular Weight:	The protein has a predicted molecular weight of 101 kDa. Under DTT-reducing conditions, it migrates at approximately 130-150 kDa on SDS-PAGE prior to conjugation.
Affinity Tag:	C-Fc
Formulation:	1xPBS buffer, pH7.4, 0.09% NaN ₃ with a carrier protein
Endotoxin level:	Not tested
Protein Concentration:	25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.
Storage and Handling:	Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2-8°C for up to six months.

BACKGROUND INFORMATION

CD22, also known as Siglec-2 or BL-CAM, is a 130 kDa type I transmembrane glycoprotein and a member of the immunoglobulin superfamily and SIGLEC family. It is expressed in the cytoplasm of pro-B and pre-B cells and on the surface of mature and activated B cells, but not plasma cells. CD22 acts as both an adhesion receptor that binds α 2,6-linked sialic acid-containing glycoproteins (such as CD45RO and CD75) and a key modulator of B cell receptor (BCR) signaling. Through its immunoreceptor tyrosine-based inhibitory motifs (ITIMs), CD22 recruits SHP-1 phosphatase to attenuate BCR-mediated calcium signaling, helping to establish B cell activation thresholds and maintain immune tolerance. CD22 also interacts with signaling molecules including Lyn, Syk, Lck, and PLC γ 1, and its function is partly regulated by CD19 and ligand binding. It is involved in B cell-B cell interactions and may play a role in B cell localization within lymphoid tissues.