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APC Human CD22 Protein (C-Fc)

Catalog Number:	803703, 803704
Size:	25 ug, 100 ug
Target Name:	CD22, SIGLEC2, BL-CAM
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	Flow Cytometry
Format:	Liquid, APC
Expression Host:	CHO
Species:	Human
Sources:	Human CD22 protein (Asp20-Arg687) with C-terminus Fc tag is expressed in CHO cells and conjugated to APC.
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% NaN3 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 α2,6-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 PLCγ1, 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.