

APC Human CD19 Protein (C-Fc)

Catalog Number:	807403, 807404
Size:	25 ug, 100 ug
Target Name:	CD19, B4, CVID3
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	Flow Cytometry
Format:	Liquid, APC
Expression Host:	CHO
Species:	Human
Sources:	Recombinant Human CD19 Protein (Glu21-Lys291) with C-terminus Fc-tag is expressed in CHO cell and conjugated to APC.
Accession Number:	P15391
Molecular Weight:	The protein has a predicted molecular weight of 56.2 kDa. Under DTT-reducing conditions, it migrates at approximately 70-80 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

Cluster of Differentiation 19 (CD19) is a 95 kDa type I transmembrane glycoprotein and a member of the immunoglobulin superfamily, expressed on B cells from the early pro-B stage through to activated B blasts, but absent on plasma cells. It is also present on follicular dendritic cells. CD19 functions as a crucial co-receptor in B cell signaling by forming a complex with CD21 (CR2) and CD81 (TAPA-1), which enhances the sensitivity of B cells to antigens by lowering the activation threshold. Upon antigen binding, CD19 is phosphorylated, recruits Src-family kinases and PI3K, and internalizes with surface immunoglobulin (sIg), promoting downstream signal transduction necessary for B cell development, activation, and differentiation. Mutations in CD19 are linked to immunodeficiency syndromes with impaired antibody production, and CD19 is a key target in immunotherapy, particularly CAR-T cell treatment of B-cell malignancies.

PRODUCT DATA

A: CD19 CAR-transfected
Stained with APC-CD19-Fc

B: Mock-transfected
Stained with APC-CD19-Fc

CHO cells transfected with either CD19 CAR or Mock plasmid were stained with APC conjugated CD19 (C-Fc) protein at 1ug_test