

Technical Data Sheet

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.

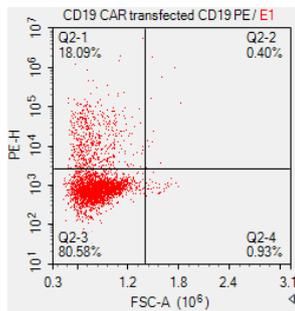
Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

Background Information

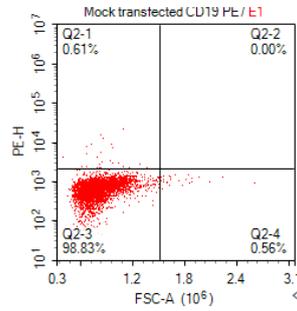
Cluster of Differentiation 19 (CD19) is a 95 kDa type I transmembrane glycoprotein and a member of the immunoglobulin superfamily, expressed on B cells from the early pro-B stage through to activated B blasts, but absent on plasma cells. It is also present on follicular dendritic cells. CD19 functions 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