InnoCyto Inc.
15375 Barranca Pkwy, Suite I-103
Irvine, CA 92618

Technical Data Sheet

Human CD19 Protein (C-Fc)

Catalog Number: 807301, 807302
Size: 25 ug, 100 ug
Target Name: CD19, B4, CVID3
Regulatory Status: RUO

Product Details

Application: ELISA, BLI
Format: Liquid, Purified
Expression Host: CHO
Species: Human
Sources: Recombinant Human CD19 Protein (Glu21-Lys291) with C-terminus Fc-tag is expressed in CHO cell.
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.
Affinity Tag: C-Fc
Purity: >95% based on SDS-PAGE under reducing condition
Formulation: 1xPBS buffer, pH7.4, 0.22 μm filtered
Endotoxin level: Not tested
Protein Concentration: 25μg size is bottled at 0.2mg/mL concentration. 100 μg size is supplied at a lot-specific concentration.
Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 μm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at <= –70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

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.

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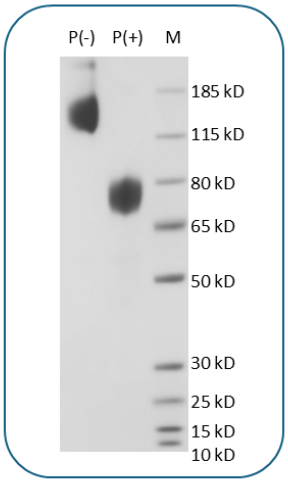
Product Data



Human CD19 Protein (C-Fc) on SDS-PAGE under reducing condition (P+) and non-reducing condition (P-). The gel was stained for 1 hour with BlinkBlue (catalog 700102). The purity of this protein appears to be greater than 95%?