

Technical Data Sheet

Human CD22 Protein (C-His-Avi)

Catalog Number: 803401, 803402
Size: 25 ug, 100 ug
Target Name: CD22, SIGLEC2, BL-CAM
Regulatory Status: RUO

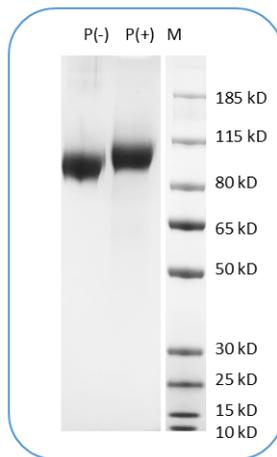
Product Details

Application: ELISA, BLI
Format: Liquid, Purified
Expression Host: CHO
Species: Human
Sources: Human CD22 protein (Asp20-Arg687) with C-terminus His-Avi tag is expressed in CHO cells
Accession Number: P20273
Molecular Weight: The protein has a predicted molecular weight of 78.6 kDa. Under DTT-reducing conditions, it migrates at approximately 100 kDa on SDS-PAGE.
Affinity Tag: C-His-Avi
Purity: >95% based on SDS-PAGE under reducing condition
Formulation: 1xPBS buffer, pH7.4, 0.22 μ m filtered
Endotoxin level: Not tested
Protein Concentration: 25 μ g size is bottled at 0.2mg/mL concentration. 100 μ g 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 μ m-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at $\leq -70^{\circ}\text{C}$ 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

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.

Product Data



Human CD22 Protein (C-His-Avi) 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%.