HUMAN CD33(140-259) PROTEIN, HFC TAG

Cat.#: 11489

Product Name: Human CD33(140-259) Protein

Size : 10 µg, 50 µg and 100 µg

Synonyms: CD33;IGLEC3;p67

Target: CD33

UNIPROT ID: P20138

Description: Recombinant human CD33 protein with C-terminal human Fc tag

Background: Sialic-acid-binding immunoglobulin-like lectin (Siglec) that plays a role in mediating cell-cell interactions and in maintaining immune cells in a resting state. Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans. Upon engagement of ligands such as C1q or syalylated glycoproteins, two immunoreceptor tyrosine-based inhibitory motifs (ITIMs) located in CD33 cytoplasmic tail are phosphorylated by Src-like kinases such as LCK. These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2. In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules. One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 38.9 kDa after removal of the signal peptide.

Molecular Characterization: CD33(Asp140-His259) hFc(Glu99-Ala330)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

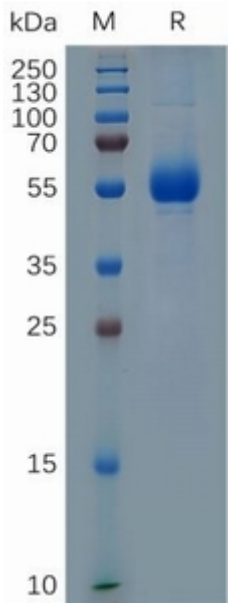

Figure 1. Human CD33, hFc Tag on SDS-PAGE under reducing condition.