

## HUMAN CD33(18-259) PROTEIN, HFC-HIS TAG

**Cat.#:** 11166

**Product Name:** Human CD33(18-259) 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 and 6xHis 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 sialylated 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 53.8 kDa after removal of the signal peptide.

**Molecular Characterization:** CD33(Asp18-His259) hFc(Glu99-Ala330) 6xHis tag

**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.

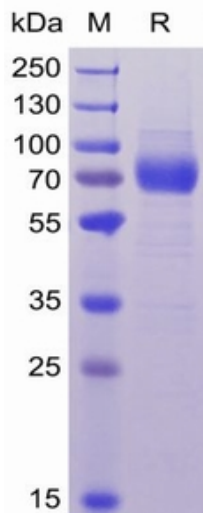


Figure 1. Human CD33, hFc-His Tag on SDS-PAGE under reducing condition.

**Human CD33, hFc-His tagged protein ELISA**  
0.1  $\mu$ g of Human CD33, hFc-His tagged protein per well

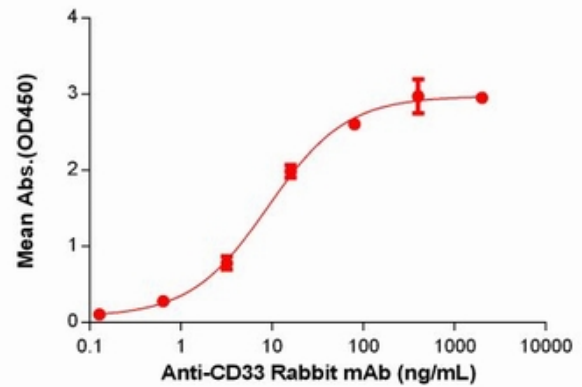


Figure 2. ELISA plate pre-coated by 1  $\mu$ g/ml (100  $\mu$ l/well) Human CD33(18-259) Protein, hFc-His Tag(11166) can bind Anti-CD33 Rabbit mAb in a linear range of 3.2-16 ng/mL.