

## PRODUCT INFORMATION

<b>Target</b>	CD33
<b>Synonyms</b>	CD33;SIGLEC3;gp67
<b>Description</b>	Recombinant human CD33 protein with C-terminal human Fc and 6×His tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P20138
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-Human Fc and 6×His Tag
<b>Molecular Characterization</b>	CD33(Asp18-His259) hFc(Glu99-Ala330) 6×His tag
<b>Molecular Weight</b>	The protein has a predicted molecular mass of 53.8 kDa after removal of the signal peptide.
<b>Purity</b>	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
<b>Storage&amp;Shipping</b>	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.
<b>Background</b>	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.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



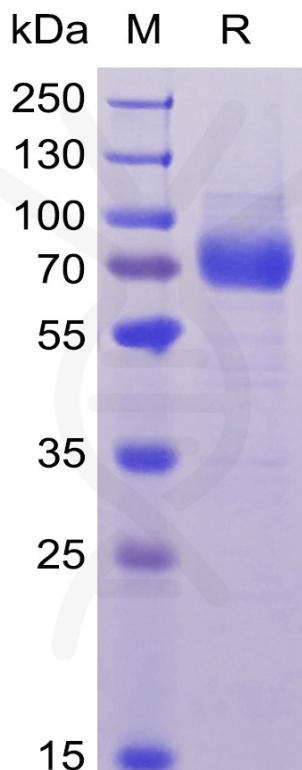
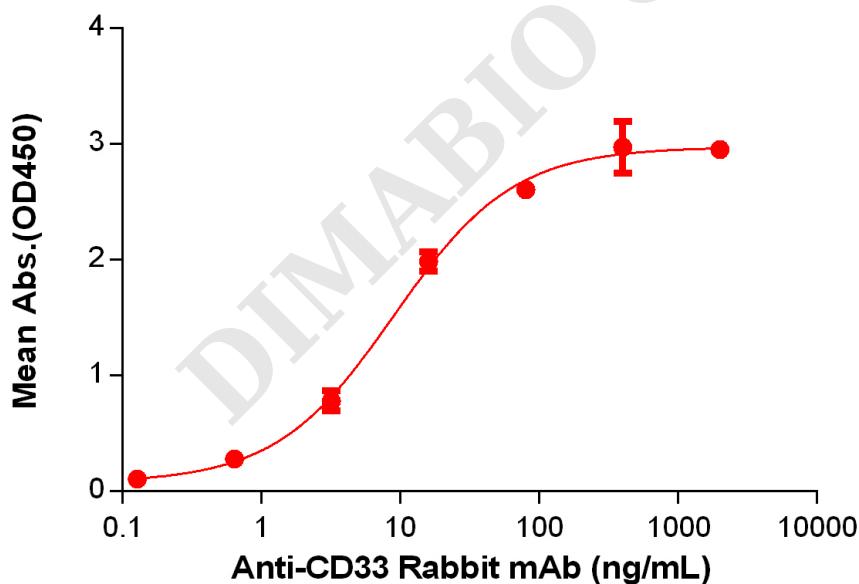


Figure 1. Human CD33, hFc-His Tag on SDS-PAGE under reducing condition.

### 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(PME100039) can bind Anti-CD33 Rabbit mAb in a linear range of 3.2-16 ng/mL.