

Human CD33 Protein; His Tag

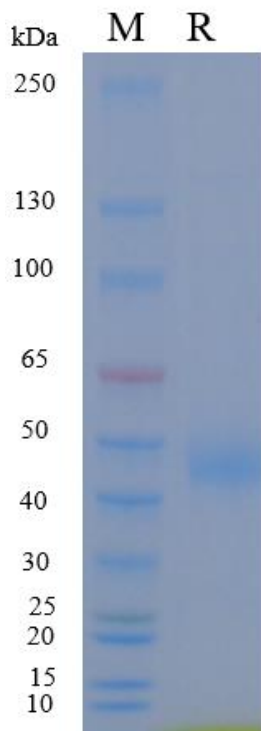
Product Information

Product Name	Human CD33 Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88735RP-100 / 100 μg GM-88735RP-1000 / 1 mg

Protein Information

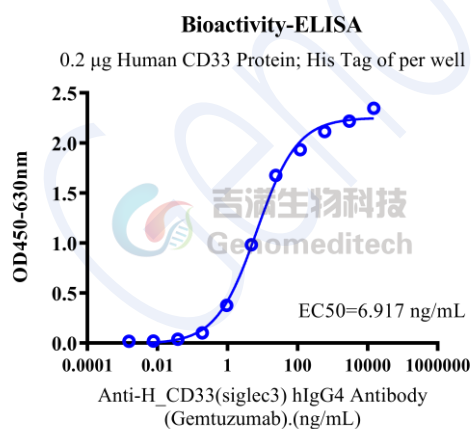
Alternative Names	SIGLEC3, gp67
Source	Human CD33 Protein; His Tag (GM-88735RP) is expressed from human 293 cells (HEK-293). It contains AA Asp 18 - His 259 (Accession # AAH28152.1). This protein carries a His tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	27.6 kDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	CD33 protein, full name Cluster of Differentiation 33, also known as Siglec-3 (Sialic acid-binding immunoglobulin-type lectin-3), is an important cell surface transmembrane glycoprotein and a member of the Siglec family of immunomodulatory receptors. CD33 protein plays a crucial role in regulating myeloid cell function by binding to sialic acid-containing glycans on the cell surface, thereby mediating cell-cell interactions, inhibiting cell activation, and modulating inflammatory responses and immune homeostasis in normal physiological conditions. Currently, CD33-targeted therapeutic strategies have shown significant clinical promise, with the antibody-drug conjugate (ADC) Gemtuzumab Ozogamicin (Mylotarg®) having been approved for the treatment of newly diagnosed or relapsed/refractory CD33-positive AML. In summary, CD33 protein plays a pivotal role in leukemogenesis and immune evasion in hematological cancers, and holds great significance for understanding tumor immunology, identifying myeloid leukemia biomarkers, developing novel targeted immunotherapies such as ADCs, BiTEs, and CAR-T, and evaluating patient prognosis in AML and other myeloid malignancies.

SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Human CD33 Protein; His Tag (Catalog # GM-88735RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-H_CD33(siglec3) hIgG4 Antibody (Gemtuzumab) (Catalog # GM-28754AB) were added.