

Product datasheet for **TP762715**

CD33 (NM_001772) Human Recombinant Protein

Product data:

| | |
|---------------------------------------|--|
| Product Type: | Recombinant Proteins |
| Description: | Purified recombinant protein of Human CD33 molecule (CD33), transcript variant 1, 50Tyr-259His, with N-terminal His tag, expressed in E.coli, 50ug |
| Species: | Human |
| Expression Host: | E. coli |
| Expression cDNA Clone or AA Sequence: | A DNA sequence encoding the region (50Tyr-259His) of CD33 |
| Tag: | N-His |
| Predicted MW: | 25.3 kDa |
| Concentration: | >0.05 ug/ul as determined by microplate BCA method |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| Buffer: | 25mM Tris, 150mM NaCl, 10% glycerol, pH8.0, 1% SKL |
| Storage: | Store at -80°C after receiving vials. |
| Stability: | Stable for at least 1 year from receipt of products under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| RefSeq: | NP_001763 |
| Locus ID: | 945 |
| UniProt ID: | P20138 , Q546G0 |
| RefSeq Size: | 1466 |
| Cytogenetics: | 19q13.41 |
| RefSeq ORF: | 1092 |
| Synonyms: | p67; SIGLEC-3; SIGLEC3 |



[View online »](#)

Summary:

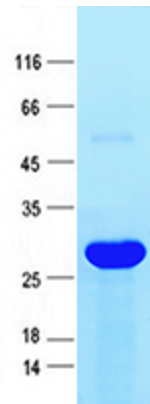
Sialic-acid-binding immunoglobulin-like lectin (Siglec) that plays a role in mediating cell-cell interactions and in maintaining immune cells in a resting state (PubMed:10611343, PubMed:15597323, PubMed:11320212). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed:7718872). 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 (PubMed:28325905, PubMed:10887109). These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2 (PubMed:10556798, PubMed:10206955, PubMed:10887109). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed:10206955, PubMed:10887109). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed:15597323).[UniProtKB/Swiss-Prot Function]

Protein Families:

Druggable Genome, Transmembrane

Protein Pathways:

Hematopoietic cell lineage

Product images:

Coomassie blue staining of purified CD33 protein (Cat #TP762715). The protein was produced from E.coli.