

## Product datasheet for **TP307023**

### CD33 (NM\_001772) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human CD33 molecule (CD33), transcript variant 1, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC207023 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	<p>MPLLLLLPLLWAGALAMDPNFWLQVQESVTVQEGLCVLPCTFFHPIPIYYDKNSPVHGYWFREGAIIISGD SPVATNKLDQEVQEETQGRFRLLDPSRNNCSLSIVDARRRDNGSYFFRMERGSTKYSYKSPQLSVHVTD LTHRPKILIPGTLEPGHKNLTCVSWACEQGTPIFSWLSAAPTSLGPRTHSSVLIITPRPQDHGTNL TCQVKFAGAVTERTIQLNVTYVPQNPTTGIFPGDGSQKQETRAGVVHGAIGGAGVTALLALCLCLIFF IVKTHRRKAARTAVGRNDTHPTTGSASPKHQKSKLHGPTETSSCSGAAPTVMDEELHYASLNFGHMNP SKDTSTEYSEVRTQ</p> <p><b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b></p>
Tag:	C-Myc/DDK
Predicted MW:	38 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	Association in cell culture (PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/27757305/">27757305</a> )
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="https://ncbi.nlm.nih.gov/RefSeq/record/NP_001763">NP_001763</a>



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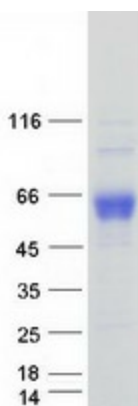
Locus ID:	945
UniProt ID:	<a href="#">P20138</a>
RefSeq Size:	1466
Cytogenetics:	19q13.41
RefSeq ORF:	1092
Synonyms:	p67; SIGLEC-3; SIGLEC3

**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# TP307023). The protein was produced from HEK293T cells transfected with CD33 cDNA clone (Cat# [RC207023]) using MegaTran 2.0 (Cat# [TT210002]).