

Product datasheet for **TP307023L**

CD33 (NM_001772) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human CD33 molecule (CD33), transcript variant 1, 1 mg

Species: Human

Expression Host: HEK293T

Expression cDNA Clone or AA Sequence: >RC207023 protein sequence
Red=Cloning site **Green**=Tags(s)

MPLLLLLPLLWAGALAMDPNFWLQVQESVTVQEGLCVLPCTFFHPIPIYYDKNSPVHGYWFREGAIIISGD
SPVATNKLDQEVQEETQGRFRLGDP SRNNCSLSIVDARRRDNGSYFFRMERGSTKYSYKSPQLSVHVTD
LTHRPKILIPGTLEPGH SKNLTC SVSWACEQGTPIFSWLSAAPTSLGPRTHSSVLIITPRPQDHGTNL
TCQVKFAGAGVTTERTIQLNVTYVPQNPTTGIFPGD GSGKQETRAGVVHGAIGGAGVTALLALCLCLIFF
IVKTHRRKAARTAVGRNDTHPTTGSASPKHQKSKLHGPTETSSCSGAAPT VEMDEELHYASLNFGHMNP
SKDTSTEYSEVRTQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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: [27757305](https://pubmed.ncbi.nlm.nih.gov/27757305/))

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: [NP_001763](https://www.ncbi.nlm.nih.gov/RefSeq/record/NP_001763)



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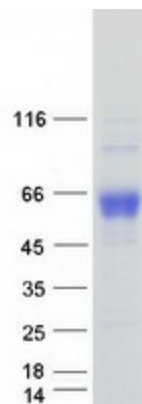
Locus ID:	945
UniProt ID:	P20138 , Q546G0
RefSeq Size:	1466
Cytogenetics:	19q13.41
RefSeq ORF:	1092
Synonyms:	p67; SIGLEC-3; SIGLEC3

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]).