

# **Product datasheet for TP317716L**

### OriGene Technologies, Inc.

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#### CD33 (NM 001082618) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Homo sapiens CD33 molecule (CD33), transcript variant 2, 1

mg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC217716 representing NM 001082618

or AA Sequence: Red=Cloning site Green=Tags(s)

MPLLLLPLLWADLTHRPKILIPGTLEPGHSKNLTCSVSWACEQGTPPIFSWLSAAPTSLGPRTTHSSVL IITPRPQDHGTNLTCQVKFAGAGVTTERTIQLNVTYVPQNPTTGIFPGDGSGKQETRAGVVHGAIGGAGV TALLALCLCLIFFIVKTHRRKAARTAVGRNDTHPTTGSASPKHQKKSKLHGPTETSSCSGAAPTVEMDEE

LHYASLNFHGMNPSKDTSTEYSEVRTQ

**TRTRPL**EQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

**Predicted MW:** 23.9 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

**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 001076087

Locus ID: 945



RefSeq ORF:

#### CD33 (NM\_001082618) Human Recombinant Protein - TP317716L

UniProt ID:P20138RefSeq Size:1085Cytogenetics:19q13.41

**Synonyms:** p67; SIGLEC-3; SIGLEC3

711

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,

inhibitory motifs (ITIMs) located in CD33 cytoplasmic tail are phosphorylated by Src-like

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 syalylated glycoproteins, two immunoreceptor tyrosine-based

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

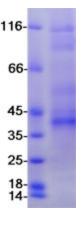
monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed:15597323).

[UniProtKB/Swiss-Prot Function]

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Hematopoietic cell lineage

## **Product images:**



Coomassie blue staining of purified CD33 protein (Cat# [TP317716]). The protein was produced from HEK293T cells transfected with CD33 cDNA clone (Cat# [RC217716]) using MegaTran 2.0 (Cat# [TT210002]).