# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 18-259aa

**UniProt No.** P20138

NCBI Accession No. AAH28152

### **Alternative Names**

SIGLEC-3, SIGLEC3, Sialic acid-binding Ig-like lectin 3, p67, Myeloid cell surface antigen CD33 isoform 1, Myeloid cell surface antigen CD33, FLJ00391, CD33 molecule, CD33

# **PRODUCT SPECIFICATION**

## **Molecular Weight**

29.1 kDa (265aa)

**Concentration** 1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

**Purity** > 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE, Denatured

## **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

CD33 is putative adhesion molecule of myelomonocytic-derived cells that mediates sialic-acid dependent binding to cells. It preferentially binds to alpha-2, 6-linked sialic acid. The sialic acid recognition site may be masked by cis interactions with sialic acids on the same cell surface. In the immune response, CD33 may act as an inhibitory receptor upon ligand induced tyrosine phosphorylation by recruiting cytoplasmic phosphatase (s) via their SH2 domain (s) that block signal transduction through dephosphorylation of signaling molecules. This



protein induces apoptosis in acute myeloid leukemia (in vitro). Recombinant human CD33 protein, fused to Histag at N-terminus, was expressed in E. coli.

#### **Amino acid Sequence**

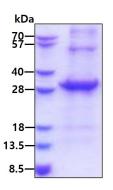
<MGSSHHHHHH SSGLVPRGSH MGS>DPNFWLQ VQESVTVQEG LCVLVPCTFF HPIPYYDKNS PVHGYWFREG
AIISGDSPVA TNKLDQEVQE ETQGRFRLLG DPSRNNCSLS IVDARRRDNG SYFFRMERGS TKYSYKSPQL SVHVTDLTHR
PKILIPGTLE PGHSKNLTCS VSWACEQGTP PIFSWLSAAP TSLGPRTTHS SVLIITPRPQ DHGTNLTCQV KFAGAGVTTE
RTIQLNVTYV PQNPTTGIFP GDGSGKQETR AGVVH

### **General References**

ulyanova T., et al. (1999) Eur. J. Immunol. 29:3440-3449 Vitale C., et al. (2001) Proc. Natl. Acad. Sci. u.S.A. 98:5764-5769

### DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain