# Data Sheet (Cat.No.TMPY-05572)

TargetMol

## Siglec-3/CD33 Protein, Human, Recombinant, PE conjugated

### General Information

Synonyms: Siglec-3;p67;CD33 molecule;SIGLEC3

Protein Construction: Recombinant human CD33 (AAH28152.1, Met1-His259) are conjugated with PE under optimum conditions, the unreacted PE was removed.

Species: Human

Expression Host: HEK293 Cells

Accession: AAH28152.1

### QC Testing

Biological Activity: Tested by Flow cytometric analysis of anti-CD33 CAR expression.

Formulation: Aqueous solution containing 0.5% BSA and 0.03% Proclin 300

### Preparation and Storage

Stability & Storage:

This reagent is stable for 6 months when stored at 2°C-8°C. Protected from prolonged exposure to light. Do not freeze!

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

### Protein Background

Myeloid cell surface antigen CD33 also known as Sialic acid binding Ig-like lectin 3, CD33 antigen or Siglec-3, is a member of the immunoglobulin superfamily and SIGLEC (sialic acid binding Ig-like lectin) family. This Single-pass type I membrane protein contains 1 Ig-like C2-type (immunoglobulin-like) domain and 1 Ig-like V-type (immunoglobulin-like) domain. CD33 /Siglec-3 is a putative adhesion molecule of myelomonocytic-derived cells that mediates sialic-acid dependent binding to cells. CD33 /Siglec-3 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, 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. CD33/Siglec-3 induces apoptosis in acute myeloid leukemia (in vitro). CD33/Siglec-3 can function as a sialic acid-dependent cell adhesion molecule and that binding can be modulated by endogenous sialoglycoconjugates when CD33 is expressed in a plasma membrane.Cancer ImmunotherapyImmune CheckpointImmunotherapyTargeted Therapy

Reference

Simmons D,et al.(1988) Isolation of a cDNA encoding CD33, a differentiation antigen of myeloid progenitor cells. J Immunol. 141(8): 2797-800.

Ulyanova T,et al.(1999) The sialoadhesin CD33 is a myeloid-specific inhibitory receptor. Eur J Immunol. 29(11): 3440-9.

Freeman SD,et al.(1995) Characterization of CD33 as a new member of the sialoadhesin family of cellular interaction molecules. Blood. 85(8): 2005-12.