

# Recombinant Human CD33 Protein, Fc-tagged, FITC conjugated

**Cat. No.** CD33-459HF    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <b>Product Overview</b> | FITC conjugated recombinant human Siglec-3 was fused to the Fc region of human IgG1 (aa 93-330). The chimeric protein was expressed in modified <i>human 293 cells</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Description</b>      | Siglecs (or sialic acid-binding immunoglobulin superfamily lectins) are sialic acid-binding Ig-like lectins characterized by a homologous N-terminal V-set Ig-like domain and varying numbers of C2-set Ig-like domains. In humans 11 Siglecs have been described. Siglec-3 (CD33) is the smallest Siglec, with only 2 of these C2-set Ig domains. Siglec-3 is a 67 kDa glycoprotein found predominantly on myeloid cells, including early myeloid precursors in the bone marrow and certain subsets of mature circulating myeloid cells. Siglec-3 has also been reported on dendritic cells, cord blood-derived natural killer (NK) cells, in vitro expanded T cells, and some biphenotypic leukemias. Siglec-3 was initially described as a marker for normal and leukemic myeloid progenitor cells, but has received renewed interest due to its demonstrated lectin activity for alpha 2-6 and alpha 2-3 sialylated N-linked oligosaccharides expressed on red blood cells (RBCs) and certain myeloid cells. |
| <b>Molecular Mass</b>   | Siglec-3-Fc Chimera migrates as a broad band between 60 and 75 kDa on SDS-PAGE due to post-translation modifications, in particular glycosylation. This compares with the unmodified Siglec-3-Fc Chimera that has a predicted molecular mass of 54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | kDa.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>N-terminal Sequence Analysis</b> | <p>Theoretical Sequence: DPNFWLQVQESVTVQEG LCVLPCTFFHPIPYDKNS PVHGYWFREGAIISGDS P VAT NKLD QEVQEETQG RFRLLGDP SRNNCSLSI VDARRRDNGSYFFRMERG S T KYSYKSPQLSVH VTDLTHRPKILIPGTLE PGHSKNLTCSVSWA CE QG TPP IFS WLSAA PTS LGPRTHSSVLIITPR PQDHGTNLT CQVKFAGA GV TT ER TIQ LN VT YV PQNPT TGIFPGD GSGKQETRAGVVH RSSNTKVDKKVEPKSCD KT HT CP PC PA PELLGG PSVFLFPPKPKDTLMI SRTPEVTCVVVDVSH EDPEVKFNWYVDGVE VH NAKTKPREEQYN STYRVVSVLTVLHQ DWLNGKEYKCKVS N KA LP AP IE KT IS KA KGQPREPQVYTLP PSRDELTKNQVSL TCLVKGFYPSDIAV EW ESN GQ PE NN YKTPPVLDSDG SFFLYSKLTVDKS RWQQGNVFSCSV MHEALHNHYTQK SL SLSPGK.</p> |
| <b>Purity</b>                       | > 95 % as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Characteristic</b>               | <p>Disulfide-linked homodimer</p> <p>Labeled with FITC via amines</p> <p>Excitation source: 488 nm spectral line, argon-ion laser</p> <p>Excitation Wavelength: 488 nm</p> <p>Emission Wavelength: 535 nm</p>                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Storage</b>                      | Lyophilized products should be stored at 2 to 8 centigrade. Following reconstitution short-term storage at 4 centigrade is recommended, with longer-term storage in aliquots at -18 to -20 centigrade.                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Storage Buffer</b>               | When reconstituted in 0.5 mL sterile phosphate-buffered saline, the solution will contain 1% human serum albumin (HSA) and 10% trehalose.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reconstitution</b>               | It is recommended that 0.5 mL of sterile phosphate-buffered saline be added to the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

vial.

**Conjugation** FITC

## GENE INFORMATION

**Gene Name** CD33 CD33 molecule [ Homo sapiens ]

**Official Symbol** CD33

**Synonyms** CD33 molecule; p67; SIGLEC3; FLJ00391; SIGLEC-3; CD33; CD33 antigen (gp67); CD33 antigen; gp67; Siglec-3; Sialic acid-binding Ig-like lectin 3

**Gene ID** 945

**mRNA Refseq** NM\_001082618

**Protein Refseq** NP\_001076087

**MIM** 159590

**UniProt ID** P20138

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