

# Recombinant Human CD33 Protein, Fc-tagged, Alexa Fluor 555 conjugated

**Cat. No.** CD33-459HAF555    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <b>Product Overview</b> | Alexa Fluor 555 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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|                                     | with the unmodified Siglec-3-Fc Chimera that has a predicted molecular mass of 54 kDa.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>N-terminal Sequence Analysis</b> | <p>Theoretical Sequence: DPNFWLQVQESVTVQEG LCVLPCTFFHPIPYDKNS PVHGYWFREGAIISGDS P VAT NKLD QEVQEETQG RFRL LGDPSRNNCSLSI VDARRRDNGSYFFRMERG S T KYSYKSPQLSVH VTDLTHRPKILIPGTLE PGHSKNLTCVSWA CE QG TPP IFS WLSAA P TSLGPRTHSSVLIITPR PQDHGTNLTCQVKFAGA 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 KGQPREPQVYTL P PSRDELTKNQVSL TCLVKGFYPSDIAV EW ESN GQ PE NN YKTT PPVLDS DG 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 Alexa Fluor 555 via amines</p> <p>With an excitation and emission maximum of 555/565 nm, Alexa Fluor 555 can be efficiently excited using a 543 nm He-Ne laser line and detected under standard TRITC/Cy3 filters.</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.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

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| <b>Reconstitution</b> | It is recommended that 0.5 mL of sterile phosphate-buffered saline be added to the vial. |
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| <b>Conjugation</b> | Alexa Fluor 555 |
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## GENE INFORMATION

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| <b>Gene Name</b> | CD33 CD33 molecule [ Homo sapiens ] |
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|------------------------|------|
| <b>Official Symbol</b> | CD33 |
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| <b>Synonyms</b> | CD33 molecule; p67; SIGLEC3; FLJ00391; SIGLEC-3; CD33; CD33 antigen (gp67); CD33 antigen; gp67; Siglec-3; Sialic acid-binding Ig-like lectin 3 |
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| <b>Gene ID</b> | 945 |
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| <b>mRNA Refseq</b> | NM_001082618 |
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| <b>Protein Refseq</b> | NP_001076087 |
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| <b>MIM</b> | 159590 |
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| <b>UniProt ID</b> | P20138 |
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