

Recombinant Human CD33 Protein, Fc-tagged, Alexa Fluor 488 conjugated

Cat. No. CD33-459HAF488 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Alexa Fluor 488 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> .
Species	Human
Source	HEK293
Description	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.
Molecular Mass	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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	with the unmodified Siglec-3-Fc Chimera that has a predicted molecular mass of 54 kDa.
N-terminal Sequence Analysis	Theoretical Sequence: DPNFWLQVQESVTVQEG LCVLVPCTFFHPIPYDKNS 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 KGQPREPQVY TLP PSRDELTKNQVSL TCLVKGFYPSDIAV EW ESN GQ PE NN YKTPPVLDSDG SFFLYSKLTVDKS RWQQGNVFSCSV MHEALHNHYTQK SL SLSPGK.
Purity	> 95 % as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.
Characteristic	Disulfide-linked homodimer Labeled with Alexa Fluor 488 via amines Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Storage	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.
Storage Buffer	When reconstituted in 0.5 mL sterile phosphate-buffered saline, the solution will contain 1% human serum albumin (HSA) and 10% trehalose.
Reconstitution	It is recommended that 0.5 mL of sterile phosphate-buffered saline be added to the

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vial.

Conjugation Alexa Fluor 488**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 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA