Recombinant Human CD33 Protein, Fc-tagged, Alexa Fluor 647 conjugated

Cat. No. CD33-459HAF647 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Alexa Fluor 647 conjugated recombinant human Siglec-3 was fused to the Fc region of human IgG1 (aa 93-330). The chimeric protein was expressed in modified*human 293 cells*.
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 LCVLVPCTFFHPIPYYDKNS PVHGYWFREGAIISGDS P VAT NKLD QEVQEETQG RFRLLGDPSRNNCSLSI VDARRRDNGSYFFRMERG S T KYSYKSPQLSVH VTDLTHRPKILIPGTLE PGHSKNLTCSVSWA CE QG TPP IFS WLSAA PTSLGPRTTHSSVLIITPR 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 KGQPREPQVYTLP PSRDELTKNQVSL TCLVKGFYPSDIAV EW ESN GQ PE NN YKTTPPVLDSDG 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 647 via amines Excitation = 650 nm Emission = 668 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 647

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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