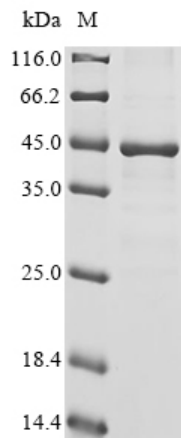


## Datasheet

<b>Product Name</b>	Recombinant Human Myeloid cell surface antigen CD33(CD33),partial
<b>Catalog Number</b>	<b>MBS965393</b>
<b>Expression host</b>	<i>E.coli</i>
<b>Product Info</b>	N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged
<b>Buffer</b>	Lyophilized from 10 mM Tris-HCl, 1 mM EDTA, 6%Trehalose, pH 8.0. The volume before lyophilization is 100µl/vial , 2vials.
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Relevance</b>	Sialic-acid-binding immunoglobulin-like lectin (Siglec) that plays a role in mediating cell-cell interactions and in maintaining immune cells in a resting state (PubMed:10611343, PubMed:15597323, PubMed:11320212). Preferentially recognizes and binds alpha-2,3- and more avidly alpha-2,6-linked sialic acid-bearing glycans (PubMed:7718872). Upon engagement of ligands such as C1q or sialylated glycoproteins, two immunoreceptor tyrosine-based inhibitory motifs (ITIMs) located in CD33 cytoplasmic tail are phosphorylated by Src-like kinases such as LCK (PubMed:28325905, PubMed:10887109). These phosphorylations provide docking sites for the recruitment and activation of protein-tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2 (PubMed:10556798, PubMed:10206955, PubMed:10887109). In turn, these phosphatases regulate downstream pathways through dephosphorylation of signaling molecules (PubMed:10206955, PubMed:10887109). One of the repressive effect of CD33 on monocyte activation requires phosphoinositide 3-kinase/PI3K (PubMed:15597323).
<b>AA sequence</b>	DPNFWLQVQESVTVQEGLCVLPCTFFHPIPYDYDKNSPVHGYWFREGAIISRDS PVATNKLDQEVQEETQGRFRLLGDPSSRNCSLSIVDARRRDNGSYFFRMERGST KYSYKSPQLSVHVTDLTHRPKILIPGTLEPGHSKNLTCSVSWACEQGTPPIFSWL SAAPTSLGPRTTTHSSVLIITPRPQDHGTNLTCQVKFAGAGVTTERTIQLNVTYVP QNPTTGIFPGDGSQKQETRAGVVH
<b>References</b>	"The Alzheimer's disease-protective CD33 splice variant mediates adaptive loss of function via diversion to an intracellular pool." Siddiqui S.S., Springer S.A., Verhagen A., Sundaramurthy V., Alisson-Silva F., Jiang W., Ghosh P., Varki A. J. Biol. Chem. 292:15312-15320(2017)

## Certificate of Analysis

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Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.		
Batch Number	DA04599b1g0		
Nature	Human CD33-(AA 18-259)-P20138-Partial Protein		
Purification	Affinity purified using IMAC		
Recommended Storage	Short term	2 to 8 °C, one week from the date of receipt	
	Long term	-20 to -80 °C, twelve months from the date of receipt	
Form	Lyophilized powder		
Date of detection	2020.07.28		
Test Items	Specifications		Results
Purity	≥85%, by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.		85%
Molecular Weight	Predicted band size: 46.7 kDa		Observed band size: 45 kDa

<b>Electrophoretic parameters</b>	(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.
<b>Aseptic Processing</b>	Not done
<b>Endotoxin Level</b>	Untreated
<b>Activity</b>	Not tested
<b>Conclusion</b>	pass

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