

CD66b Active Protein | CEACAM8 active protein

CD66b Protein, Human, Recombinant (His Tag)

CATALOG #
AAA257990

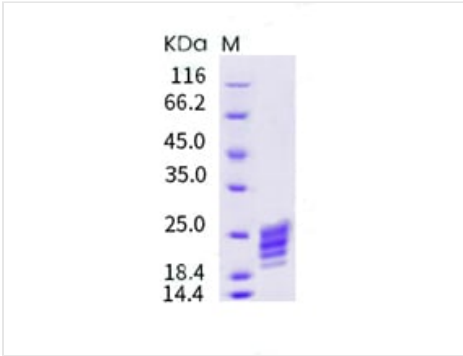
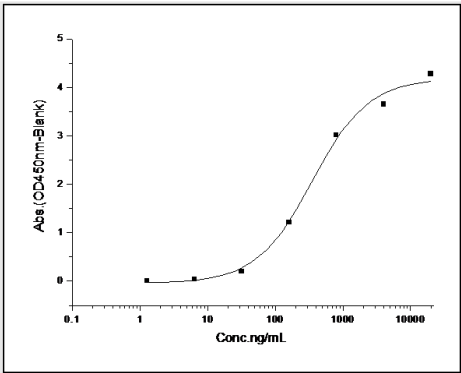
HOST
HEK293 Cells

PRODUCT SYNONYMS

CD66b; CD66b Protein; Human; Recombinant (His Tag); Human CEACAM8/CD66b Protein (His Tag); CD67 Protein; CGM6 Protein; NCA-95 Protein; carcinoembryonic antigen-related cell adhesion molecule 8; CEACAM8 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>96% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Ser31 9
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Gln 35
Tag	C-His
Protein Construction	A DNA sequence encoding the human CEACAM8 (NP_001807.2) without the pro peptide (Met 1-Ser319) was expressed, with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	1. Measured by its binding ability in a functional ELISA. 2. Immobilized human CEACAM6-his at 10ug/mL (100uL/well) can bind biotinylated human CEACAM8-his. The EC50 of biotinylated human CEACAM8-his is 0.17ug/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured by its binding ability in a functional ELISA. Immobilized human CEACAM6-his at 10 ug/mL (100 ul/well) can bind biotinylated human CEACAM8-his, The EC50 of biotinylated human CEACAM8-his is 0.17 ug/mL.

ADDITIONAL INFORMATION

Related Product Information for CEACAM8 active protein	Background: CEACAM8, also known as CD66b or NCA-95, is a single chain, GPI-anchored, highly glycosylated protein belonging to the carcinoembryonic antigen family. There are four members in this family: CD66a, CD66b, CD66c, and CD66d. Members of CEACAM family are widely expressed especially on human neutrophils, and, depending on the tissue, capable of regulating diverse functions including tumor promotion, tumor suppression, angiogenesis, and neutrophil activation. Abnormal overexpression and downregulation of some CEACAMs have been described in tumor cells. Monoclonal antibodies grouped in the CD66 cluster recognize CEACAM members. Ectopic CD66 expression is commonly detected in B-cell lineage acute lymphoblastic leukemia (ALL). CEACAM8(CD66b) is also an activation marker for human granulocytes. However, its biological functions are largely unknown in eosinophils. It has been reported that CD66b is highly expressed on the surface of human peripheral blood eosinophils isolated from healthy individuals. Engagement of CD66b by mAb or a natural ligand, galectin-3, activated a Src kinase family molecule, hemopoietic cell kinase (Hck), and induced cellular adhesion, superoxide production, and degranulation of eosinophils. CD66b molecules were localized in lipid rafts, and disruption of lipid rafts or removal of the GPI anchor inhibited the adhesion and activation of eosinophils. Importantly, CD66b was constitutively and physically associated with a beta2 integrin, CD11b, and cross-linking of CD66b induced a striking clustering of CD11b molecules. Thus, CD66b molecules are involved in regulating adhesion and activation of eosinophils, possibly through their localization in lipid rafts and interaction with other cell surface molecules, such as CD11b. Binding of exogenous or endogenous carbohydrate ligands(s) to CD66b may be important in the release of proinflammatory mediators by human eosinophils.
References	Yoon J, et al. (2007) CD66b regulates adhesion and activation of human eosinophils. J Immunol. 179 (12): 8454-62. Skubitz KM, et al. (1996) CD6a, CD66b, CD66c, and CD66d each independently stimulate neutrophils. J Leukoc Biol. 60 (1): 106-17. Skubitz KM, et al. (2008) Interdependency of CEACAM-1, -3, -6, and -8 induced human neutrophil adhesion to endothelial cells. J Transl Med. 6: 78. Lasa A, et al. (2008) High expression of CEACAM6 and CEACAM8 mRNA in acute lymphoblastic leukemias. Ann Hematol. 87 (3): 205-11.

NCBI AND UNIPROT INFORMATION

NCBI GI #	21314600
NCBI GeneID	1088
NCBI Accession #	NP_001807.2
NCBI GenBank Nucleotide #	NM_001816.3
UniProt Accession #	P31997; O60399; Q16574
Molecular Weight	38,154 Da
NCBI Official Full Name	carcinoembryonic antigen-related cell adhesion molecule 8
NCBI Official Synonym Full Names	carcinoembryonic antigen related cell adhesion molecule 8

NCBI Official Symbol	CEACAM8
NCBI Official Synonym Symbols	CD67; CGM6; CD66b; NCA-95
NCBI Protein Information	carcinoembryonic antigen-related cell adhesion molecule 8
UniProt Protein Name	Carcinoembryonic antigen-related cell adhesion molecule 8
UniProt Gene Name	CEACAM8
UniProt Synonym Gene Names	CGM6

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-ceacam8-active-protein/cd66b/257990>