

## Datasheet for ABIN7317499

# **CEACAM8 Protein (His tag)**



#### Overview

Quantity:	100 μg
Target:	CEACAM8
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CEACAM8 protein is labelled with His tag.

## **Product Details**

Purpose:	Recombinant Human CEACAM8/CD66b Protein (His Tag)(Active)
Sequence:	Met 1-Ser319
Characteristics:	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.
Purity:	> 96 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its binding ability in a functional ELISA. Immobilized human CEACAM6-his at 10 $\mu$ g/mL (100 $\mu$ l/well) can bind biotinylated human CEACAM8-his, The EC50 of biotinylated human CEACAM8-his is 0.17 $\mu$ g/mL.

## **Target Details**

Target:	CEACAM8	

Alternative Name:

CEACAM8/CD66b (CEACAM8 Products)

Background:

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. Synonym: Carcinoembryonic Antigen-Related Cell Adhesion Molecule 8, CD67 Antigen,

Carcinoembryonic Antigen CGM6, Non-Specific Cross-Reacting Antigen NCA-95, CD66b, CEACAM8, CGM6

Molecular Weight:

32.8 kDa

NCBI Accession:

NP\_001807

**Application Details** 

Restrictions:

For Research Use only

Handling

Format:

Lyophilized

# Handling

Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.  Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.