

## Recombinant Human CEACAM8/CD66b Protein (His Tag)

Catalog Number: PKSH031021

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

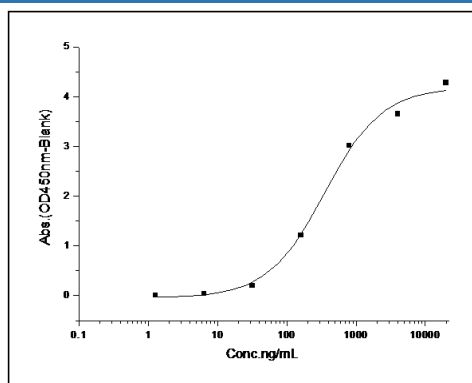
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human CEACAM8/CD66b protein Met 1-Ser319, with an C-terminal His
<b>Calculated MW</b>	32.8 kDa
<b>Observed MW</b>	55-60 kDa
<b>Accession</b>	NP_001807.2
<b>Bio-activity</b>	Immobilized human CEACAM6-his at 10 µg/mL (100 µl/well) can bind biotinylated human CEACAM8-his, The EC <sub>50</sub> of biotinylated human CEACAM8-his is 0.17 µg/mL.

### Properties

<b>Purity</b>	> 96 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



Measured by its binding ability in a functional ELISA. Immobilized human CEACAM6-his (Cat: PKSH031409) at 10 µg/mL (100 µl/well) can bind biotinylated human CEACAM8-his, The EC<sub>50</sub> of biotinylated human CEACAM8-his is 0.17 µg/mL.

### Background

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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. 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. 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.

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