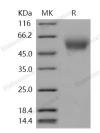
Recombinant Human CEACAM8/CD66b Protein (His Tag)

Catalog No. PKSH031021

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

Description	
Synonyms	Carcinoembryonic Antigen-Related Cell Adhesion Molecule 8;CD67 Antigen;Carcinoembryonic Antigen CGM6;Non-Specific Cross-Reacting Antigen NCA-95;CD66b;CEACAM8;CGM6
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Ser319
Accession	NP_001807.2
Calculated Molecular Weight	32.8 kDa
Observed molecular weight	55-60 kDa
Tag	C-His
Bioactivity	Immobilized human CEACAM6-his at 10 µg/mL (100 µl/well) can bind biotinylated human CEACAM8-his, The EC50 of biotinylated human CEACAM8-his is 0.17 µg/mL.
Properties	
Purity	> 96 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	

Data



> 96 % as determined by reducing SDS-PAGE.

Elabscience®

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. 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.