



Recombinant Protein Technical Manual

Recombinant Human CEACAM1/CD66a Protein (His Tag)(Active)

RPES2845

Product Data:

Product SKU: RPES2845

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001020083.1

Protein Information:

Molecular Mass: 45 kDa

AP Molecular Mass: 65-85 kDa

Tag: C-His

Bio-activity: 1. Measured by its ability to bind biotinylated Human CEACAM6-His in functional ELISA. 2. Measured by its ability to bind biotinylated Human CEACAM8-His in functional ELISA.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: Carcinoembryonic Antigen-Related Cell Adhesion Molecule 1; Biliary Glycoprotein 1; BGP; CD66a; CEACAM1; BGP; BGP1

Immunogen Information:

Sequence: Met 1-Gly 428

Background:

The carcinoembryonic-antigen-related cell-adhesion molecule (CEACAM) family of proteins has been implicated in various intercellular-adhesion and intracellular-signalling-mediated effects that govern the growth and differentiation of normal and cancerous cells. CEACAM1, also known as biliary glycoprotein I (BGP I) and CD66a, is a member of the carcinoembryonic antigen (CEA) gene family which belongs to the immunoglobulin superfamily. The highly glycosylated CEACAM1 contains one N-terminal V-type Ig-like domain and three C2-type Ig-like domains within its ECD, and one ITIM motif and a calmodulin binding site in the cytoplasmic region. CEACAM1 is a surface glycoprotein expressed on various blood cells, epithelial cells, and vascular cells. It was described as an adhesion molecule mediating cell adhesion via both homophilic and heterophilic manners, and was detected on leukocytes, epithelia, and endothelia. Studies have revealed that CEACAM1 performs actions in multiple cellular processes including tissue differentiation, angiogenesis, apoptosis, metastasis, as well as the modulation of innate and adaptive immune responses.