



Recombinant Protein Technical Manual
Recombinant Rat CEACAM1/CD66a Protein (His Tag)
RPES0311

Product Data:

Product SKU: RPES0311

Size: 50µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: P16573

Protein Information:

Molecular Mass: 44.9 kDa

AP Molecular Mass: 66-76 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein 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:

Synonyms: CEACAM1

Immunogen Information:

Sequence: Met1-Ser422

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.