

## Recombinant Mouse CEACAM1/CD66a Protein (His Tag)

Catalog No. PKSM040607

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

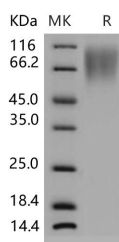
### Description

|                                    |   |
|------------------------------------|---|
| <b>Synonyms</b>                    | bb-1;Bgp;Bgp1;C-CAM;Cc1;CD66a;Cea-1;Cea-7;Cea1;Cea7;Hv-2;Hv2;mCEA1;Mhv-1;MHVR;MHVR1;mmCGM1;mmCGM1a;mmCGM2 |
| <b>Species</b>                     | Mouse   |
| <b>Expression Host</b>             | HEK293 Cells  |
| <b>Sequence</b>                    | Met 1-Gly 428   |
| <b>Accession</b>                   | NP_001034274.1  |
| <b>Calculated Molecular Weight</b> | 45 kDa  |
| <b>Observed molecular weight</b>   | 70-100 kDa  |
| <b>Tag</b>                         | C-His   |
| <b>Bioactivity</b>                 | Not validated for activity  |

### Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 95 % 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<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual.            |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.  |

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

The carcinoembryonic-antigen-related cell-adhesion molecule (CEACAM) family of proteins has been implicated in

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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.