

For Research Use Only

# Recombinant Human CEACAM-1/CD66a protein (His Tag)



Catalog Number: Eg0314

## Basic Information

**Species:**  
Human

**Purity:**  
>95 %, SDS-PAGE

**Tag:**  
His Tag

**EC50:**  
70-280 ng/mL

## Technical Specifications

**Purity:**  
>95 %, SDS-PAGE

**Endotoxin Level:**  
<0.1 EU/  $\mu$ g protein, LAL method

**Source:**  
HEK293-derived Human CEACAM-1 protein Gln35-Gly428 (Accession# P13688-1) with a His tag at the C-terminus.

**GeneID:**  
634

**Accession:**  
P13688-1

**Predicted Molecular Mass:**  
47.5 kDa

**SDS-PAGE:**  
55-90 kDa, reducing (R) conditions

**Formulation:**  
Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Immobilized Human CEACAM-1 (His tag) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human CEACAM-8 (hFc tag) with a linear range of 70-280 ng/mL.

## Storage and Shipping

**Storage:**  
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

**Shipping:**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

Carcinoembryonic antigen-related cell adhesion molecule 1 (CEACAM1), belonging to the immunoglobulin superfamily. It is cell adhesion protein that mediates homophilic cell adhesion in a calcium-independent manner. CEACAM1 is expressed in columnar epithelial cells of the colon, T cells, granulocytes and lymphocytes. It plays a role as coinhibitory receptor in immune response, insulin action and functions also as an activator during angiogenesis. Its coinhibitory receptor function is phosphorylation- and PTPN6-dependent, which in turn, suppress signal transduction of associated receptors by dephosphorylation of their downstream effectors. Plays a role in immune response, of T cells, natural killer (NK) and neutrophils. It inhibits cell migration and cell scattering through interaction with FLNA and interferes with the interaction of FLNA with RALA.

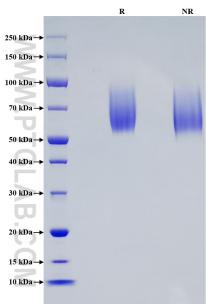
## References

- 1.Huang YH, et al. (2015). Nature. 517(7534):386-390
- 2.Hosomi S, et al. (2013). Eur J Immunol. 43(9):2473-2483
- 3.Chen Z, et al. (2008). J Immunol.180(9):6085-6093
- 4.Klaile E, et al. (2005). J Cell Sci. 118(Pt 23):5513-5524

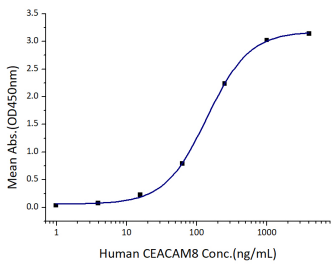
## Synonyms

CEACAM1, CEACAM1/CD66a, BGP, BGP1, BGP-1

Selected Validation Data



Purity of Recombinant Human CEACAM-1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



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