

# Human CEACAM-7 Protein

Cat. No. CEA-HM107

## Description

<b>Source</b>	Recombinant Human CEACAM-7 Protein is expressed from HEK293 with His tag at the C-terminus. It contains Thr36-Ser242.
<b>Accession</b>	Q14002-1
<b>Molecular Weight</b>	The protein has a predicted MW of 24.45 kDa. Due to glycosylation, the protein migrates to 45-65 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Carcinoembryonic antigen-related cell adhesion molecules (CEACAMs) belong to a group of mammalian immunoglobulin-related glycoproteins. They are involved in cell-cell recognition and modulate cellular processes that range from the shaping of tissue architecture and neovascularization to the regulation of insulin homeostasis and T-cell proliferation. CEACAM7 (CGM2), a member of the CEA family of proteins with expression restricted to the colon and pancreas, as a potential CAR T-cell target for PDAC.

## Assay Data

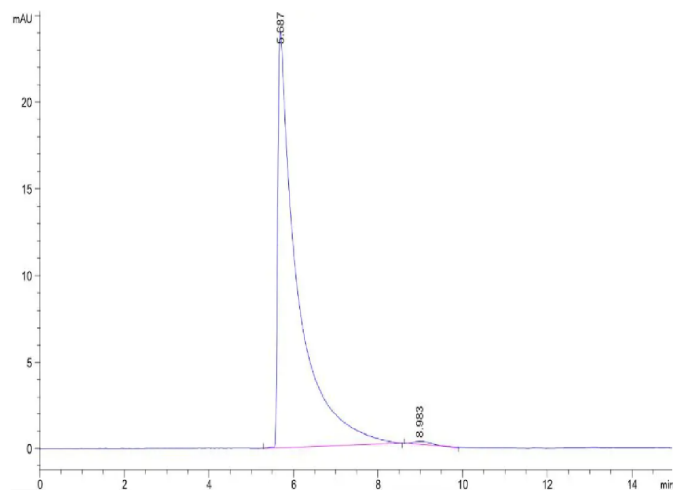
### Bis-Tris PAGE



Human CEACAM-7 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

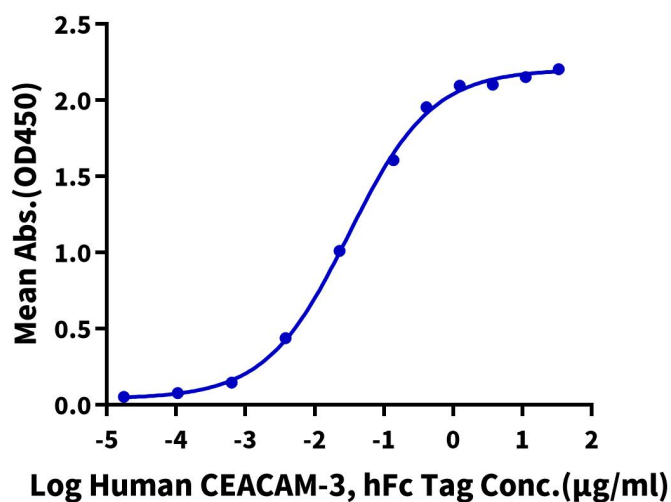


The purity of Human CEACAM-7 is greater than 95% as determined by SEC-HPLC.

ELISA Data

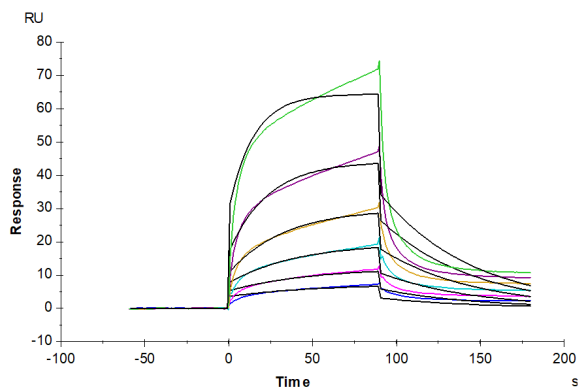
**Human CEACAM-7, His Tag ELISA**

0.1µg Human CEACAM-7, His Tag Per Well



Immobilized Human CEACAM-7, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human CEACAM-3, hFc Tag with the EC50 of 31.1ng/ml determined by ELISA (QC Test).

SPR Data



Human CEACAM-1, His Tag immobilized on CM5 Chip can bind Human CEACAM-7, His Tag with an affinity constant of 0.37 µM as determined in SPR assay (Biacore T200).