

Human CEACAM-7 Protein

Cat. No. CEA-HM107

Description

Source	Recombinant Human CEACAM-7 Protein is expressed from HEK293 with His tag at the C-terminus. It contains Thr36-Ser242.
Accession	Q14002-1
Molecular Weight	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.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months 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

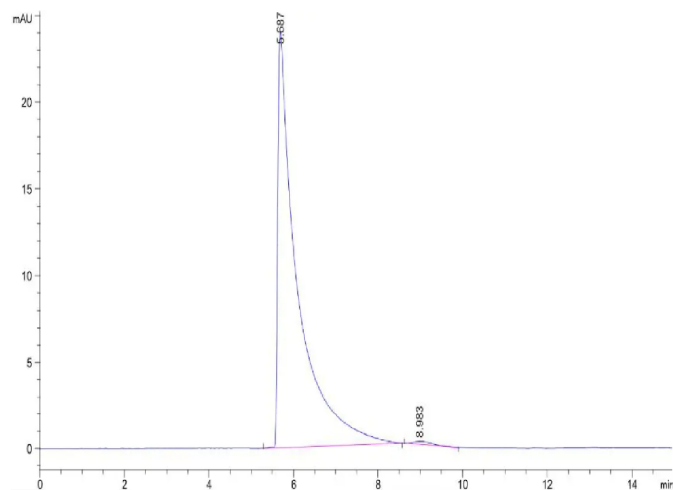
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

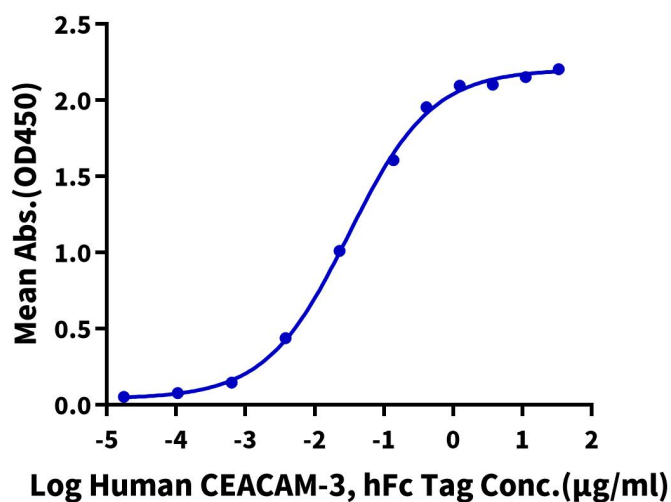


The purity of Human CEACAM-7 is greater than 95% as determined by SEC-HPLC.

ELISA Data

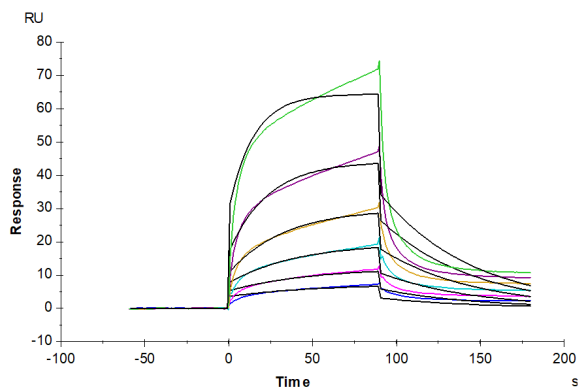
Human CEACAM-7, His Tag ELISA

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).