

Human CEACAM-5/CD66e Protein

Cat. No. CAM-HM405

Description

Source	Recombinant Human CEACAM-5/CD66e Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Lys35-Ala685.
Accession	Q8N4D0
Molecular Weight	The protein has a predicted MW of 74.2 kDa. Due to glycosylation, the protein migrates to 115-150 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU 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 µg/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 molecule 5 (CEACAM5) was identified as a metastatic driver. CEACAM5 overproduction enriched for an epithelial gene expression pattern and facilitated tumor outgrowth at metastatic sites. Tissues from patients with metastatic breast cancer confirmed elevated levels of CEACAM5 in lung metastases relative to breast tumors, and an inverse correlation between CEACAM5 and the mesenchymal marker vimentin was demonstrated.

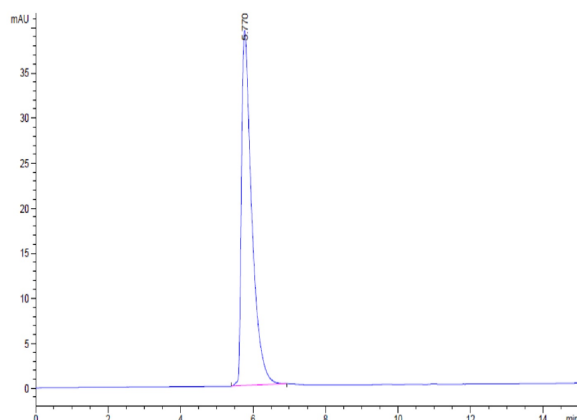
Assay Data

Bis-Tris PAGE



Human CEACAM-5 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

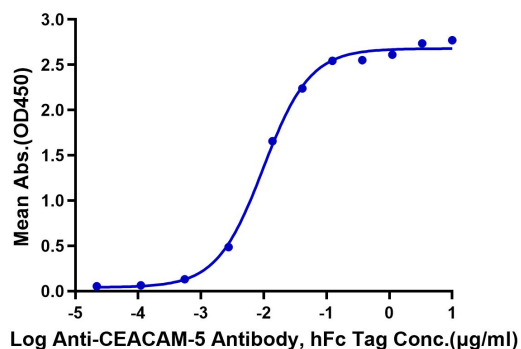


The purity of Human CEACAM-5 is greater than 95% as determined by SEC-HPLC.

Assay Data

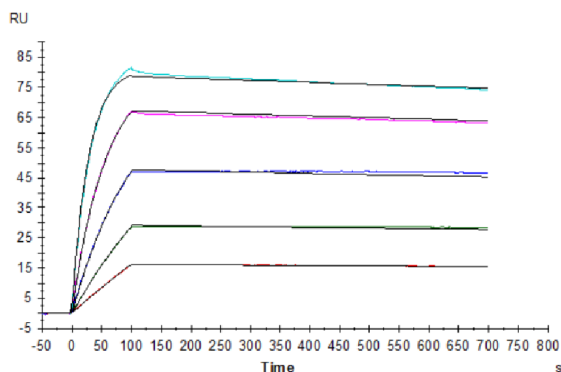
ELISA Data

Human CEACAM-5, His Tag ELISA
0.05µg Human CEACAM-5, His Tag Per Well



Immobilized Human CEACAM-5, His Tag at 0.5 µg/ml (100 µl/well) on the plate. Dose response curve for Anti-CEACAM-5 Antibody, hFc Tag with the EC50 of 9.8 ng/ml determined by ELISA.

SPR Data



Human CEACAM-5, His Tag captured on CM5 Chip via Anti-His Antibody can bind Anti-CEACAM5 Antibody, hFc Tag with an affinity constant of 0.12 nM as determined in SPR assay (Biacore T200).