

# Human ALCAM/CD166 Protein

Cat. No. ALC-HM201



## Description

<b>Source</b>	Recombinant Human ALCAM/CD166 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Trp28-Ala526.
<b>Accession</b>	Q13740-1
<b>Molecular Weight</b>	The protein has a predicted MW of 82.7 kDa. Due to glycosylation, the protein migrates to 90-115 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per ug by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

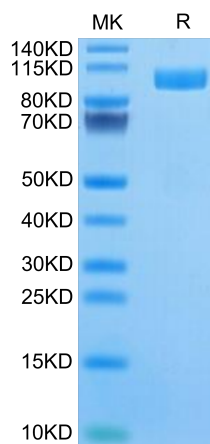
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein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

## Background

Brain metastasis (BM) in non-small-cell lung cancer (NSCLC) has a very poor prognosis. Recent studies have demonstrated the importance of cell adhesion molecules in tumor metastasis. Elevated levels of ALCAM expression promote BM formation in NSCLC through increased tumor cell dissemination and interaction with the brain endothelial cells. Therefore, ALCAM could be targeted to reduce the occurrence of BM.

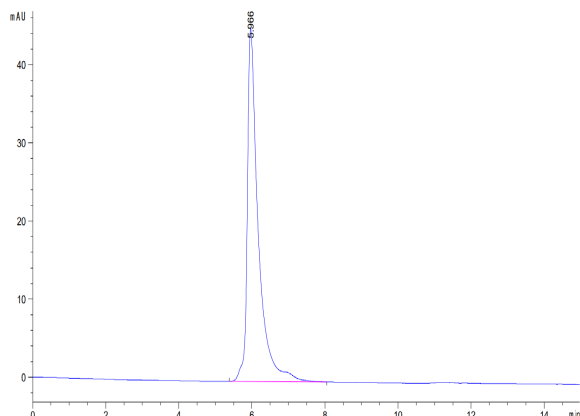
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



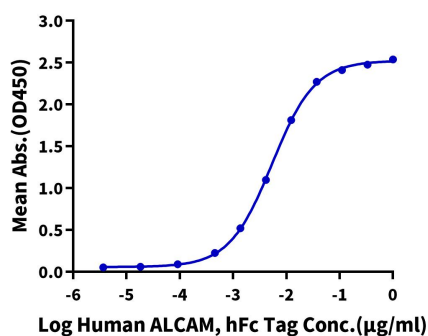
The purity of Human ALCAM is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human ALCAM, hFc Tag ELISA

0.1µg Human CD6, His Tag Per Well

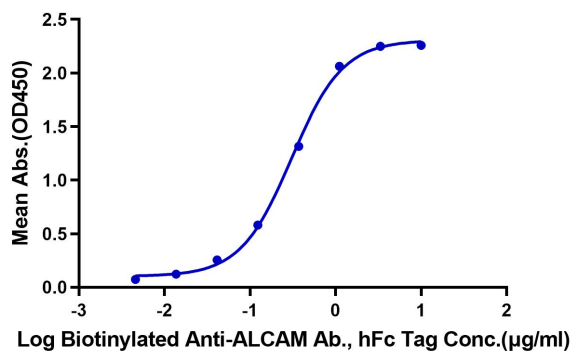


Immobilized Human CD6, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human ALCAM, hFc Tag with the EC50 of 5.4ng/ml determined by ELISA (QC Test).

ELISA Data

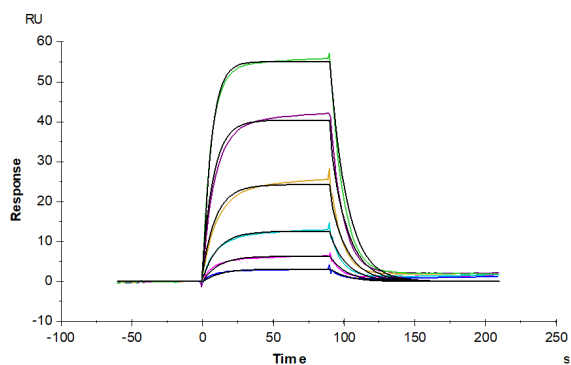
Human ALCAM, hFc Tag ELISA

0.2µg Human ALCAM, hFc Tag Per Well



Immobilized Human ALCAM, hFc Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Anti-ALCAM Antibody, hFc Tag with the EC50 of 0.3ug/ml determined by ELISA.

SPR Data



Human ALCAM, hFc Tag captured on CM5 Chip via Protein A can bind Human CD6, His Tag with an affinity constant of 0.53 µM as determined in SPR assay (Biacore T200).