Data Sheet (Cat.No.TMPK-00339)

TargetMol

ALCAM Protein, Mouse, Recombinant (His & Avi), Biotinylated

General Information

Synonyms:	CD6L;ALCAM;MEMD;KG-CAM;CD166
Protein Construction:	Tyr28-Lys527
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q61490
Molecular Weight:	58.9 kDa (predicted). Due to glycosylation, the protein migrates to 75-85 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Human CD6, His Tag at 5 μg/mL (100 μL/well) on the plate. Dose response curve for Biotinylated Mouse ALCAM, His-Avi Tag with the EC50 of 0.81 μg/mL determined by ELISA (QC Test).
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein 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.

Reference

Münsterberg J, et al. ALCAM contributes to brain metastasis formation in non-small-cell lung cancer through interaction with the vascular endothelium. Neuro Oncol. 2020 Jul 7;22(7):955-966. doi: 10.1093/neuonc/noaa028. PMID: 32064501; PMCID: PMC7339886.

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