



Recombinant Protein Technical Manual  
Recombinant Mouse ALCAM/CD166 Protein (His & Fc Tag)(Active)  
RPES0313

Product Data:

**Product SKU:** RPES0313

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_033785.1

Protein Information:

**Molecular Mass:** 84.2 kDa

**AP Molecular Mass:** 10510 kDa & 210 kDa

**Tag:** C-His-Fc

**Bio-activity:** Immobilized mouse CD6-His at 10 µg/ml (100 µl/well) can bind mouse ALCAM-Fc2h, The EC50 of mouse ALCAM-Fc2h is 0.12-0.28 µg/ml.

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** AI853494;BEN;CD166;DM-GRASP;MuSC;SC1

## Immunogen Information:

**Sequence:** Met 1-Lys 527

## Background:

Activated leukocyte cell adhesion molecule (ALCAM)/Cluster of differentiation (CD166) is a type I transmembrane cell adhesion molecule belonging to the Ig superfamily and a ligand for CD6 that is expressed on T lymphocytes. The extracellular domain of ALCAM contains five Ig-like domains (three Ig-like C2-type domains and two Ig-like V-type domains), of which the amino-terminal V1 domain is essential for ligand binding and ALCAM-mediated cell aggregation. ALCAM mediates both heterophilic (ALCAM-CD6) and homophilic (ALCAM-ALCAM) cell-cell interactions. ALCAM/CD6 interaction plays a role in T cell development and T cell regulation, as well as in the binding of T- and B-cells to activated leukocytes. Recently, homophilic (ALCAM-ALCAM) adhesion was shown to play important roles in tight cell-to-cell interaction and regulation of stem cell differentiation. While expressed in a wide variety of tissues, ALCAM is usually restricted to subsets of cells involved in dynamic growth and/or migration, including neural development, branching organ development, hematopoiesis, immune response and tumor progression. And CD166 is regarded as a potential novel breast cancer indicator and therapeutic target.