



Recombinant Protein Technical Manual

Recombinant Rat ALCAM/CD166 Protein (His Tag)(Active)
RPES0351

Product Data:

Product SKU: RPES0351

Size: 50µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: O35112

Protein Information:

Molecular Mass: 57.5 kDa

AP Molecular Mass: 68-91 kDa

Tag: C-His

Bio-activity: Immobilized rat ALCAM-His at 10 µg/ml (100 µl/well) can bind mouse CD6-Fc, The EC50 of mouse CD6-Fc is 0.08-0.18 µg/ml.

Purity: > 98 % 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: ALCAM

Immunogen Information:

Sequence: Met1-Lys527

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.