



Recombinant Protein Technical Manual

Recombinant Rat CD6/TP120 Protein (His Tag)(Active)
RPES4566

Product Data:

Product SKU: RPES4566

Size: 100µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: Q812A4

Protein Information:

Molecular Mass: 42.5 kDa

AP Molecular Mass: 64-70 kDa

Tag: C-His

Bio-activity: 1. Immobilized rat CD6-His at 10 µg/mL (100 µL/well) can bind rat ALCAM-Fc3 , The EC50 of rat ALCAM-Fc3 is 19.5-45.5 ng/ml. 2. Measured by the ability of the immobilized protein to support the adhesion of Jurkat human acute T cell leukemia cells. When 8 x 10⁴ cells/well are added to ratCD6-His coated plates (10µg/mL, 100 µL/well), approximately 39.2% will adhere after 60 minutes at 37°C.

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: CD6

Immunogen Information:

Sequence: Met1-Asn396

Background:

T-cell differentiation antigen CD6, also known as TP120 and CD6, is a single-pass type I membrane protein which contains three SRCR domains. CD6 / TP120 is a cell surface glycoprotein expressed primarily on T cells, it may function as a costimulatory molecule and may play a role in autoreactive immune responses. CD6 / TP120 is expressed by thymocytes, mature T-cells, a subset of B-cells known as B cells, and by some cells in the brain. CD6 ligand termed CD166 (previously known as activated leukocyte cell adhesion molecule, ALCAM) has been identified and shown to be expressed on activated T cells, B cells, thymic epithelium, keratinocytes, and in rheumatoid arthritis synovial tissue. CD6 / TP120 binds to activated leukocyte cell adhesion molecule (CD166), and is considered as a costimulatory molecule involved in lymphocyte activation and thymocyte development. CD6 / TP120 partially associates with the TCR / CD3 complex and colocalizes with it at the center of the mature immunological synapse (IS) on T lymphocytes. During thymic development CD6-dependent signals may contribute both to thymocyte survival, and to the overall functional avidity of selection in both man and mouse.