

Mouse CD6 / TP120 Protein (His Tag)

Catalog Number: 50711-M08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CD6

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse CD6 (Q91WN5) (Met 1-Gly396) was expressed with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by the ability of the immobilized protein to support the adhesion of Jurkat human acute T cell leukemia cells. When 8×10^4 cells/well are added to mCD6-His coated plates (5 μ g/mL and 100 μ L/well) in the presence of 10 μ g/ml PHA, approximately > 45% cells will adhere specifically after 60 minutes at 37°C.

Endotoxin:

< 1.0 EU per μ g of the protein as determined by the LAL method

Predicted N terminal: Gly 17

Molecular Mass:

The secreted recombinant mouse CD6 comprises 391 amino acids and has a calculated molecular mass of 42.6 kDa. As a result of glycosylation, the apparent molecular mass of the recombinant protein is approximately 60-70 kDa in SDS-PAGE under reducing conditions

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

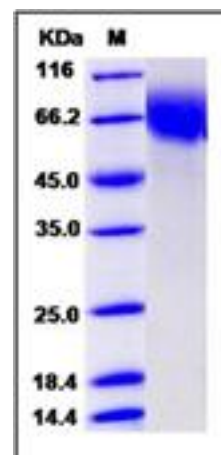
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

T-cell differentiation antigen CD6, also known as TP12 and CD6, is a single-pass type I membrane protein which contains three SCR domains. CD6 / TP12 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 / TP12 is expressed by thymocytes, mature T-cells, a subset of B-cells known as B-1 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 / TP12 binds to activated leukocyte cell adhesion molecule (CD166), and is considered as a costimulatory molecule involved in lymphocyte activation and thymocyte development. CD6 / TP12 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.

References

1. Joo YS. et al., 2000, Arthritis Rheum. 43 (2): 329-35. 2. Singer NG. et al., 2002, Int Immunol. 14 (6): 585-97. 3. Gimferrer I. et al., 2005, J Immunol. 175 (3): 1406-14.