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 x 10^4 cells/well are added to mCD6-His coated plates (5μg/mL, 100 μL/well) , approximately more than 15% of cells will adhere after 60 minutes at 37℃.

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

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

Storage:

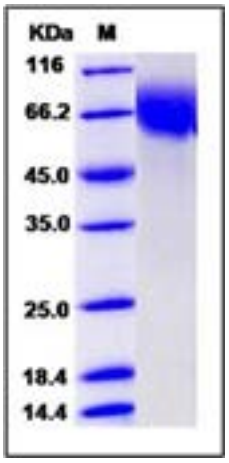
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 TP120 and CD6, is a single-pass type I membrane protein which contains threeSRCR 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-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 / 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.

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.