

Human CD6 / Cluster of Differentiation 6 Protein (Fc Tag)

Catalog Number: 17051-H02H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

TP120

Protein Construction:

A DNA sequence encoding the human CD6 (NP_006716.3) (Met1-Glu398) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % 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 CD6-Fc coated plates (10 μ g/mL, 100 μ L/well), approximately >70% will adhere after 60 minutes at 37°C.

Endotoxin:

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

Stability:

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

Predicted N terminal: His 18

Molecular Mass:

The recombinant human CD6 consists of 619 amino acids and predicts a molecular mass of 67.3 kDa.

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:

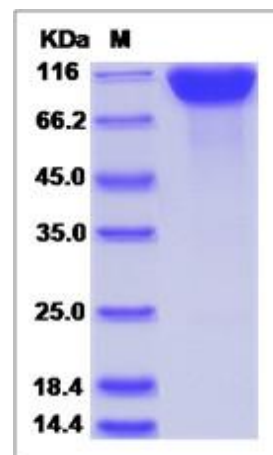
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 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-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.

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