

Rat CD70 / CD27L / TNFSF7 Protein (Fc Tag)

Catalog Number: 80161-R01H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

CD70

Protein Construction:

A DNA sequence encoding the rat CD70 (D3ZGU3) (Gln46-Pro195) was expressed, fused with Fc region of human IgG1 at the N-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio-Activity

Immobilized mouse CD27-His (Cat:50110-M08H) at 10 µg/ml (100 µl/well) can bind rat Fc-CD70 with a linear range of 0.16-1.25 µg/ml.

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 °C

Predicted N terminal: Glu

Molecular Mass:

The recombinant rat CD70 comprises 410 amino acids and predicts a molecular mass of 45 kDa. The apparent molecular mass of the recombinant protein is approximately 55 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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

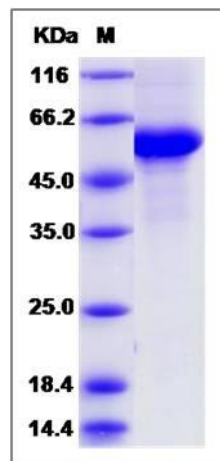
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

CD70, also known as CD27 ligand (CD70 / CD27L / TNFSF7), is a member of the tumor necrosis factor superfamily (ie. TNFSF7) and a surface antigen found on activated T-and B-lymphocytes and mature dendritic cells. CD70 is a single-pass type III transmembrane glycoprotein consisting of a short cytoplasmic domain (1-17aa), a transmembrane domain (18-38 aa) and a 155aa extracellular domain (39-193), and exists as a homotrimer in vivo. Binding of CD70 to its receptor CD27 induces in priming, effector functions, differentiation and memory formation of T-cells, and thus is involved in the biological processes including T-cell activation, the proliferation of costimulated T-cells, as well as the generation of cytolytic T-cells. CD70 expression on malignant cells coupled with its highly restricted expression on normal cells makes CD70 an attractive target for monoclonal antibody-based therapies.

References

1. Goodwin RG. et al., 1993, Cell. 73: 447-56
2. Boursalian TE. et al., 2009, Adv Exp Med Biol. 647: 108-19.
3. Bowman MR. et al., 1994, J Immunol. 152: 1756-61.
4. McEarchern JA. et al., 2008, Clin Cancer Res. 14 (23): 7763-72.
5. Tesselaar K. et al., 2002, J Immunol. 169: 33-40.

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