Mouse CD27 / TNFRSF7 Protein (His & Fc Tag)

Catalog Number: **50110-M03H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

S152; S152. LPFS2; S152.LPFS2; T14; TNFRSF7; Tp55; S152; Tnfrsf7; Tp55

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Arg 182) of mouse CD27 (NP_001028298.1) precursor was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 94 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA . Immobilized recombinant mouse CD27 at 2 μg/ml (100 μl/well) can bind biotinylated human CD70 with a linear range of 0.39-12.5 ng/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 ℃

Predicted N terminal: Thr 21

Molecular Mass:

The recombinant mouse CD27/Fc is a disulfide-linked homodimer after removal of the signal peptide. The reduced monomer consists of 410 amino acids and has a predicted molecular mass of 46.2 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rm CD27/Fc monomer is approximately 60-65 kDa due to glycosylation.

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:

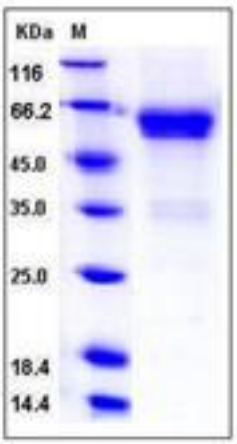
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CD27, also known as TNFRSF7, is a member of the TNF-receptor superfamily limited to cells of the lymphoid lineage, and exists as both a dimeric glycoprotein on the cell surface and as a soluble protein in serum. As a type I transmembrane glycoprotein of about 55 kDa existing as disulfide-linked homodimer, CD27 has been shown to play roles in lymphoid proliferation, differentiation, and apoptosis.It has important role in generation of T cell immunity, and is an apparently robust marker for normal memory B cells. It is a T and B cell co-stimulatory molecule, the activity of CD27 is governed by its TNF-like ligand CD70 on lymphocytes and dendritic cells. The CD27-CD70 interaction is required for Th1 generation responses to differentiation signals and long-term maintenance of T cell immunity, and meanwhile, plays a key role in regulating B-cell differentiation, activation and immunoglobulin synthesis.

References

1.Drner T, *et al.* (2004) Correlation of circulating CD27 high plasma cells and disease activity in systemic lupus erythematosus. Lupus. 13(5): 283-9.
2.Sahota SS, *et al.* (2009) CD27 in defining memory B-cell origins in Waldenstrm's macroglobulinemia. Clin Lymphoma Myeloma. 9(1): 33-5.
3.Jiang J, *et al.* (2010) Reduced CD27 expression on antigen-specific CD4+ T cells correlates with persistent active tuberculosis. J Clin Immunol. 30(4): 566-73.