

Rhesus CD27 / TNFRSF7 Protein (Fc Tag)

Catalog Number: 90049-C02H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CD27

Protein Construction:

A DNA sequence encoding the rhesus CD27 (XP_001104337.1) (Met1-Ile192) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Rhesus

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Immobilized Rhesus CD27-Fc at 10 µg/ml (100 µl/well) can bind biotinylated human CD70-Fc (Cat:10780-H01H). The EC₅₀ of biotinylated human CD70-Fc (Cat:10780-H01H) is 10.9-25.3 ng/ml.

Endotoxin:

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

Predicted N terminal: Thr 21

Molecular Mass:

The recombinant rhesus comprises 413 amino acids and has a calculated molecular mass of 46.3 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

Stability & Storage:

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

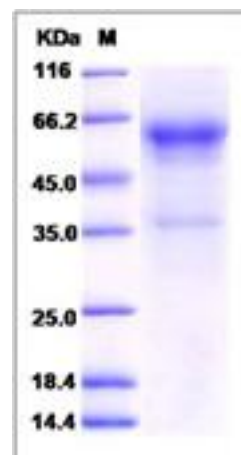
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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 CD7 on lymphocytes and dendritic cells. The CD27-CD7 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 Waldenström'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.

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