# Human CD27 / TNFRSF7 Protein (Fc Tag)

**Catalog Number:** **10039-H31H**

Sino Biological
Biological Solution Specialist

## General Information

**Gene Name Synonym:**

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

**Protein Construction:**

A DNA sequence encoding the human CD27 (P26842) (Met1-Ile192) was expressed, fused with the Fc region of rabbit IgG at the C-terminus.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

**Bio Activity:**

**Measured by its binding ability in a functional ELISA. Immobilized human CD27-his (Cat:10039-H31H) at 10 μg/mL (100 μl/well) can bind biotinylated human CD70-Fc (Cat:10780-H01H), The $EC_{50}$ of biotinylated human CD70-Fc (Cat:10780-H01H) is 95-150 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:** Ala 20

**Molecular Mass:**

The recombinant human CD27/rFc is a disulfide-linked homodimer. The reduced monomer comprises 396 amino acids and has a predicted molecular mass of 44.4 kDa. The apparent molecular mass of the protein is approximately 63 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:**

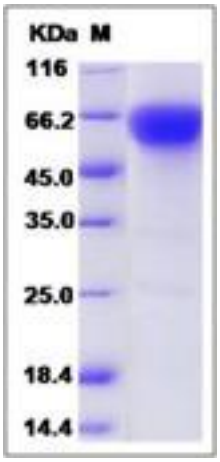
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**




## Protein Description

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.