Data Sheet (Cat.No.TMPY-03070)

TargetMol

CD27/TNFRSF7 Protein, Human, Recombinant (rFc)

General Information

Synonyms:	T14;S152. LPFS2;S152;Tp55;TNFRSF7;S152.LPFS2;CD27 molecule
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. Predicted N terminal: Ala 20
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P26842
Molecular Weight:	44.4 kDa (predicted); 63 kDa (reducing conditions)

QC Testing

Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized human CD27-his at 10 μg/mL (100 μl/well) can bind biotinylated human CD70-Fc , The EC50 of biotinylated human CD70-Fc is 95-150 ng/mL.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

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 an important role in the generation of T

cell immunity and is an 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.Cancer ImmunotherapyCo-stimulatory Immune Checkpoint TargetsImmune CheckpointImmune Checkpoint Detection: AntibodiesImmune Checkpoint Detection: ELISA AntibodiesImmune Checkpoint Detection: FCM AntibodiesImmune Checkpoint Detection: ICC AntibodiesImmune Checkpoint Detection: IHC AntibodiesImmune Checkpoint ProteinsImmune Checkpoint TargetsImmunotherapyTargeted Therapy

Reference

Drner T, et al. (2004) Correlation of circulating CD27 high plasma cells and disease activity in systemic lupus erythematosus. Lupus. 13(5): 283-9.

Sahota SS, et al. (2009) CD27 in defining memory B-cell origins in Waldenstrm's macroglobulinemia. Clin Lymphoma Myeloma. 9(1): 33-5.

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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