

Synonym

CD70,CD27LG,TNFSF7,TNFSF7G,CD27L

Source

Mouse CD27 Ligand, Mouse IgG2a Fc Tag, low endotoxin (CDL-M5251) is expressed from human 293 cells (HEK293). It contains AA Gln 47 - Pro 195 (Accession # O55237-1).

Predicted N-terminus: Glu

Molecular Characterization

mFc(Glu 98 - Lys 330) P01863	CD27 Ligand(Gln 47 - Pro 195) O55237-1
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This protein carries a mouse IgG2a Fc tag at the N-terminus.

The protein has a calculated MW of 43.5 kDa. The protein migrates as 47-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

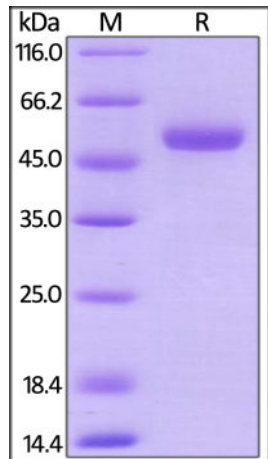
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

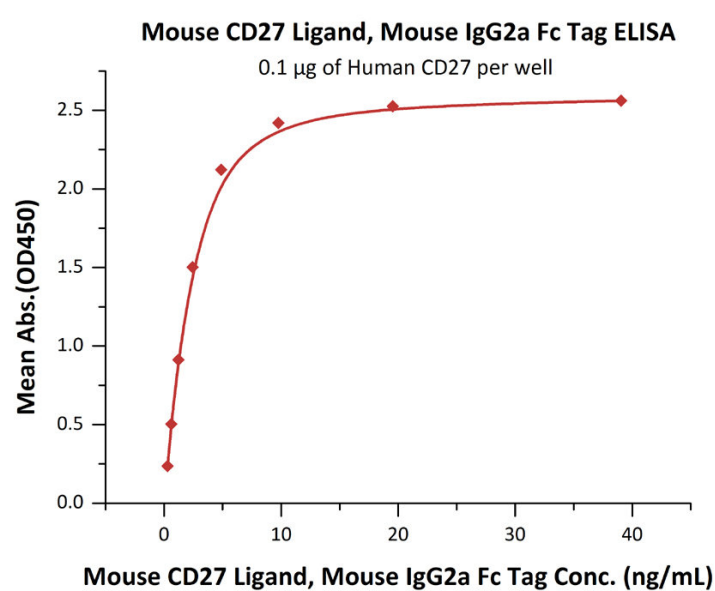
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse CD27 Ligand, Mouse IgG2a Fc Tag, low endotoxin on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human CD27 (Cat. No. [CD7-H522b](#)) at 1 µg/mL (100 µL/well) can bind Mouse CD27 Ligand, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. [CDL-M5251](#)) with a linear range of 0.3-2 ng/mL (QC tested).

Background

Cluster of Differentiation 70 (CD70) is also known as CD27 ligand (CD27L / CD27LG), TNFSF7, TNFSF7G, is a type II transmembrane glycoprotein belonging to the TNF superfamily (TNFSF) and is a surface antigen found on activated T-and B-lymphocytes and mature dendritic cells. 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 on T cells provides costimulatory signals that are required for T cell proliferation, clonal expansion and the promotion of effector T cell formation. CD70 on mouse B cell has been shown to inhibit terminal differentiation of activated B cells into plasma cells and enhances commitment to memory B cell responses. CD70 induces proliferation and IFN γ production, on NK cells.

References

- (1) [McEarchern JA. et al., 2008, Clin Cancer Res., 14\(23\):7763-72.](#)
- (2) [Croft M., 2003, Nat Rev Immunol., 3\(8\):609-20.](#)
- (3) [Kobata, TS. et al., 1995, Proc. Natl. Acad. Sci. USA, 92: 11249-11253.](#)
- (4) [Raman V.S. et al., 2003, J Immunol., 171\(11\):5876-81.](#)
- (5) [Takeda, K. et al., 2000, J Immunol., 15;164\(4\):1741-5.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.