GEMINI BIO-PRODUCTS
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Product Usage

Product: **Recombinant Mouse CD40-Ligand**
Cat #: 300-300P
Powder

Description	CD40 Ligand (CD40-L), or CD154, is a membrane glycoprotein and differentiation antigen expressed on the surface of T cells. The CD40 Ligand stimulates B cell proliferation and secretion of all immunoglobulin isotypes in the presence of cytokines. CD40 Ligand has been shown to induce cytokine production and tumoricidal activity in peripheral blood monocytes. It also co-stimulates proliferation of activated T cells and this is accompanied by the production of IFN-γ, TNF-α, and IL-2. Alternate names: TNFSF5, TRAP, CD154, gp39, T-BAM
MW	Non-glycosylated protein, containing 149 amino acids, with a molecular weight of 16.4 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	*E. coli*
Formulation	Recombinant mouse CD40 Ligand is lyophilized from 20 mM Na_2PO_4, pH 7.5 and 0.1 M Arginine.
Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.
Stability	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Biological Activity	The activity is determined by the dose production of IL-8 by human PBMCs and is typically 5-10 ng/mL.
Endotoxin Level	Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein.
AA Sequence	MQRGDEDPQI AAHVVSEANS NAASVLQWAK KGYYTMKSNL VMLENGKQLT VKREGLYYVY TQVTFCSNRE PSSQRPFIVG LWLKPSSGSE RILLKAANTH SSSQLCEQQS VHLGGVFELQ AGASVFVNVT EASQVIHRVG FSSFGLLKL

Purity greater than 98% determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

Protein content determined by HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!