



*Recombinant Human CD40-Ligand*  
(CD40 Ligand)

*Catalog Number: 100-25*  
*Accession Number: P29965*

*Specifications and Uses:*

**Alternate Names:** TNFSF5, TRAP, CD154, gp39, T-BAM

**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- $\gamma$ , TNF- $\alpha$ , and IL-2. Recombinant human CD40 Ligand is a non-glycosylated protein, containing 149 amino acids, with a molecular weight of 16.3 kDa.

**Source:** *E.coli*

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation and Stability:**

Recombinant human CD40 Ligand is lyophilized from 10 mM Na<sub>2</sub>PO<sub>4</sub>, pH 7.5. 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.

**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.

**Protein Content and Purity (typically  $\geq$  98%) determined by:**

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

**Endotoxin Level:**

Measured by kinetic LAL analysis and is typically  $\leq$  1 EU/ $\mu$ g protein.

**Biological Activity:**

The activity is determined by the dose production of IL-8 by human PBMCs and is typically 5-10 ng/mL.

**AA Sequence:**

MQKGDQNPQI AAHVISEASS KTTSVLQWAE KGYTMSNNL VTLENGKQLT VKRQGLYYIY AQVTFCNSRE  
ASSQAPFIAS LWLKSPGRFE RILLRAANTH SSAKPCGQQS IHLGGVFELQ PGASVFNVT DPSQVSHGTG  
FTSFGLLKL

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

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