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### CD40LG

### **Recombinant Human CD40 Ligand**

**Catalog No.** CRC800A **Quantity**: 10 μg

CRC800B 50 μg CRC800C 1.0 mg

Alternate Names: TNF-related activation protein, TRAP, T-cell antigen gp39, CD154, CD40L, TNFSF5

**Description:** CD40 Ligand (CD40L) is a 261 amino acid type II transmembrane glycoprotein belonging

to the TNF family. CD40L is expressed predominantly on activated CD4+ T

lymphocytes, and also found in other types of cells, like NK cells, mast cells, basophils and eosinophils. Soluble CD40L is released from platelets. Soluble CD40L can bind its receptor, CD40, in monomeric, dimeric and trimeric forms, though the trimeric form of soluble CD40L has the most potent biological activity. CD40, is expressed on B

lymphocytes, monocytes, dendritic cells and thymic epithelium. CD40L-CD40 interaction stimulates B cell proliferation, isotype switching, and secretion of all immunoglobulin isotypes in the presence of cytokines. It also plays important roles in monocyte activation

and dendritic cell maturation.

**Gene ID**: 959

UniProt ID: P29965

Source: E. coli

Molecular Weight: 16.3 kDa (149 aa)

**Formulation:** Lyophilized from a sterile-filtered solution in 10 mM sodium phosphate, pH 7.5

**Purity:** > 95% by reducing and non-reducing SDS-PAGE

**Endotoxin Level:** ≤0.1 U/μg of protein by kinetic LAL analysis

**Biological Activity:**  $ED_{50} \le 50 \text{ ng/ml}$ , as determined by the activity of HEK-Blue<sup>TM</sup> CD40L responsive

indicator cells.

**Specific Activity:**  $\geq 2.0 \times 10^4 \text{ units/mg}$ 

Amino Acid Sequence: MQKGDQNPQI AAHVISEASS KTTSVLQWAE KGYYTMSNNL VTLENGKQLT

VKRQGLYYIY AQVTFCSNRE ASSQAPFIAS LWLKSPGRFE RILLRAANTH SSAKPCGQQS IHLGGVFELQ PGASVFVNVT DPSQVSHGTG FTSFGLLKL

**Reconstitution:** Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1

mg/ml. DO NOT VORTEX. Allow several minutes for complete reconstitution. Further

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dilutions should be made in appropriate buffered solutions.

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#### Storage & Stability:

Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.

Avoid repeated freeze-thaw cycles.

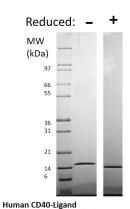
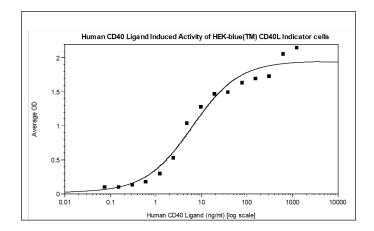


Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human CD40 Ligand has a predicted MW of 16.3 kDa.



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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