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# Cd40lg
# Recombinant Mouse CD40 Ligand, soluble

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| **Catalog No.** | CRI229 | **Quantity:** | 25 µg |

**Alternate Names:** TNF-related activation protein, TRAP, TNF ligand superfamily member 5, TNFSF5, T-cell antigen Gp39

**Description:** CD40, a member of the TNF receptor family, is a cell surface protein expressed on B-cells, dendritic cells, monocytes, thymic epithelial cells and, at low levels, on T-cells. Signaling though CD40 plays an important role in the proliferation and differentiation of B-cells, and is critical for immunoglobulin (Ig) class switching. The membrane-anchored CD40-Ligand is expressed almost exclusively on activated CD4+ T lymphocytes. Failure to express CD40LG leads to "immunodeficiency with hyper-IgM", a disease characterized by failure to produce IgG, IgA and IgE. The soluble form of CD40LG is an 18 kDa protein comprising the entire TNF homologous region of CD40LG and is generated *in vivo* by an intracellular proteolytic processing of the full length CD40LG. Recombinant mouse CD40LG is a soluble protein containing 149 amino acid residues comprising the receptor binding TNF-like domain of CD40LG.

**UniProt ID:** P27548

**Gene ID:** 21947

**Source:** *E. coli*

**Molecular Weight:** 16.4 kDa (149 aa)

**Formulation:** Lyophilized

**Purity:** > 98% by SDS-PAGE analysis

**Endotoxin Level:** < 1 EU/µg

**Biological Activity:** $ED_{50}$ < 0.1 µg/ml, determined by its ability to induce TNF-alpha and MIP1-alpha production by mouse splenocytes.

**Amino Acid Sequence:** MQRGDEDPQI AAHVVSEANS NAASVLQWAK KGYYTMKSNL VMLENGKQLT VKREGLYYVY TQVTFCSNRE PSSQRPFIVG LWLKPSSGSE RILLKAANTH SSSQLCEQQS VHLGGVFELQ AGASVFVNVT EASQVIHRVG FSSFGLLKL

**Reconstitution:** **Centrifuge vial prior to opening**. Add PBS or medium to the vial to fully solubilize the protein to a concentration ≥ 100 µg/ml. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein such as 0.1% BSA and store in working aliquots at -20°C to -80°C.

**Storage & Stability:** Lyophilized protein is stable for 1 year at -20°C to -80°C. Store reconstituted protein in working aliquots at -20°C to -80°C. **Avoid repeated freeze-thaw cycles**.

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

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