# sCD40 Ligand Murine E. coli

## Product Data Sheet

**Type:** Recombinant
**Source:** E. coli
**Species:** Murine
**Other names:** soluble CD40 Ligand, TNFSF5, TRAP, CD154, gp39, T-BAM

| **Cat. No.:** | |
|---|---|
| RBG20060005 | (5 µg) |
| RBG20060025 | (25 µg) |
| RBG20060100 | (100 µg) |

## 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 CD40L leads to “immunodeficiency with hyper-IgM”, a disease characterized by failure to produce IgG, IgA and IgE. The soluble form of CD40L is an 18kDa protein comprising the entire TNF homologous region of CD40L and is generated in vivo by an intracellular proteolytic processing of the full length CD40L. Recombinant Murine CD40L is a soluble 16.4 kDa protein containing 149 amino acid residues comprising the receptor binding TNF-like domain of CD40L.

## Research topic

Apoptosis, Cardiovascular disease, Coronary artery disease, Immune Response, Infection and Inflammation, Transplantation

## Amino Acid Sequence

```
MQRGDEDPQI AAHVVSEANS NAASVLQWAK KGYYTMKSNL VMLENGKQLT VKREGLYYVY TQVTFCSNRE PSSQRPFIVG
LWLKPSSGSE RILLKAANTH SSSQLCEQQS VHLGGVFELQ AGASVFVNVT EASQVIHRVG FSSFGLLKL
```

## Source

E. coli

## Purity

98%

## Biological Activity

Determined by its ability to induce TNF-alpha and MIP-1alpha production by murine splenocytes. The expected $ED_{50}$ for this effect is < 0.1 µg/ml.

## Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

## Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C

## Storage, Stability/Shelf Life

-20°C


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