



# Recombinant Mouse CD40 Ligand/TRAP, soluble

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>M10-054S</b>
Size:	5 µg
Lot. No.:	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	21947
<b>Synonyms:</b>	Cd40lg; IGM; IMD3; Ly62; TRAP; gp39; CD154; Cd40l; HIGM1; Ly-62; T-BAM; CD40-L; Tnfsf5

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 through 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 18 kDa 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.

## Sequence

```
MQRGDEDPQI AAHVVSEANS NAASVLQWAK KGYITMKSNL  
VMLENGKQLT VKREGLYYVY TQVTFCSNRE PSSQRPFIVG  
LWLKPSGGSE RILLKAANTH SSSQLCEQQS VHLGGVFELQ  
AGASVFNVT EASQVIHRVG FSSFGLLKL
```

## Database References

<b>Protein RefSeq:</b>	NP_035746.2
<b>Uniprot ID:</b>	P27548
<b>mRNA RefSeq:</b>	NM_011616.2

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 98% by SDS-PAGE & HPLC
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	149
<b>MW:</b>	16.4 kDa

**Biological Activity:** Determined by its ability to induce TNF- $\alpha$  and MIP-1 $\alpha$  production by murine splenocytes. The expected ED50 for this effect is < 0.1 µg/ml.



**AVOID REPEATED FREEZE AND THAW CYCLES!**