

## Recombinant Mouse sCD40 Ligand/TRAP (rm sCD40L / CD154)

**Synonyms:** Tumor necrosis factor ligand superfamily member 5 (TNFSF5), TNF-related activation protein (TRAP), T cell antigen Gp39

**Introduction:** sCD40L is a membrane glycoprotein and differentiation antigen expressed on the surface of T-cells. The sCD40 ligand stimulates B-cell proliferation and secretion of all immunoglobulin isotypes in the presence of cytokines. sCD40 ligand has been shown to induce cytokine production and tumoricidal activity in peripheral blood monocytes. It also costimulates proliferation of activated T-cells and this is accompanied by the production of IFN $\gamma$ , TNF $\alpha$  and IL-2.

**Description:** Recombinant mouse sCD40L produced in E.Coli is a non-glycosylated polypeptide chain containing 149 amino acids and having a molecular mass of 16.4 kDa. The sCD40L is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

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

**Formulation:** Lyophilized from 0.22  $\mu$ m filtered solution in 25 mM sodium phosphate, 200 mM NaCl, pH 6.6. The sample size of 1  $\mu$ g contains Trehalose 5% (w/vol) for better recovery.

**Solubility:** It is recommended to reconstitute the lyophilized rm sCD40L in sterile water not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rm sCD40L although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Reconstituted rm sCD40L should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by SDS-PAGE.

**Endotoxicity:** The endotoxin level is less than 1 EU /  $\mu$ g determined by LAL method.

**Amino Acid Sequence:** MQRGDEDPQI AAHVSEANS NAASVLQWAK KGYTMSKNL VMLENGKQLT  
VKREGLYYVY TQVTFCSNRE PSSQRPFIVG LWLKPSSGSE RILLKAANTH SSSQLCEQQS HLGGVFELQ  
AGASVFNVT EASQVIHRVG FSSFGLLKL

**Biological Activity:** ED50 = 0.1  $\mu$ g/ml, determined by its ability to induce MIP-1  $\alpha$  & TNF- $\alpha$  from mouse splenocytes

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 $\mu$ g	Cat.N°	12343340
<i>medium</i>	25 $\mu$ g	Cat.N°	12343344
<i>large</i>	100 $\mu$ g	Cat.N°	12343346
<i>x-large</i>	500 $\mu$ g	Cat.N°	12343347

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