

## 32-20054: Animal-Free Recombinant Human sCD40 Ligand(Discontinued)

**Reactivity :** Human

**Alternative Name :** soluble CD40 Ligand, TNFSF5, TRAP, CD154, Gp39, T-BAM

### Description

**Source:** *E.coli* CD40, a member of the TNF receptor superfamily, 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<sup>+</sup> T lymphocytes. Failure to express CD40L leads to "immunodeficiency with hyper-IgM", a disease characterized by failure to produce IgG, IgA and IgE. The human CD40L gene codes for a 261 amino acid type II transmembrane protein, which contains a 22 amino acid cytoplasmic domain, a 24 amino acid transmembrane domain, and a 215 amino acid extracellular domain. 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 Human soluble CD40 ligand is a 16.3 kDa protein containing 149 amino acid residues comprising the receptor binding TNF-like domain of CD40L.

### Product Info

**Amount :** 10 µg / 50 µg

**Purification :** Purity: ≥ 98% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** MQKGDQNPQI AAHVISEASS KTTSVLQWAE KGYTMSNNL VTLENGKQLT VKRQGLYYIY AQVTFCSNRE  
ASSQAPFIAS LWLKSPGRFE RILLRAANTH SSAKPCGQQS IHLGGVFELQ PGASVFNVT DPSQVSHGTG  
FTSFGLLKL

### Application Note

Determined by the dose-dependent stimulation of IL-8 production by human PBMC. The expected ED<sub>50</sub> for this effect is 5-10 ng/ml.