



Product Datasheet

Product Name	Soluble CD-40 Ligand/TRAP Human Recombinant
Cata No	CB500147
Source	<i>Escherichia Coli.</i>
Synonyms	CD40-L, Tumor necrosis factor ligand superfamily member 5, TNF-related activation protein, TRAP, T cell antigen Gp39, CD154 antigen, sCD40, IGM, IMD3, HIGM1, T-BAM, TNFSF5, hCD40L.

Description

CD40L or CD154 is a membrane glycoprotein and differentiation antigen expressed on the surface of T-cells. The CD40 ligand stimulates B-cell proliferation and secretion of all immunoglobulin isotopes in the presence of cytokines . CD40 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 IL2 .

sCD40 Human Recombinant produced in E.Coli is a non-glycosylated, Polypeptide chain containing 149 amino acids and having a molecular mass of 16308 Dalton.

The sCD40 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED50 as determined by the dose-dependant stimulation of IL-12 induction & IL-8 production by human PBMC was found to be 5-10 ng/ml.

Purity

Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Formulation

Lyophilized from a sterile concentrated solution (1mg/ml) with 10mM Sodium Phosphate pH=7.5.

Solubility

It is recommended to reconstitute the lyophilized sCD40 in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized sCD40 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CD154 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.

Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Gln-Lys-Gly-Asp.

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