

Rev03
 Update: Dec,14,2021

DATASHEET

CD40L/CD154/TRAP, Human

Cat. No.: Z02022

Product Introduction

Species	Human
Protein Construction	CD40L (Met113-Leu261) Accession # P29965
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by RP-HPLC > 95% as analyzed by Anion-exchange FPLC
Endotoxin Level	< 1 EU/μg of protein by LAL method
Biological Activity	Recombinant human CD40 Ligand (CD40L/CD154/TRAP) is fully biologically active when compared to standard. The ED ₅₀ as determined by the dose-dependant stimulation of IL-12 & IL-8 induction by PMB (Peripheral Mononuclear) cells was found to be 5.0-10.0 ng/ml, corresponding to a Specific Activity of 1.0 x 10 ⁵ IU/mg.
Expression System	E. coli
Theoretical Molecular Weight	16.3 kDa
N-terminal Sequence Analysis	The sequence of the first five N-terminal amino acids was determined and found to be Met-Gln-Lys-Gly-Asp.
Formulation	Lyophilized after extensive dialysis against 50 mM Tris-HCl, pH 8.0, 250 mM NaCl buffer.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile 18 MΩ-cm H ₂ O up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background

Target Background : CD40 Ligand (CD40L/CD154/TRAP) 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 isotypes in the presence of cytokines. It also costimulates proliferation of activated T-cell and this is accompanied by the production of IFN-γ, TNF-α, and IL2. CD40 ligand has been shown to induce cytokine production and tumoricidal activity in peripheral blood monocytes.

Synonyms : CD40 ligand; CD40-L; T-cell antigen Gp39; TNF-related activation protein; Tumor necrosis factor ligand superfamily member 5; CD_antigen: CD154; CD40LG; TNFSF5

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.