

Rev03
Update: Dec,14,2021

DATASHEET

sCD40L, Human

Cat. No.: Z02727

Product Introduction

Species	Human
Protein Construction	sCD40L (Met113-Leu261) Accession # P29965
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 1 EU/μg of protein by LAL method
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by the dose-dependent stimulation of IL-8 production by human PBMC is less than 5.0-10.0 ng/ml.
Expression System	E. coli
Theoretical Molecular Weight	16.3 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS, pH 7.0.
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 distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/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 (also known as CD154, TRAP or gp39), is a 261 amino acid type II transmembrane glycoprotein belonging to the TNF family, CD40L is expressed predominantly on activated CD4⁺ T lymphocytes, and also found in other types of cells, like NK cells, mast cells, basophils and eosinophils. Human CD40L shares 78% amino acid identity with its mouse counterpart. The receptor of CD40L is CD40, a type I transmembrane glycoprotein belonging to the TNF receptor family. CD40 is expressed on B lymphocytes, monocytes, dendritic cells and thymic epithelium. Although all monomeric, dimeric and trimeric forms of soluble CD40L can bind to CD40, the trimeric form of soluble CD40L has the most potent biological activity through oligomerization of cell surface CD40, a common feature of TNF receptor family members. CD40L mediates a range of activities on B cells including induction of activation-associated surface antigen, entry into cell cycle, isotype switching and Ig secretion and memory generation. CD40-CD40L interaction also plays important roles in monocyte activation and dendritic cell maturation.

Synonyms : soluble CD40 Ligand; sCD40-L; T-cell antigen Gp39; TRAP; CD_antigen: CD154; Tumor necrosis factor ligand superfamily member 5; CD154

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