rHu CD40-L

recombinant Human CD40-Ligand, CD154
Product code A8296

Description:
CD40-L 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 isotypes in the presence of cytokines. CD40-Ligand has been shown to induce cytokine production and tumoricidal activity in peripheral blood monocytes. It also co-stimulates proliferation of activated T-cells and this is accompanied by the production of IFN-γ, TNF-α, and IL2. Recombinant Human CD40-L produced in E. coli is a non-glycosylated, polypeptide chain containing 149 amino acids and having a molecular mass of 16308 Dalton.

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

Source: E. coli

Formulation: CD40-L is lyophilized from a sterile concentrated solution (1 mg/ml) with 10 mM sodium phosphate pH 7.5.

Reconstitution: It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Stability: Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended to add a carrier protein (0.1 % HSA or BSA) for long term storage.

Purity > 98 % as determined by RP-HPLC, reducing and non-reducing SDS-PAGE.

Protein Content: determined by UV spectroscopy at 280 nm. Analysis by RP-HPLC calibrated against a known standard. Quantitation on SDS-PAGE against a known standard.

Biological Activity: CD40-L is fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of IL-12 and IL-8 induction by PMB (Peripheral Mononuclear) cells was found to be 5 - 10 ng/ml.

Amino Acid Sequence:
MQKGDQNPQI AAVHISEASS KTTSVLQWAE KGYYTMSNNL VTIENQKQLT VKRQGLYYYI AQVTFCNSRE ASSQAPFIAS LWLKSPGRFE RILLRAANTH SSAKFCGQQS IHLGGVFELO PGASVFVNNV DPSQVSHGTT FTSFGLLKL

References