



Recombinant Protein Technical Manual

Recombinant Human CD40L/TNFSF5 Protein (His Tag)(Active)
RPES0859

Product Data:

Product SKU: RPES0859

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: NP_000065.1

Protein Information:

Molecular Mass: 17.7 kDa

AP Molecular Mass: 18 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA.1. Immobilized human CD40 at 2 µg/ml (100 µl/well) can bind biotinylated human CD40L with a linear range of 15.6-500 ng/ml.2. Immobilized human CD40 / Fc at 2 µg/ml (100 µl/well) can bind biotinylated human CD40L with a linear range of 7.825 ng/ml.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4, 10% glycerol

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: CD40 Ligand; CD40-L; T-Cell Antigen Gp39; TNF-Related Activation Protein; TRAP; Tumor Necrosis Factor Ligand Superfamily Member 5; CD154; CD40LG; CD40L; TNFSF5; TRAP;hCD40L;HIGM1;IGM;IMD3;T-BAM;TNFSF5;TRAP

Immunogen Information:

Sequence: Glu 108-Leu 261

Background:

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD154, also known as CD40 ligand or CD40L, is a member of the TNF superfamily. While CD154 was originally found on T cell surface, its expression has since been found on a wide variety of cells, including platelets, mast cells, macrophages and NK cells. CD154's ability is achieved through binding to the CD40 on antigen- presenting cells (APC). In the macrophage cells, the primary signal for activation is IFN- γ from Th1 type CD4 T cells. The secondary signal is CD40L on the T cell, which interacting with the CD40 molecules, helping increase the level of activation.