

Recombinant Human CD40L/TNFSF5 Protein (His Tag)

Catalog No. PKSH031976

Note: Centrifuge before opening to ensure complete recovery of vial contents.

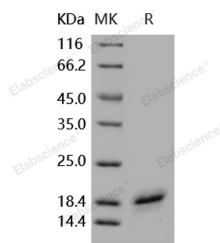
Description

Synonyms	CD40 Ligand;CD40-L;T-Cell Antigen Gp39;TNF-Related Activation Protein;TRAP;Tumor Necrosis Factor Ligand Superfamily Member 5;CD154;CD40 LG;CD40L;TNFSF5;TRAP;hCD40L;HIGM1;IGM;IMD3;T-BAM;TNFSF5;TRAP
Species	Human
Expression Host	E.coli
Sequence	Glu 108-Leu 261
Accession	NP_000065.1
Calculated Molecular Weight	17.7 kDa
Observed molecular weight	18 kDa
Tag	C-His
Bioactivity	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 7.8-125 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

For Research Use Only

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.

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