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## Recombinant Human CD40L/TNFSF5 Protein (E.coli)

Catalog No. PKSH033725

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

SpeciesHumanExpression HostE.coli

Sequence Met113-Leu261

AccessionP29965Calculated Molecular Weight17.0 kDaObserved molecular weight16 kDaTagC-His

**Bioactivity** Measure by its ability to induce IL-8 secretion in human PBMCs. The ED<sub>50</sub> for this

effect is < 5 ng/mL.

#### **Properties**

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

**Endotoxin** < 0.1 EU per µg of the protein as determined by the LAL method.

**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  $< -20^{\circ}$ C for 3 months.

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

**Formulation** Lyophilized from sterile PBS,pH 8.0.

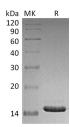
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

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

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# **Background**

CD40 Ligand (CD40LG) is a type II transmembrane glycoprotein that belongs to the TNF superfamily. Like other TNF superfamily members; CD40LG exists as a trimer in membrane bound and soluble form; both of which are bioactive. CD40LG is a ligand for CD40; its ligation also initiates signal transduction in CD40LG expressing cells. CD40LG is a differentiation antigen that is expressed on the surface of T-cells. It stimulates B-cell proliferation and secretion of all immunoglobulin isotypes in the presence of cytokines. CD40LG 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-gamma; TNF-alpha; and IL2.

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