

Datasheet for ABIN6699578
CD40 Ligand Protein (CD40LG)



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2 Images

Overview

Quantity:	10 µg
Target:	CD40 Ligand (CD40LG)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Human CD40 Ligand Recombinant Protein
Purification:	CD40 Ligand purity was determined to be greater than 98% as determined by analysis by HPLC, UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-pAGE.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is tested by HEK-blue™ CD40L Activity. Acceptable Level $<50\text{ng/mL}$, $>2.0 \times 10^4$ units/mg. Additionally testing by ELISA: IL-8 production by human PBMCs.

Target Details

Target:	CD40 Ligand (CD40LG)
Alternative Name:	CD40LG (CD40LG Products)
Background:	Synonyms: TNFSF5, TRAP, CD154, gp39, T-BAM Background: CD40 Ligand (CD40-L), or CD154, is a membrane glycoprotein and differentiation

Target Details

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-gamma, TNF- α , and IL-2. Recombinant human CD40 Ligand is a non-glycosylated protein, containing 149 amino acids, with a molecular weight of 16.3 kDa.

UniProt: [P29965](#)

Pathways: [NF-kappaB Signaling](#), [Production of Molecular Mediator of Immune Response](#), [Cancer Immune Checkpoints](#)

Application Details

Application Notes: Other: User Optimized
Application_Note: CD40 Ligand Recombinant Protein has been tested by SDS-PAGE and biological assay and is suitable as a control for polyclonal or monoclonal anti-CD40 Ligand in immunological assays.

Comment: Suggested_Applications: Cellular Assay
Other_Performance_Data:

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution_Buffer: Restore with deionized water (or equivalent)
Reconstitution_Volume: 10 μ L (10-100 μ L)

Buffer: Buffer: 0.01 M Sodium Phosphate, pH 7.5
Stabilizer: None

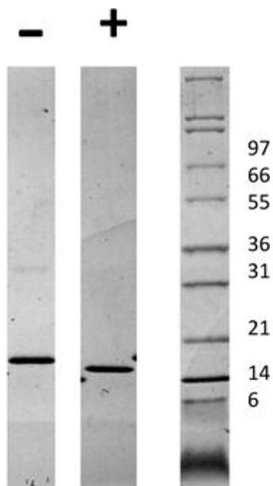
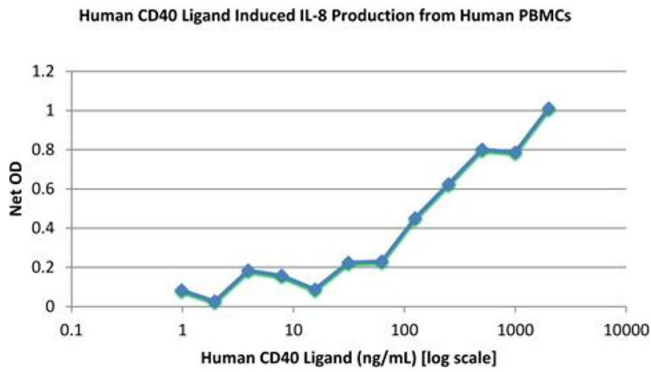
Preservative: Without preservative

Storage: 4 °C, -20 °C

Storage Comment: Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing

at room temperature.

Expiry Date: 6 months



SDS-PAGE

Image 1. SDS-PAGE of Human CD40 Ligand Recombinant Protein Bioactivity of Human CD40 Ligand Recombinant Protein. Serial dilutions of Human CD40 Ligand, starting at 2000 ng/mL, were added to human PBMCs. After 48 hours, cell supernatant was collected and human IL-8 was measured via ELISA and the linear portion of the curve was used to calculate the ED50. The ED50 of Human CD40 Ligand is 50-75 ng/mL.

SDS-PAGE

Image 2. SDS-PAGE of Human CD40 Ligand Recombinant Protein SDS-PAGE of Human CD40 Ligand Recombinant Protein. Lane 1: 1 µg Human CD40 Ligand in non-reducing conditions . Lane 2: 1 µg Human CD40 Ligand in reducing conditions (+). Lane 3: Molecular weight marker. Human CD40 Ligand has a predicted MW of 16.3 kDa.