

# Recombinant human CD40L

*E. coli* expressed human CD40 ligand with HSA

Catalog # rcyec-hcd40l

For research use only, not for diagnostic or therapeutic use

Version # 16A06-MM

## PRODUCT INFORMATION

### Content:

- 10 µg of recombinant human CD40L provided as a white lyophilized powder

*Note: Recombinant human CD40L is sterile filtered prior to lyophilization.*

- 1.5 ml endotoxin-free water

### Storage and stability:

- Recombinant human CD40L is shipped at room temperature. Upon receipt it should be stored at -20 °C.

- Upon resuspension, prepare aliquots of recombinant human CD40L and store at 4 °C for 1 week or at -20 °C to -80 °C for 12 months.

*Note: Avoid repeated freeze-thaw cycles.*

### Quality control:

- Purity greater than 95% as determined by:

(a) Analysis by HPLC

(b) Analysis by SDS-PAGE

- Endotoxin: Less than 0.1 EU/µg of recombinant human CD40L as determined by the LAL method.

- The biological activity has been confirmed using HEK-Blue™ CD40L cells (see validation data sheet available on our website).

## DESCRIPTION

CD40 Ligand (CD40L), also known as CD154, TRAP or gp39, is a type II transmembrane glycoprotein belonging to the tumor necrosis factor (TNF) family. It is mainly expressed in CD4<sup>+</sup>-T cells and interacts with CD40 on antigen-presenting cells to regulate both humoral and cellular immune responses. CD40L-CD40 interactions are thought to play an important role in the pathogenesis of many diseases<sup>1,2</sup>.

Recombinant human CD40 ligand (CD40L) is intended for use in cell culture applications. Recombinant human CD40L is produced in *Escherichia coli*.

1. Seijkens T. *et al.*, 2013. CD40-CD40L: Linking pancreatic, adipose tissue and vascular inflammation in type 2 diabetes and its complications. Diabetes and Vascular Disease Research. 10: 115 - 122. 2. Daoussis D. *et al.*, 2004. Targeting CD40L: a promising therapeutic approach. Clin Diagn Lab Immunol. 11(4):635-41.

## CHARACTERISTICS

Source: *E. coli*

Accession number: NM\_000074

UniProt ID: P29965

Molecular mass: ≈ 16.3 kDa

Formulation: Recombinant human CD40L was lyophilized from a 0.2 µm filtered phosphate buffer solution (pH 7.0) containing human serum albumin (HSA).

Solubility: 100 µg/ml in water

## METHOD

### Preparation of stock solution (100 µg/ml):

1. Add 100 µl endotoxin-free water (provided) to 10 µg of recombinant human CD40L.
2. Mix by pipetting. Do not vortex.
3. Prepare aliquots of recombinant human CD40L and store at 4 °C for 1 week or at -20 °C to -80 °C for 12 months. Avoid freeze-thaw cycles.
4. Further dilutions can be prepared in the appropriate aqueous buffer, such as cell culture medium containing serum.

## RELATED PRODUCTS

Product	Catalog Code
Anti-hCD40L-IgG	mabg-h40l-3
HEK-Blue™ CD40L Cells	hkb-cd40

## TECHNICAL SUPPORT

InvivoGen USA (Toll-Free): 888-457-5873

InvivoGen USA (International): +1 (858) 457-5873

InvivoGen Europe: +33 (0) 5-62-71-69-39

InvivoGen Hong Kong: +852 3-622-34-80

E-mail: info@invivogen.com