

sCD40 Ligand Human E. coli

Product Data Sheet

Type: Recombinant	Cat. No.:	
Source: E. coli	RBG10101010	(10 µg)
Species: Human	RBG10101050	(50 µg)
Other names: soluble CD40 Ligand, TNFSF5, TRAP, CD154, gp39, T-BAM	RBG10101100	(100 µg)

Description

CD40, a member of the TNF receptor family, is a cell surface protein expressed on B cells, dendritic cells, monocytes, thymic epithelial cells and, at low levels, on T cells. Signaling through CD40 plays an important role in the proliferation and differentiation of B cells, and is critical for immunoglobulin (Ig) class switching. The membrane-anchored CD40-Ligand is expressed almost exclusively on activated CD4+ T lymphocytes. Failure to express CD40L leads to "immunodeficiency with hyper-IgM", a disease characterized by failure to produce IgG, IgA and IgE. The human CD40L gene codes for a 261 amino acid type II transmembrane protein, which contains a 22 amino acid cytoplasmic domain, a 24 amino acid transmembrane domain, and a 215 amino acid extracellular domain. The soluble form of CD40L is an 18 kDa protein comprising the entire TNF homologous region of CD40L and is generated in vivo by an intracellular proteolytic processing of the full length CD40L. Recombinant Human soluble CD40 ligand is a 16.3 kDa protein containing 149 amino acid residues comprising the receptor binding TNF-like domain of CD40L.

Research topic

Apoptosis, Cardiovascular disease, Coronary artery disease, Immune Response, Infection and Inflammation, Transplantation

Amino Acid Sequence

MQKGDQNPQI AAHVISEASS KTTSVLQWAE KGYTMSNNL VTLENGKQLT VKRQGLYYIY AQVTFCSNRE ASSQAPFIAS
LWLKSPGRFE RILLRAANTH SSAKPCGQQS IHLGGVFELQ PGASVFNVT DPSQVSHGTG FTSFGLLKL

Source

E. coli

Purity

98%

Biological Activity

Assay #1: Determined by the stimulation of IL-12 induction by human PBMCs. Assay #2: Determined by the dose-dependent stimulation of IL-8 production by human PBMC. The expected ED₅₀ for this effect is 5-10 ng/ml. Note: Results may vary with PBMC donors.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in 5-10 mM Sodium Phosphate, pH 7.5 to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

HEADQUARTERS:				
BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: info@biovendor.com sales@biovendor.com Web: www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail: infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail: infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail: infoUSA@biovendor.com