

Recombinant Human CD40LG protein

Cat. No. CD40LG-26080TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CD40LG protein was expressed in Escherichia coli.
Species	Human
Source	E.coli
ProteinLength	149
Description	CD40 ligand is a 261 amino acid type II transmembrane glycoprotein belonging to the TNF family and can be cleaved into two chains: the CD40 ligand membrane form and CD40 ligand soluble form. It is primarily expressed on activated CD4+ T lymphocytes, and also found in other types of cells, like NK cells, mast cells, basophils and eosinophils. In total CD40 ligand has three binding partners: CD40, $\alpha 5\beta 1$ integrin and $\alpha 11\beta 3$. It mediates a range of activities on B cells including induction of activation-associated surface antigen, entry into cell cycle, isotype switching and Ig secretion and memory generation. CD40-CD40L interaction also plays important roles in monocyte activation and dendritic cell maturation.
Form	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.0.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by the dose-dependent stimulation of IL-8 production by human PBMC is less than 5-10 ng/ml.
Molecular Mass	Approximately 16.3 kDa, a single non-glycosylated polypeptide chain containing 149

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	amino acids.
AA Sequence	MQKGDQNPQIAAHVISEASSKTTSVLQWAEKGYTMSNNLVTLENGKQLTVKRQGL YYIYAQVTFCSNREASSQAPFIASLWLKSPGRFERILLRAANTHSSAKPCGQQSIHLG GVFELQPGASVFNVTDPQSQVSHGTGFTSFGLLKL
Endotoxin	Less than 1 EU/μg of rHusCD40L as determined by LAL method.
Purity	>95% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-0.3 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	CD40LG
Official Symbol	CD40LG
Synonyms	CD40LG; CD40 ligand; HIGM1, IMD3, TNFSF5, tumor necrosis factor (ligand) superfamily, member 5 (hyper IgM syndrome); CD40 antigen ligand; CD40L; CD154; gp39; hCD40L; hyper IgM syndrome; T B cell activating molecule; TNF related activation protein; TRAP; tumor necrosis factor (ligand) superfamily member 5; CD40-

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L; T-cell antigen Gp39; T-B cell-activating molecule; TNF-related activation protein;
IGM; IMD3; HIGM1; T-BAM; TNFSF5;

Gene ID 959

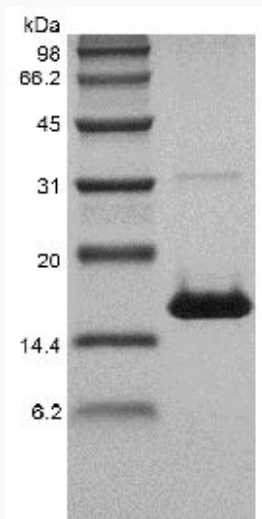
mRNA Refseq NM_000074

Protein Refseq NP_000065

MIM 300386

UniProt ID P29965

**SDS-PAGE of
CD40LG-26080TH**



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