

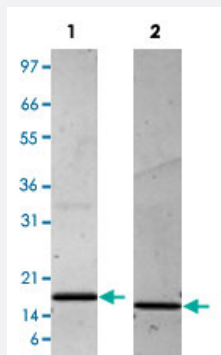
Bioactive

CD40LG (Human) Recombinant Protein

Catalog # P4377

Size 50 ug

Applications



Lane 1: non-reducing conditions

Lane 2: reducing conditions

Result of activity analysis

Result of activity analysis

Serial dilutions of human CD40LG, 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.

Specification

Product Description	Human CD40LG (P29965) recombinant protein expressed in <i>Escherichia coli</i> .
Sequence	MQKGDQNPQIAAHVISEASSKTTSVLQWAEKGYTMSNNLVTLENGKQLTVKRQGLYYIAQVTFC SNREASSQAPFIASLWLKSPGRFERILLRAANTHSSAKPCGQQSIHLGGVFELQPGASVFNVTD PSQVSHGTGFTSFGLLKL
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	16.3
Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system

Endotoxin Level	< 0.1 EU/ug
Activity	The activity is determined by the dose-dependent production of IL-8 from human PBMCs. The expected ED ₅₀ for this effect is 8-12 ng/mL.
Quality Control Testing	1 ug/lane in 4-20% Tris-Glycine gel Stained with Coomassie Blue Lane 1: non-reducing conditions Lane 2: reducing conditions
Storage Buffer	Lyophilized from 10 mM Na ₂ PO ₄ , pH 7.5
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with sterilized water, store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis Serial dilutions of human CD40LG, 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.

Applications

- Functional Study
- SDS-PAGE

Gene Info — CD40LG

Entrez GeneID	959
Protein Accession#	P29965
Gene Name	CD40LG
Gene Alias	CD154, CD40L, HIGM1, IGM, IMD3, T-BAM, TNFSF5, TRAP, gp39, hCD40L
Gene Description	CD40 ligand
Omim ID	300386 308230
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is expressed on the surface of T cells. It regulates B cell function by engaging CD40 on the B cell surface. A defect in this gene results in an inability to undergo immunoglobulin class switch and is associated with hyper-IgM syndrome. [provided by RefSeq]

Other Designations

CD40 antigen ligand|OTTHUMP00000024130|T-B cell-activating molecule|TNF-related activation protein|tumor necrosis factor (ligand) superfamily member 5

Pathway

- [Allograft rejection](#)
- [Asthma](#)
- [Autoimmune thyroid disease](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Cytokine-cytokine receptor interaction](#)
- [Primary immunodeficiency](#)
- [Systemic lupus erythematosus](#)
- [T cell receptor signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Bronchiolitis](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Coronary Stenosis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)

- [Disease Progression](#)
- [Drug Eruptions](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Graves Disease](#)
- [Immunologic Deficiency Syndromes](#)
- [Infant](#)
- [Lupus Erythematosus](#)
- [Malaria](#)
- [Metabolic Syndrome X](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Pemphigus](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Renal Insufficiency](#)
- [Respiratory Syncytial Virus Infections](#)
- [Severe Combined Immunodeficiency](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Tuberculosis](#)
- [Werner syndrome](#)