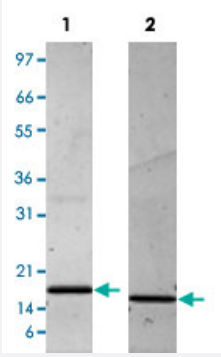
Bioactive

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 us used to calculate the ED50.

Specification

Product Description	Human CD40LG (P29965) recombinant protein expressed in *Escherichia coli*.
Sequence	MQKGDQNPQIAAHVISEASSKTTSVLQWAEKGYYTMSNNLVTLENGKQLTVKRQGLYYIYAQVTFC SNREASSQAPFIASLWLKSPGRFERILLRAANTHSSAKPCGQQSIHLGGVFELQPGASVFVNVTD PSQVSHGTGFTSFGLLKL
Host	Escherichia coli
Theoretical MW (kDa)	16.3
Form	Lyophilized
Preparation Method	*Escherichia coli* expression system

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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_2PO_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 us 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

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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

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- 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

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