CD40 monoclonal antibody, clone BE-1

Catalog # MAB6911 Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against native CD40.
Immunogen	Native purified CD40 from murine L cells.
Host	Mouse
Reactivity	Human
Specificity	This antibody binds with cross linked BE-1 will partially activate B cells.
Form	Liquid
Isotype	IgG1
Recommend Usage	The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM sodium phosphate buffer, 100 mM potassium Chloride, 150 mM NaCl, pH 7.5 (0.5 mg/mL gentamicin sulfate)
Storage Instruction	Store at 4°C.

Applications

- Immunohistochemistry (Frozen sections)
- Immunoprecipitation
- Flow Cytometry

Gene Info — CD40

Entrez GeneID	958

Gene Name	CD40
Gene Alias	Bp50, CDW40, MGC9013, TNFRSF5, p50
Gene Description	CD40 molecule, TNF receptor superfamily member 5
Omim ID	109535 606843
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the TNF-receptor superfamily. This receptor ha s been found to be essential in mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and ger minal center formation. AT-hook transcription factor AKNA is reported to coordinately regulate the expression of this receptor and its ligand, which may be important for homotypic cell interactions. Adaptor protein TNFR2 interacts with this receptor and serves as a mediator of the signal transdu ction. The interaction of this receptor and its ligand is found to be necessary for amyloid-beta-indu ced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogene sis. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq
Other Designations	B cell surface antigen CD40|B cell-associated molecule|CD40 antigen|CD40 antigen (TNF recept or superfamily member 5)|CD40 type II isoform|CD40L receptor|OTTHUMP00000031699|OTTHU MP00000031700|nerve growth factor receptor-related B-lymphocyte activation mol

Publication Reference

- Assembly and regulation of the CD40 receptor complex in human B cells.

  Kuhne MR, Robbins M, Hambor JE, Mackey MF, Kosaka Y, Nishimura T, Gigley JP, Noelle RJ, Calderhead DM.

  The Journal of Experimental Medicine 1997 Jul; 186(2):337.

  Application: IP, Human, DND39 cells, Human B cells

- Immune regulation by CD40 and its ligand GP39.

  Foy TM, Aruffo A, Bajorath J, Buhlmann JE, Noelle RJ.

  Annual Review of Immunology 1996 Apr; 14:591.

- Analysis of expression and function of CD40 on normal and leukemic human B cell precursors.

  Law CL, Wormann B, LeBien TW.

  Leukemia 1990 Nov; 4(11):732.

Pathway

- Allograft rejection
- Asthma
- Autoimmune thyroid disease
- Cell adhesion molecules (CAMs)
- Cytokine-cytokine receptor interaction
- Primary immunodeficiency
- Systemic lupus erythematosus
- Toll-like receptor signaling pathway

Disease

- Arthritis
- Asthma
- Atherosclerosis
- Autoimmune Diseases
- Brain Ischemia
- Bronchiolitis
- Calcinosis
- Cardiovascular Diseases
- Colitis
- Coronary Artery Disease
- Coronary Disease
- Crohn Disease
- Diabetes Mellitus
- Diabetic Angiopathies
- Disease Progression
- Drug Eruptions

- Edema
- Endometriosis
- Genetic Predisposition to Disease
- Graves Disease
- Hashimoto Disease
- Hematologic Diseases
- Hepatitis B
- Hodgkin Disease
- Hypertension
- Infant
- Inflammation
- Kidney Failure
- Lung Neoplasms
- Lymphoma
- Lymphoproliferative Disorders
- Mucocutaneous Lymph Node Syndrome
- Multiple Myeloma
- Multiple Sclerosis
- Myasthenia Gravis
- Occupational Diseases
- Pemphigus
- Pulmonary Disease
- Recurrence
- Respiratory Syncytial Virus Infections
- Rupture
- Stroke

- Thyroiditis
- Urinary Bladder Neoplasms
- Waldenstrom Macroglobulinemia
- Wegener Granulomatosis
- Werner syndrome