

CD40 monoclonal antibody, clone HI40a (PE)

Catalog # MAB5080

Size 100 Reactions

Specification

Product Description	Mouse monoclonal antibody raised against CD40a.
Immunogen	Human CD40a.
Host	Mouse
Theoretical MW (kDa)	48
Reactivity	Human
Specificity	This antibody recognizes CD40 (BP50), a 48 KDa type I single chain transmembrane glycoprotein expressed on normal and neoplastic B cells, but not on terminally differentiated plasma cells.
Form	Liquid
Conjugation	PE
Isotype	IgG1
Recommend Usage	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10^6 cells in a suspension) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- 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 has 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 germinal 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 transduction. The interaction of this receptor and its ligand is found to be necessary for amyloid-beta-induced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogenesis. 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 receptor superfamily member 5) CD40 type II isoform CD40L receptor OTTHUMP00000031699 OTTHUMP00000031700 nerve growth factor receptor-related B-lymphocyte activation mol

Publication Reference

- [Involvement of mitogen-activated protein kinases and NFkappaB in LPS-induced CD40 expression on human monocytic cells.](#)

Wu W, Alexis NE, Chen X, Bromberg PA, Peden DB.
Toxicology and Applied Pharmacology 2007 Dec; 228(2):135.
- [CD40-mediated signaling in monocytic cells: up-regulation of tumor necrosis factor receptor-associated factor mRNAs and activation of mitogen-activated protein kinase signaling pathways.](#)

Pearson LL, Castle BE, Kehry MR.
International Immunology 2001 Mar; 13(3):273.
- [CD40-CD40 ligand interactions are critical in T-B cooperation but not for other anti-viral CD4+ T cell functions.](#)

Oxenius A, Campbell KA, Maliszewski CR, Kishimoto T, Kikutani H, Hengartner H, Zinkernagel RM, Bachmann MF.
The Journal of Experimental Medicine 1996 May; 183(5):2209.

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](#)