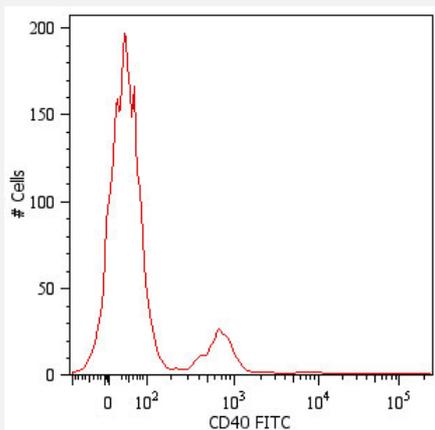


# CD40 monoclonal antibody, clone HI40a (FITC)

Catalog # MAB5079

Size 100 Reactions

## Applications



### Flow Cytometry

Surface staining of human peripheral blood cells with CD40 monoclonal antibody, clone HI40a (FITC) (Cat # MAB5079). Cells in the lymphocyte gate were used for analysis.

## Specification

<b>Product Description</b>	Mouse monoclonal antibody raised against CD40a.
<b>Immunogen</b>	Human CD40a.
<b>Host</b>	Mouse
<b>Theoretical MW (kDa)</b>	48
<b>Reactivity</b>	Human
<b>Specificity</b>	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.
<b>Form</b>	Liquid
<b>Conjugation</b>	FITC
<b>Isotype</b>	IgG1

<b>Recommend Usage</b>	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10 <sup>6</sup> cells in a suspension) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS (0.2% BSA, 0.09% sodium azide)
<b>Storage Instruction</b>	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Flow Cytometry

Surface staining of human peripheral blood cells with CD40 monoclonal antibody, clone H40a (FITC) (Cat # MAB5079). Cells in the lymphocyte gate were used for analysis.

## Gene Info — CD40

<b>Entrez GeneID</b>	<a href="#">958</a>
<b>Gene Name</b>	CD40
<b>Gene Alias</b>	Bp50, CDW40, MGC9013, TNFRSF5, p50
<b>Gene Description</b>	CD40 molecule, TNF receptor superfamily member 5
<b>Omim ID</b>	<a href="#">109535 606843</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

**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](#)
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- [Hypertension](#)
- [Infant](#)
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- [Kidney Failure](#)
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- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
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- [Occupational Diseases](#)
- [Pemphigus](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Respiratory Syncytial Virus Infections](#)
- [Rupture](#)
- [Stroke](#)
- [Thyroiditis](#)
- [Urinary Bladder Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Wegener Granulomatosis](#)
- [Werner syndrome](#)