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Datasheet

CD40 monoclonal antibody, clone HI40a (PE)

Catalog Number: MAB5080

Regulation Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against CD40a.

Clone Name: HI40a

Immunogen: Human CD40a.

Host: Mouse

Theoretical MW (kDa): 48

Reactivity: Human

Applications: Flow Cyt
(See our web site product page for detailed applications information)

Protocols: See our web site at http://www.abnova.com/support/protocols.asp or product page for detailed protocols

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, 15 mM 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.

Entrez GeneID: 958

Gene Symbol: CD40

Gene Alias: Bp50, CDW40, MGC9013, TNFRSF5, p50

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]

References:

1. 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. Toxicol Appl Pharmacol. 2008 Apr 15;228(2):135-43. Epub 2007 Dec 14.
2. 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. Int Immunol. 2001 Mar;13(3):273-83.
3. 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. J Exp Med. 1996 May 1;183(5):2209-18.