

BACKGROUND

CD40 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.¹ 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.² Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

References:

1. Klaus, G.G.B. et al: Int. Rev. Immunol. 15:5-31,1997
2. Togo, T. et al: Brain Res. 885:117-21, 2000

TECHNICAL INFORMATION

Source:

CD40 Antibody is a mouse monoclonal antibody raised against purified recombinant human CD40 protein fragments expressed in *E. coli*.

Specificity and Sensitivity:

This antibody detects endogenous CD40 proteins in normal cell lysates without cross-reactivity with other family members.

Storage Buffer: PBS and 30% glycerol

Storage:

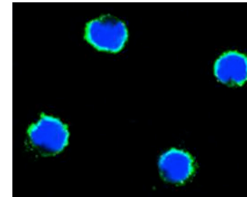
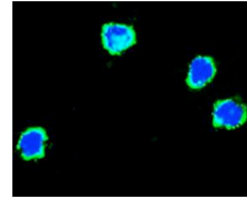
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1,000
IP	n/d
IHC	n/d
ICC	1:50
FACS	1:200-400

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Confocal immunofluorescent analysis of human periphery blood lymphocytes (top) and mouse L1210 cells (bottom) using CD40 Antibody. CD40 Antibody (Green) stains cell plasma membrane. DQAR5 DNA dye (Blue) stains nucleus.

