
Anti-CD40

Cat #: HM1077
Rabbit polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

CD40 is a member of the TNF-receptor superfamily. It is 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. A downstream mediator of the CD40 signaling pathway, designated CRAF, is a member of an expanding family of proteins that contain a conserved cysteine- and histidine-rich RING finger motif. Other members of the family include TRAF1 and TRAF2, both of which have been shown to regulate TNF-R2 as well as CD40 signaling through activation of the NFκB family of transcription factors.

SPECIFICITY

This antibody reacts with CD40 of mouse, rat and human origin by Western blotting, immunoprecipitation and immunohistochemistry (including paraffin-embedded sections).

Recommended dilution for Western blot analysis: 1:1000.
Molecular Weight of CD40: 40 kDa. Western blotting positive control: A-431 cell lysate.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

IMMUNOGEN

A peptide at the carboxy terminus of human CD40.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

1. Gordon, J. 1995. CD40 and its ligand: central players in B lymphocyte survival, growth, and differentiation. *Blood Rev.* 9: 53-56.
2. Fuleihan, R., Ahern, D., and Geha, R.S. 1995. Expression of the CD40 ligand in T lymphocytes and induction of IgE isotype switching. *Intl. Arch. All. Immunol.* 107: 43-44.
3. Cheng, G., Cleary, A.M., Ye, Z.-s., Hong, D.I., Lederman, S., and Baltimore, D. 1995. Involvement of CRAF1, a relative of TRAF, in CD40 signaling. *Science* 267: 1494-1498.
4. Hu, H.M., O'Rourke, K., Boguski, M.S., and Dixit, V.M. 1994. A novel RING finger protein interacts with the cytoplasmic domain of CD40. *J. Biol. Chem.* 269: 30069-30072.
5. Rothe, M., Sarma, V., Dixit, V.M., and Goeddel, D.V. TRAF2-mediated activation of NF-kappa B by TNF receptor 2 and CD40. *Science* 269: 1424-1427.
6. Bennett, S.R., Carbone, F.R., Karamalis, F., Flavell, R.A., Miller, J.F. and Heath, W.R. (1998) Help for cytotoxic-T-cell responses is mediated by CD40 signalling. *Nature* 393, 478-480.

7. Siddiqua, A., Sims-Mourtada, J.C., Guzman-Rojas, L., Rangel, R., Guret, C., Madrid-Marina, V., Sun, Y. and Martinez-Valdez, H. (2001) Regulation of CD40 and CD40 ligand by the AT-hook transcription factor AKNA. *Nature* 410, 383-387.
8. Fotin-Mlczek, M., Henkler, F., Hausser, A., Glauner, H., Samel, D., Graness, A., Scheurich, P., Mauri, D. and Wajant, H. (2004) Tumor necrosis factor receptor-associated factor (TRAF) 1 regulates CD40-induced TRAF2-mediated NF-kappaB activation. *J. Biol. Chem.* 279, 677-685
9. Flaxenburg, J.A., Melter, M., Lapchak, P.H., Briscoe, D.M. and Pal, S. (2004) The CD40-induced signaling pathway in endothelial cells resulting in the overexpression of vascular endothelial growth factor involves Ras and phosphatidylinositol 3-kinase. *J. Immunol.* 172, 7503-7509.

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