

anti-CD27

Cat #: HM1073
Mouse monoclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

CD27 is a 55 kDa homodimeric lymphocyte-specific surface antigen present on T and B lymphocytes. It belongs to the TNF-receptor superfamily that also includes FAS, OX40, and CD30. CD27 is required for generation and long-term maintenance of T cell immunity. CD27 binds to ligand CD70, and plays a key role in regulating B-cell activation and immunoglobulin synthesis. This receptor transduces signals that lead to the activation of NF-kappaB and MAPK8/JNK. Adaptor proteins TRAF2 and TRAF5 have been shown to mediate the signaling process of this receptor. CD27-binding protein (SIVA), a proapoptotic protein, can bind to this receptor and is thought to play an important role in the apoptosis induced by this receptor.

SPECIFICITY

CD27 is recommended for the detection of CD27 of human origin by Western blotting, immunoprecipitation and immunohistochemistry.

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

Recommended dilution for Western blotting: 1:1000.

IMMUNOGEN

A peptide mapping at the carboxy terminus of mouse CD27.

STORAGE

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

REFERENCE

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3. Gruss, H.J. and Dower, S.K. 1995. Tumor necrosis factor ligand superfamily: involvement in the pathology of malignant lymphomas. *Blood* 85: 3378-3404.
4. Lens, S.M., de Jong, R., Hintzen, R.Q., Koopman, G., van Lier, R.A., and van Oers, R.H. 1995. CD27-CD70 interaction: unravelling its implication in normal and neoplastic Bcell growth. *Leuk. Lymph.* 18: 51-59.
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6. Akiba, H., Nakano, H., Nishinaka, S., Shindo, M., Kobata, T., Atsuta, M., Morimoto, C., Ware, C.F., Malinin, N.L., Wallach, D., Yagita, H. and Okumura, K. (1998) CD27, a

member of the tumor necrosis factor receptor superfamily, activates NF-kappaB and stress-activated protein kinase/c-Jun N-terminal kinase via TRAF2, TRAF5, and NF-kappaB-inducing kinase. *J. Biol. Chem.* 273, 13353-13358.

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8. Hase, H., Kanno, Y., Kojima, H., Morimoto, C., Okumura, K. and Kobata, T. (2002) CD27 and CD40 inhibit p53-independent mitochondrial pathways in apoptosis of B cells induced by B cell receptor ligation. *J. Biol. Chem.* 277, 46950-46958.

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