

Anti-Mouse/Rat CD40 FITC

Catalogue Number : 02512-50

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: HM40-3

Format/Conjugate: FITC

Concentration: 0.5 mg/mL

Reactivity: Mouse, Rat

Laser: Blue (488nm)

Peak Emission: 520nm

Peak Excitation: 494nm

Filter: 530/30

Brightness (1=dim,5=brightest): 3

Isotype: Armenian Hamster IgM, kappa

Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC

Description

The HM40-3 monoclonal antibody reacts with mouse CD40, a 48kDA type I glycoprotein known as Bp50. CD40 is part of the TNFR family and expressed on a subset of T cells, B cells, dendritic cells, and macrophages. It has been shown to be involved in the protection of B cells from apoptosis, B cell differentiation, co-stimulation, and isotype class-switching. The HM40-3 antibody blocks the binding of CD40L (CD154) and stimulates B and dendritic cell proliferation.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤1 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Kaneko, Y., Hirose, S., Abe, M., Yagita, H., Okumura, K., Shirai, T. (1996). CD40 mediated stimulation of B1 and B2 cells: implication in autoantibody production in murine lupus.; European journal of immunology.; 26(12), 3061-3065.
2. Ferlin, W. G., Severinson, E., Strouml, L., Heath, A. W., Coffman, R. L., Ferrick, D. A., Howard, M. C. (1996). CD40 signaling induces interleukin4 independent IgE switching in vivo.; European journal of immunology.; 26(12), 2911-2915.
3. Kashiwada, M., Kaneko, Y., Yagita, H., Okumura, K., Takemori, T. (1996). Activation of mitogen activated protein kinases via CD40 is distinct from that stimulated by surface IgM on B cells.; European journal of immunology.; 26(7), 1451-1458.