

## Anti-Mouse/Rat CD40 SAFIRE Purified

Catalog Number :02512-25

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

### Product Information

**Clone:** HM40-3  
**Format/Conjugate:** SAFIRE Purified  
**Concentration:** 1 mg/mL  
**Reactivity:** Mouse, Rat  
**Laser:** Not Applicable  
**Peak Emission:** Not Applicable  
**Peak Excitation:** Not Applicable  
**Filter:** Not Applicable  
**Brightness (1=dim,5=brightest):** Not Applicable  
**Isotype:** Armenian Hamster IgM, kappa  
**Formulation:** Phosphate-buffered aqueous solution, pH7.2.  
**Storage:** Product should be kept at 2-8°C.  
**Applications:** FC, FA

### 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. Do not freeze. The monoclonal antibody was purified utilizing affinitychromatography. The endotoxin level is determined by LAL test to be less than 0.01 EU/μg of the protein.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. 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., Ström, L., Heath, A. W., Coffman, R. L., Ferrick, D. A., Howard, M. C. (1996). CD40 signaling induces interleukin-4-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.