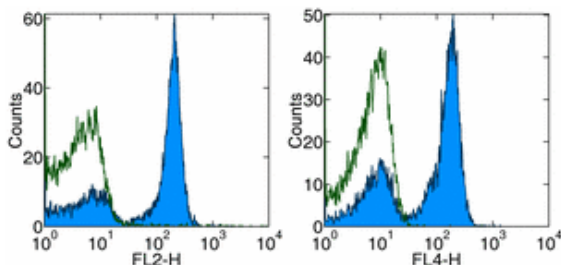


## Anti-Mouse CD40 Purified

Catalog Number: 14-0401

Also Known As: TNFRSF5

RUO: For Research Use Only



Staining of mouse splenocytes with Anti-Mouse CD40 PE (left) and APC (right). Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

### Product Information

Contents: Anti-Mouse CD40 Purified


**REF** Catalog Number: 14-0401

Clone: 1C10


Concentration: 0.5 mg/ml


Host/Isotype: Rat IgG2a,  $\kappa$

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 Temperature Limitation: Store at 2-8°C.

**LOT** Batch Code: Refer to Vial

 Use By: Refer to Vial

 Caution, contains Azide

### Description

The 1C10 monoclonal antibody reacts with mouse CD40, a 45-50 kDa type I transmembrane glycoprotein. CD40 is a member of the TNFR family and is expressed by mouse B lymphocytes, follicular dendritic cells, thymic epithelium, and a subset of peripheral T cells. CD40 regulates B cell development/maturation by inducing Ig isotype switching and in combination with other signals such as IL-4, protects B cells from surface Ig-induced apoptosis and promotes proliferation. Interaction of CD40 with CD154 (gp39), its ligand on T cells, is important in T-B cell crosstalk and plays a role in costimulation and immune regulation.

### Applications Reported

The 1C10 antibody has been reported for use in flow cytometric analysis, and immunoprecipitation. It has also been reported in *in vitro* activation of B cells. (Please use Functional Grade purified 1C10, cat. 16-0401, in functional assays.)

### Applications Tested

The 1C10 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

- Ferlin, W. G., T. von der Weid, et al. (1998). "The induction of a protective response in Leishmania major-infected BALB/c mice with anti-CD40 mAb." *Eur J Immunol* 28(2): 525-31.
- Ferlin, W. G., E. Severinson, et al. (1996). "CD40 signaling induces interleukin-4-independent IgE switching in vivo." *Eur J Immunol* 26(12): 2911-5.
- Heath, A. W., W. W. Wu, et al. (1994). "Monoclonal antibodies to murine CD40 define two distinct functional epitopes." *Eur J Immunol* 24(8): 1828-34.

### Related Products

- 11-0402 Anti-Mouse/Rat CD40 FITC (HM40-3)
- 11-4317 Streptavidin FITC
- 11-4811 Anti-Rat IgG FITC
- 12-4317 Streptavidin PE
- 13-0402 Anti-Mouse/Rat CD40 Biotin (HM40-3)
- 13-4813 Anti-Rat IgG Biotin (Polyclonal)
- 14-0402 Anti-Mouse/Rat CD40 Purified (HM40-3)

14-4321 Rat IgG2a K Isotype Control Purified  
16-0402 Anti-Mouse/Rat CD40 Functional Grade Purified (HM40-3)  
17-4317 Streptavidin APC

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