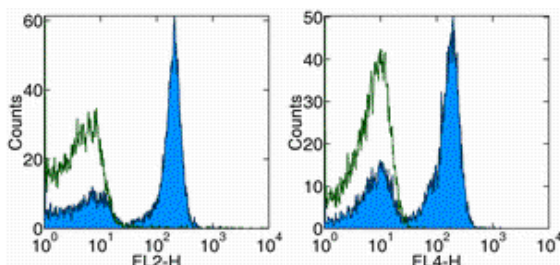


## Anti-Mouse CD40 Functional Grade Purified

**Catalog Number:** 16-0401

**Also Known As:** TNFRSF5

**RUO: For Research Use Only**



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

### Product Information

**Contents:** Anti-Mouse CD40 Functional Grade Purified

**REF** **Catalog Number:** 16-0401

**Clone:** 1C10

**Concentration:** 1 mg/ml

**Host/Isotype:** Rat IgG2a, κ

**Handling Conditions:** Use in sterile environment.

**Endotoxin Level:** Less than 0.001 ng/ug antibody, as determined by the LAL assay.

**Formulation:** aqueous buffer, no sodium azide

 **Temperature Limitation:** Store at 2-8°C.

**LOT** **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

### 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. It has also been reported in *in vitro* activation of B cells.

### 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 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> 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)

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

---

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • [www.eBioscience.com](http://www.eBioscience.com) • [info@eBioscience.com](mailto:info@eBioscience.com)