

TECHNICAL DATA SHEET

# PE Anti-Mouse CD40 (FGK45)

Catalog Number: 50-8050

## PRODUCT INFORMATION

**Contents:** PE Anti-Mouse CD40 (FGK45)

**Isotype:** Rat IgG2a

**Concentration:** 0.2 mg/mL

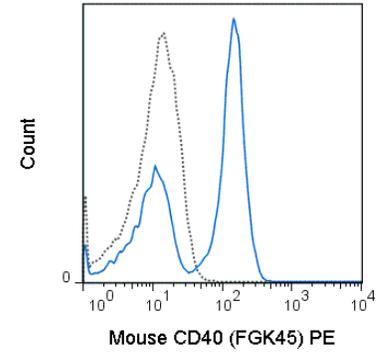
**Clone:** FGK45

**Reactivity:** Mouse

**Use By:** 12 months from date of receipt

**Storage Conditions:** 2-8°C protected from light

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.09% NaN<sub>3</sub>, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with 0.25 ug PE Anti-Mouse CD40 (50-8050) (solid line) or 0.25 ug PE Rat IgG2a isotype control (dashed line).

## DESCRIPTION

The FGK45 antibody reacts with mouse CD40, a 40-50 kDa glycoprotein member of the tumor necrosis factor receptor (TNFR) family. CD40 is constitutively expressed by antigen presenting cells, including dendritic cells, B cells, and macrophages. The interaction of CD40 and its ligand CD154, expressed on activated T cells, plays an essential role in mediating a broad range of immune and inflammatory responses including T cell dependent immunoglobulin class switching, germinal center formation, and the development of memory B cells.

The FGK45 clone is reported to be functionally useful for both in vitro and in vivo activation of CD40 expressing antigen presenting cells.

## PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

## APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

## REFERENCES

Shepherd DM, Kerkvliet NI. 1999. *J Immunol.* Sep 1;163(5):2470-2477. Mauri C, Mars LT, Londei M. 2000. *Nat Med.* Jun;6(6):673-679. Hellings PW, Kasran A, Bullens D, Overbergh L, Mathieu C, Heremans H, Matthys P, Boon L, Jorissen M, Ceuppens JL. 2006. *J Immunol.* Oct 15;177(8):5138-5144. Bartholdy C, Kauffmann SO, Christensen JP, Thomsen AR. 2007. *J Immunol.* Feb 1;178(3):1662-1670.

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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