

**PE/Cy7 anti-mouse CD40**

**Catalog # / Size:** 1223110 / 100 µg  
1223105 / 25 µg

**Clone:** 3/23

**Isotype:** Rat IgG2a, κ

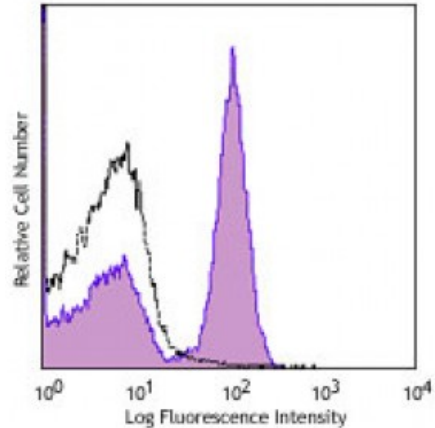
**Immunogen:** Recombinant mouse CD40 protein

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2



BALB/c splenocytes stained with CD40 (clone 3/23) PE/Cy7 (filled histogram), or rat IgG2a, κ PE/Cy7 isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is  $\leq 1.0$  microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** The LEAF™ purified antibody (Endotoxin  $< 0.1$  EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 124604). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 124628) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin  $< 0.01$  EU/microg).

**Application References:** 1. Hasbold J, *et al.* 1994. *Eur. J. Immunol.* 24:1835.  
2. Bourgeois C, *et al.* 2002. *Science* 297:2060.

**Description:** CD40 is a 48 kD type I transmembrane glycoprotein also known as Bp50. It is a member of the tumor necrosis factor receptor (TNFR) superfamily and is expressed on B cells, basal epithelial cells, macrophages, follicular dendritic cells, endothelial cells, and a subset of CD34<sup>+</sup> hematopoietic progenitors. CD40 regulates B cell development/maturation, 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 its ligand CD154 (gp39), which is expressed on activated T cells, is important in costimulation and immune regulation.

**Antigen References:** 1. Grewal IS, *et al.* 1998. *Annu Rev Immunol* 16:111.