

**PE/Dazzle™ 594 anti-mouse CD40**

**Catalog # / Size:** 1223145 / 25 µg  
1223150 / 100 µg

**Clone:** 3/23

**Isotype:** Rat IgG2a, κ

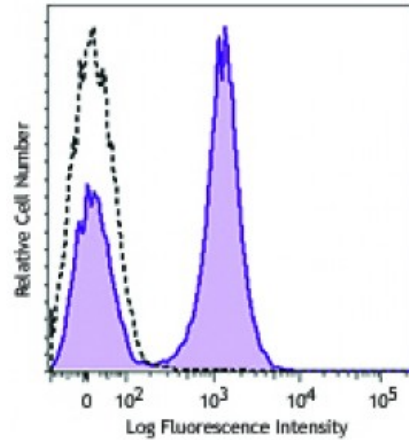
**Immunogen:** Recombinant mouse CD40 protein

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

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

**Concentration:** Lot-specific



C57BL/6 mouse splenocytes were stained with CD40 (clone 3/23) PE/Dazzle™ 594 (filled histogram) or rat IgG2a, κ PE/Dazzle™ 594 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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**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.