

**PerCP/Cy5.5 anti-human CD40**

**Catalog # / Size:** 2271575 / 25 tests  
2271580 / 100 tests

**Clone:** 5C3

**Isotype:** Mouse IgG1,  $\kappa$

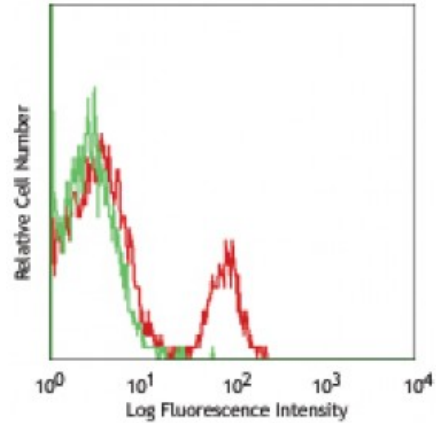
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Workshop Number:** V CD40.4

**Concentration:** Lot-specific



Human peripheral blood lymphocytes stained with 5C3 PerCP/Cy5.5

**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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: costimulation of B cell proliferation<sup>1</sup>, partial inhibition of CD40 binding to CD40L3, and B cell rescue from apoptosis<sup>1</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/microg, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays.

**Application References:**

- Schlossman SF, *et al.* 1995. ed. Leukocyte Typing V:White Cell Differentiation Antigens. New York:Oxford University Press.
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- Pound JD, *et al.* 1999. *Int. Immunol.* 11:11. (Block)
- Shey MS, *et al.* 2014. *J Immunol.* 192:4833. [PubMed](#)
- Sondergaard JN, *et al.* 2014. *Mol Immunol.* 59:180. [PubMed](#)

**Description:** CD40 is a 48 kD type I glycoprotein also known as BP50. It is a member of the TNFR superfamily primarily expressed on B cells, macrophages, follicular dendritic cells, endothelial cells, fibroblasts, and at low levels on plasma cells. CD40 has been reported to be involved in B cell differentiation, costimulation, isotype class-switching, and protection of B cells from apoptosis. Additionally, CD40 is important for T cell-B cell interactions. The ligand of CD40 is CD154 (CD40 ligand). The 5C3 antibody has been reported to promote B cell proliferation in the presence of anti-IgM, IL-4 or PMA, partially blocking CD40 binding to CD40L, and B cells rescue from apoptosis.

- Antigen** 1. Banchereau J, *et al.* 1994. *Annu. Rev. Immunol.* 12:881.
- References:** 2. Foy T, *et al.* 1996. *Annu. Rev. Immunol.* 14:591.