

Product Data Sheet

APC anti-human CD40

Catalog # / Size: 334309 / 25 tests
334310 / 100 tests

Clone: 5C3

Isotype: Mouse IgG1, κ

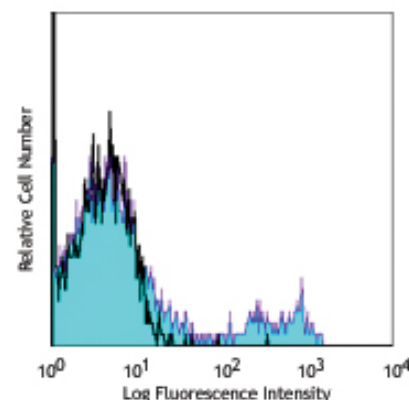
Workshop Number: V CD40.4

Reactivity: Human, **Cross-Reactivity:** Baboon, Chimpanzee, Cynomolgus Monkey, Rhesus, Squirrel Monkey

Preparation: The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.

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

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with 5C3 APC

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 μ l to 5 μ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 μ l staining volume or per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at www.biolegend.com/testsize regarding the test size change.

Application Notes: Additional reported applications (for the relevant formats) include: costimulation of B cell proliferation¹, partial inhibition of CD40 binding to CD40L, and B cell rescue from apoptosis¹. The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays.

Application References: 1. Schlossman SF, *et al.* 1995. ed. Leukocyte Typing V: White Cell Differentiation Antigens. New York: Oxford University Press.
2. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
3. Yi HJ, *et al.* 2012. *Cell Immunol.* 277:44. 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 References: 1. Banchereau J, *et al.* 1994. *Annu. Rev. Immunol.* 12:881.
2. Foy T, *et al.* 1996. *Annu. Rev. Immunol.* 14:591.

Related Products:

Product
APC Mouse IgG1, κ Isotype Ctrl
Cell Staining Buffer
RBC Lysis Buffer (10X)
Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone
MOPC-21

Application
FC, ICFC
FC, ICC, ICFC
FC, ICFC
FC, ICC, ICFC



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