

Product Data Sheet

Alexa Fluor® 647 anti-human CD40

Catalog # / Size: 303609 / 25 tests
303610 / 100 tests

Clone: G28.5

Isotype: Mouse IgG1, κ

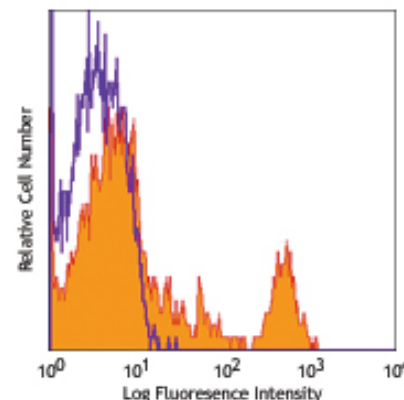
Workshop Number: V CD40.2

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

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 G28.5 Alexa Fluor® 647

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is 5 μ l per million cells or 5 μ l per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

** Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. Additional reported applications (for the relevant formats) include: B cell bioassays. Clone G28.5 has been shown to induce IgG production by B cells⁷. The G28.5 antibody has been reported to promote B cell proliferation in the presence of anti-IgM, IL-4 or PMA. The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 303608). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 303614) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/ μ g).

Application References:

- Schlossman S, *et al.* 1995. Leucocyte Typing V. Oxford University Press. New York.
- Banchereau J, *et al.* 1994. *Annu. Rev. Immunol.* 12:881. (FA)
- Gaspari A, *et al.* 1996. *Eur. J. Immunol.* 26:1371. (FA)
- Ebner S, *et al.* 2001. *J. Immunol.* 166:633. (FA)
- Lin-Lee YC, *et al.* 2006. *J. Biol. Chem.* 281:18878. (WB, IF)
- Jacobsen EM, *et al.* 2005. *Endocrinology* 146:2684. (FC)
- Alderson MR, *et al.* 1993. *J. Exp. Med.* 178:669.

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 from apoptosis. Additionally, CD40 is important for T cell-B cell interactions. The ligand of CD40 is CD154 (CD40 ligand).

Antigen References:

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

| Related Products: | Product | Clone | Application |
|-------------------|---|---------|---------------|
| | Cell Staining Buffer | | FC, ICC, ICFC |
| | RBC Lysis Buffer (10X) | | FC, ICFC |
| | Alexa Fluor® 647 Mouse IgG1, κ Isotype Ctrl (FC) | MOPC-21 | FC, IF |
| | Human TruStain FcX™ (Fc Receptor Blocking Solution) | | FC, ICC, ICFC |



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