Technical Data Sheet

APC Mouse Anti-Human CD40

Product Information

Material Number: 561848

Alternate Name: TNFRSF5; TNF receptor superfamily member 5; CD40L receptor; Bp50; p50

Size Vol. per Test: 20 µl Clone: 5C3

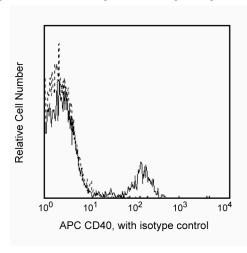
Isotype: Mouse IgG1, κ Reactivity: QC Testing: Human

Workshop: V CD40.4

Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

This 5C3 monoclonal antibody specifically binds to CD40, a 45-48 kDa type I integral membrane glycoprotein. CD40 is expressed on B lymphocytes, but is not expressed on terminally differentiated B cells. CD40 is also expressed by endothelial cells, basal epithelial cells and some epithelial cell carcinomas, follicular dendritic cells, macrophages, fibroblasts, keratinocytes, and CD34+ hematopoietic progenitor cells. This antibody is useful for studying the roles played by CD40 in B-cell growth, proliferation, and differentiation including immunoglobulin isotype switching. Anti-CD40 antibodies have been reported to stimulate B-cell proliferation when costimulated with anti-µ, anti-CD20 antibodies or with phorbol esters. 5C3 is capable of inducing B-cell proliferation when presented with IL-4.



Profile of peripheral blood lymphocytes analyzed on a BD FACScan™ (BDIS, San Jose, CA)

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested	

Suggested Companion Products

Catalog Number	Name	Size	Clone
555751	APC Mouse IgG1, κ Isotype Control	100 tests	MOPC-21
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10^{\circ}6$ cells in a 100- μ l experimental
- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 6. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
- 7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 8. An isotype control should be used at the same concentration as the antibody of interest.

References

Barclay NA, Brown MH, Birkeland ML, et al, ed. The Leukocyte Antigen FactsBook. San Diego, CA: Academic Press; 1997. (Biology)

Clark EA, Ledbetter JA. Activation of human B cells mediated through two distinct cell surface differentiation antigens, Bp35 and Bp50. *Proc Natl Acad Sci U S A.* 1986; 83(12):4494-4498. (Biology)

Galy AH, Spits H. CD40 is functionally expressed on human thymic epithelial cells. J Immunol. 1992; 149(3):775-782. (Biology)

Itoh N, Yonehara S, Ishii A, et al. The polypeptide encoded by the cDNA for human cell surface antigen Fas can mediate apoptosis. Cell. 1991; 66(2):233-243. (Biology)

Schlossman S, Boumell L, et al, ed. Leucocyte Typing V. New York: Oxford University Press; 1995. (Biology)

Schlossman SF, Boumsell L, Gilks W, et al, ed. Leukocyte Typing V: White Cell Differentiation Antigens. New York: Oxford University Press; 1995. (Clone-specific)

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