Technical Data Sheet

FITC Mouse Anti-Human CD40

Product Information

Material Number: 561847

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

Size Vol. per Test: 20 µl Clone: 5C3

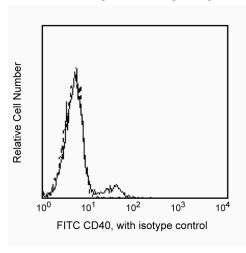
Isotype: Mouse IgG1, κ Reactivity: QC Testing: Human

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

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

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

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

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|----------------|------------------|--|
| Flow cytometry | Routinely Tested | |

Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|----------------|------------------------------------|-----------|---------|
| 555748 | FITC 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 sample (a test).
- 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. 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.
- 5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 6. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 7. An isotype control should be used at the same concentration as the antibody of interest.

References

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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)

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