

Technical Data Sheet

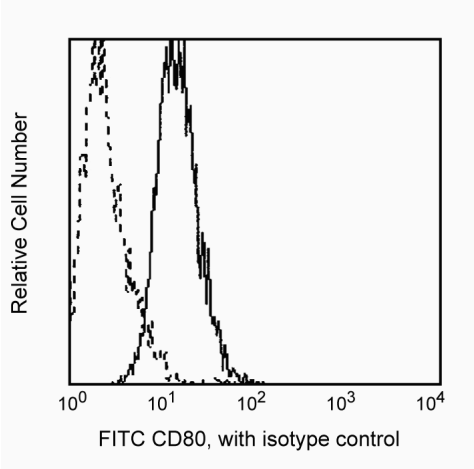
FITC Mouse Anti-Human CD80

Product Information

Material Number:	555683
Alternate Name:	B7-1
Size:	100 tests
Vol. per Test:	20 µl
Clone:	BB1
Isotype:	Mouse IgM, κ
Reactivity:	QC Testing: Human
Workshop:	A028, B7.3, BP021
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with a 60 kD transmembrane glycoprotein which was clustered as CD80 in the Fifth International Workshop on Human Differentiation Antigens. There have been several recent studies reporting discrepancies in the expression and function of CD80 when the BB1 clone is used compared to other anti-CD80 monoclonals (e.g., L307.4). Caution should therefore be used in the interpretation of data generated using BB1, as reports indicate that BB1 may recognize, in addition to CD80, CD74 and even possibly another as yet undefined molecule. CD80, a member of the Ig supergene family, is expressed on activated B cells, macrophages, and dendritic cells. It is the ligand for two molecules expressed on T cells: CD28 and CD152 (CTLA-4). CD80 is also expressed in activated CD4+ and CD8+ T cells, appearing late after activation, suggesting that activated T cells may be capable of autocrine costimulation via the CD28 activation pathway. The binding of CD28 molecule by CD28 mAb or by CD80 antigen results in T-cell activation and a signal for IL-2 production.



Profile of RAJI cells analyzed by flow cytometry.

Preparation and Storage

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.

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

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
555583	FITC Mouse IgM, κ Isotype Control	100 tests	G155-228

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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10⁶ cells in a 100- μ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
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.

References

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- Azuma M, Yssel H, Phillips JH, Spits H, Lanier LL. Functional expression of B7/BB1 on activated T lymphocytes. *J Exp Med*. 1993; 177(3):845-850. (Clone-specific)
- Behrens L, Kerschensteiner M, Misgeld T, Goebels N, Wekerle H, Hohlfeld R. Human muscle cells express a functional costimulatory molecule distinct from B7.1 (CD80) and B7.2 (CD86) in vitro and in inflammatory lesions. *J Immunol*. 1998; 161(11):5943-5951.(Clone-specific)
- Freeman GJ, Cardoso AA, Boussiotis VA, et al. The BB1 monoclonal antibody recognizes both cell surface CD74 (MHC class II-associated invariant chain) as well as B7-1 (CD80), resolving the question regarding a third CD28/CTLA-4 counterreceptor. *J Immunol*. 1998; 161(6):2708-2715.(Clone-specific)
- Koulouva L, Clark EA, Shu G, Dupont B. The CD28 ligand B7/BB1 provides costimulatory signal for alloactivation of CD4+ T cells. *J Exp Med*. 1991; 173(3):759-762.(Clone-specific)
- Schwartz RH. Costimulation of T lymphocytes: the role of CD28, CTLA-4, and B7/BB1 in interleukin-2 production and immunotherapy. *Cell*. 1992; 71(7):1065-1068.(Clone-specific: Activation)