Technical Data Sheet

Alexa Fluor® 700 Mouse Anti-Human CD80

Product Information

Material Number: 561133

B7.1; B7-1; Activation B7-1 antigen; B7; BB1; CD28LG; CD28LG1; LAB7 Alternate Name:

50 tests Size: 5 μl Vol. per Test: L307.4 Clone: Mouse IgG1, κ Isotype: Reactivity: QC Testing: Human

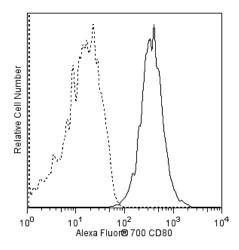
Workshop:

Storage Buffer: Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium

azide

Description

The L307.4 monoclonal antibody specifically reacts with B7/BB1, a 60 kDa transmembrane glycoprotein which was clustered as CD80 in the Fifth International Workshop on Human Leukocyte Differentiation Antigens. 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 on activated CD4-positive and CD8-positive 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 by anti-CD28 or by CD80 results in T-cell activation and a signal for IL-2 production.



Flow cytometric analysis of CD80 expression on Raii cells. Human Raji cells were stained with either Alexa Fluor® 700 Mouse Anti-Human CD80 antibody (Cat. No. 561133: solid line histogram) or with a Alexa Fluor® 700 Mouse IgG1, κ Isotype Control (Cat. No. 557882 used at the same concentration; dashed line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable cells. Flow cytometry was performed on a BD LSR™ II Flow Cytometer System.

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 to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

Application Notes

Application

Flow cytometry Routinely Tested

BD Biosciences

bdbiosciences.com

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Suggested Companion Products

Catalog Number	Name	Size	Clone
557882	Alexa Fluor® 700 Mouse IgG1, κ Isotype Control	0.1 mg	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 × 10⁶ cells in a 100-µl experimental sample (a test).
- 2. An isotype control should be used at the same concentration as the antibody of interest.
- 3. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
- 4. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
- 5. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
- 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.
- 7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 8. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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. (Biology) 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. (Biology)

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

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. (Biology)

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