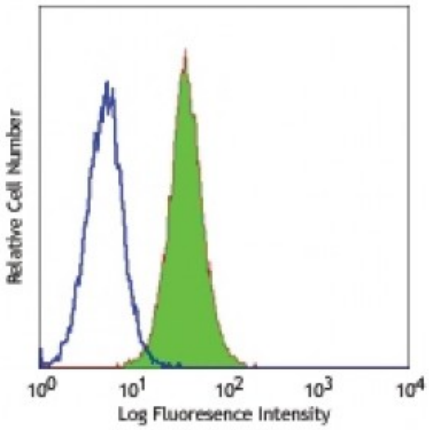
SONY

Product Data Sheet

Alexa Fluor® 488 anti-human CD80

Catalog # / Size:	2126065 / 25 tests 2126070 / 100 tests
Clone:	2D10
Isotype:	Mouse IgG1, κ
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Workshop Number:	VI CD80.1
Concentration:	Lot-specific



Human B-cell Burkitt's lymphoma cell line Daudi stained with 2D10 Alexa Fluor® 488

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.
Application Notes:	Additional reported applications (for the relevant formats) include: *in vitro* blocking of T cell activation, immunohistochemical staining of acetone-fixed frozen tissue sections2, immunoprecipitation, and Western blotting3. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 305212).

Application References:

1. Kishimoto T, *et al.* Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London.
2. Battifora M. 1998. *J. Clin. Endocr. Metab.* 83:4130. (IHC)
3. Van der Merwe PA, *et al.* 1997. *J. Exp. Med.* 185:3. (WB)
4. Jayakumar A, *et al.* 2008. *Infect. Immun.* 76:2138. PubMed
5. Schubert DA, *et al.* 2012. *J. Exp Med.* 209:335. PubMed

Description: CD80, also known as B7-1, B7, and BB1, is a 60 kD single chain type I glycoprotein belonging to the immunoglobulin superfamily. CD80 is expressed on activated B and T cells, macrophages, and dendritic cells. CD80 binds to CD28 and CD152 (CTLA-4). Along with CD86, CD80 plays a critical role in regulation of T cell activation. The interaction of CD80 with CD28 provides a potent costimulatory signal for T cell activation through the CD3 complex, while its interaction with CTLA-4 provides an inhibitory signal for T cell activation.

Antigen References:

1. Freeman G, *et al.* 1991. *J. Exp. Med.* 174:625.
2. Linsley P, *et al.* 1996. *Immunity* 4:535.
3. Linsley P, *et al.* 1991. *J. Exp. Med.* 174:561.

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com