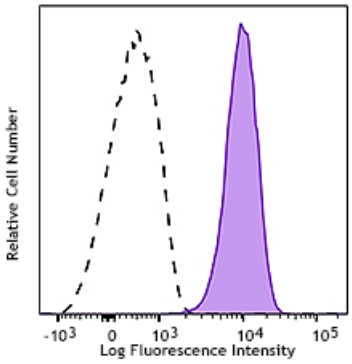
SONY

Product Data Sheet

Brilliant Violet 750™ anti-human CD80

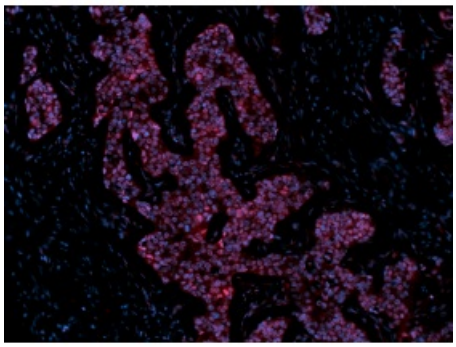
Catalog # / Size:	2126240 / 100 tests 2126235 / 25 tests
Clone:	2D10
Isotype:	Mouse IgG1, κ
Immunogen:	Full-length FOXP3 protein
Reactivity:	Human, Other
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Workshop Number:	VI CD80.1
Concentration:	Lot-specific



Human B-cell Burkitt's lymphoma cell line Raji was stained with CD80 (clone 2D10) Brilliant Violet 750™ (filled histogram) or mouse IgG1, κ Brilliant Violet 750™ isotype control (open histogram).

Applications:

Applications:	Flow Cytometry



Formalin-fixed paraffin-embedded human breast cancer tissue slices were deparaffinized and rehydrated. Antigen retrieval was done with Tris-Buffered Saline 1X (1.0 M, pH 7.4) at 95°C for 40 minutes, washed with PBS/0.05% Tween 20 twice for five minutes, permeabilized with 0.5% Triton X-100 for ten minutes, and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the slices were stained with 5 µg/mL anti-EGFR (clone A19002A) Alexa Fluor® 647 (red) at 4°C overnight. Nuclei were counterstained with DAPI (green). The image was captured with a 10X objective.

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

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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 750™ excites at 405 nm and emits at 750 nm. The bandpass filter 780/60 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 750™ is a trademark of Sirigen Group Ltd.

Application Notes:

Additional reported applications (for the relevant formats) include: *in vitro* blocking of T cell activation, immunohistochemical staining of acetone-fixed frozen tissue sections[2], immunoprecipitation, and Western blotting[3].

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
6. Wen T, *et al.* 2014. *J Immunol.* 192:5481. 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.