SONY

Product Data Sheet

Brilliant Violet 605™ anti-human IFN-γ

Catalog # / Size: 3132710 / 100 tests
3132705 / 25 tests

Clone: B27

Isotype: Mouse IgG1, κ

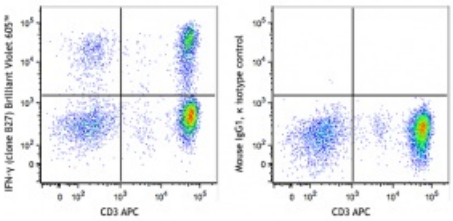
Immunogen: E. coli-expressed recombinant human IFN-γ

Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

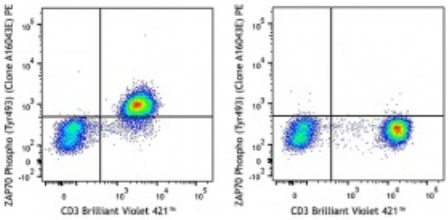
Concentration: Lot-specific



PMA+Ionomycin-stimulated (4 hours) human peripheral blood lymphocytes were fixed and permeabilized then intracellularly stained with CD3 APC (clone UCHT1) and either IFN-γ (clone B27) Brilliant Violet 605™ (left) or Mouse IgG1, κ Brilliant Violet 605™ isotype control (right).

Applications:

Applications: Intracellular Flow Cytometry



Human peripheral blood lymphocytes were stimulated by CD3 and CD28 cross-linking (left) or unstimulated (right), fixed with Fixation Buffer (Cat. No. 2704005), permiabilized with Intracellular Staining Permeabilization Wash Buffer (Cat. No. 2705010), then intracellularly stained with CD3 Brilliant Violet 421™ and anti-ZAP70 Phospho (Tyr 493) (clone A16043E) PE. For CD3 and CD28 cross-linking, cells were incubated with anti-CD3 and anti-CD28 on ice for 15 minutes followed by Purified anti-Mouse Ig on ice for 15 minutes, and

incubated at 37°C for 2 minutes.

Recommended Usage:

Each lot of this antibody is quality control tested by intracellular 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.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605™ is a trademark of Sirigen Group Ltd.

Application Notes:

Flow Cytometry[2]: The fluorochrome-labeled B27 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IFN-γ -producing cells within mixed cell populations.

Application References:

1. Favre C, *et al.* 1989. *Molec. Immunol.* 26:17. (Neut)
2. Kaur A, *et al.* 2002. J Virol. 76:3646.
3. Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5. (Neut)
4. Andersson U, *et al.* 1999. *Detection and quantification of gene expression*. New York:Springer-Verlag.
5. Rout N, *et al.* 2010. *PLoS One* 5:e9787. (FC)
6. Acosta-Rodriguez EV, *et al.* 2007. *Nat. Immunol*. 9:942-9. (Neut)
7. Gangur V, *et al*. 1998. *FASEB J.* 12:705-13. (Neut)

Description:

Interferon-γ is a potent multifunctional cytokine which is secreted primarily by activated NK cells and T cells. Originally characterized based on anti-viral activities, IFN-γ also exerts anti-proliferative, immunoregulatory, and proinflammatory activities. IFN-γ can upregulate MHC class I and II antigen expression by antigen-presenting cells. The B27 antibody reacts with the human interferon-γ. The B27 antibody can neutralize the bioactivity of natural or recombinant IFN-γ.

Antigen References:
1. Fitzgerald K, *et al.* Eds. 2001. The Cytokine FactsBook. Academic Press San Diego.
2. De Maeyer E, *et al.* 1992. *Curr. Opin. Immunol.* 4:321.
3. Farrar M, *et al.* 1993. *Annu. Rev. Immunol.* 11:571.
4. Gray P, *et al.* 1987. *Lymphokines* 13:151.