Product Data Sheet

PE/Dazzle™ 594 anti-human IFN-γ

Catalog # / Size: 3112730 / 100 tests

3112725 / 25 tests

Clone: 4S.B3

Isotype: Mouse IgG1, κ

Immunogen: Partially purified, native human IFN-γ

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

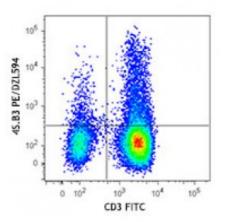
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



PMA+ Ionomycin-human peripheral blood lymphocytes (in the presence of monensin for 6 hours) were surface stained with CD3 FITC, fixed, permeabilized, and then stained with IFN-γ (clone 4S.B3) PE/Dazzle™ 594 (top) or mouse IgG1, κ PE/Dazz

Applications:

Applications: Flow Cytometry

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 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.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application

Notes:

ELISA or ELISPOT Detection5: The biotinylated 4S.B3 antibody is useful as a detection antibody for a sandwich

ELISA or ELISPOT assay, when used in conjunction with purified NIB42 antibody (Cat. No. 502402/502404) or purified

MD-1 antibody (Cat. No.

507502/507513) as the capture

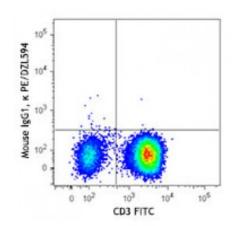
antibody.

Flow Cytometry^{3,4,6-8}: The

fluorochrome-labeled 4S.B3 antibody is

useful for intracellular

immunofluorescent staining and flow cytometric analysis to identify IFN-γ - producing cells within mixed cell



populations.

Additional reported applications (for the relevant formats) include:

neutralization^{1,2}, Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponintreated tissue sections, and immunocytochemistry. The 4S.B3 antibody can neutralize the bioactivity of natural or recombinant IFN-γ.

Note: For testing human IFN-γ in serum or plasma, BioLegend's ELISA Max[™] Sets (Cat. No. 430101 to 430106) are specially developed and recommended.

Application References:

- 1. Meager A, et al. 1984. J. Interferon Res. 4:619. (Neut)
- 2. Meager A, 1987. *Lymphokines and Interferons: A Practical Approach*. IRL Press Ltd, Oxford, p. 105. (Neut)
- 3. Sester M, et al. 2002. J. Virol. 76:3748. (ICFC)
- 4. Infante-Duarte C, et al. 2000 J. Immunol. 165:6107. (ICFC)
- 5. Goodier M, et al. 2000. J. Immunol. 165:139. (ELISA)
- 6. Chen H, et al. 2005. J. Immunol. 175:591. (ICFC)
- 7. Smeltz RB, 2007. J. Immunol. 178:4786. (ICFC)
- 8. Iwamoto S, et al. 2007. J. Immunol. 179:1449. (ICFC) PubMed
- 9. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (ICFC)

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.

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