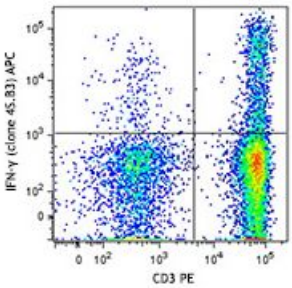
SONY

Product Data Sheet

APC anti-human IFN-γ

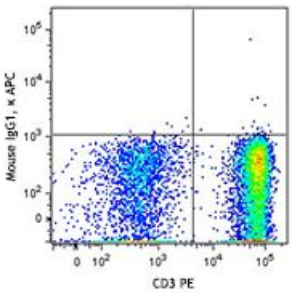
Catalog # / Size:	3112555 / 25 tests 3112560 / 100 tests
Clone:	4S.B3
Isotype:	Mouse IgG1, κ
Immunogen:	Partially purified, native human IFN-γ
Reactivity:	Human, Non-human primate, Other
Preparation:	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions.
Formulation:	µg format: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. Test format: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide, 0.2% (w/v) BSA (USA origin).
Workshop Number:	VI C-7
Concentration:	NULL



PMA+ionomycin stimulated (6 hours) human peripheral blood lymphocytes (in the presence of monensin) were stained with CD3 PE, then fixed with Fixation Buffer (Cat# 420801), and permeabilized with Permeabilization Wash Buffer (Cat# 421002). Cells were then stained with IFN-γ (clone 4S.B3) APC (top) or mouse IgG1, κAPC isotype control (bottom).

Applications:

Applications:	Intracellular Staining for Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.

Application Notes:

Other or ELISPOT Detection5: The biotinylated 4S.B3 antibody is useful as a detection antibody for a sandwich Other 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, saponin-treated 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, Other 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. (Other)
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)
10. Longhi MS, *et al.* 2014. *PLoS One.* 9:87956. PubMed
11. Goetzmann JE, *et al.* 2014. *PNAS.* 111:8873. PubMed
12. Tian X, *et al.* 2015. *J Immunol.* 194:3873. PubMed

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.
4. Gray P, *et al.* 1987. *Lymphokines* 13:151.

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.