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Product Data Sheet

Alexa Fluor® 647 anti-mouse IL-17F

Catalog # / Size: 517003 / 25 µg
517004 / 100 µg

Clone: 9D3.1C8

Isotype: Mouse IgG1, κ

Immunogen: Mouse IL-17F-OVA

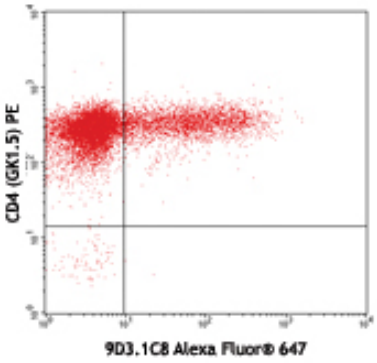
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

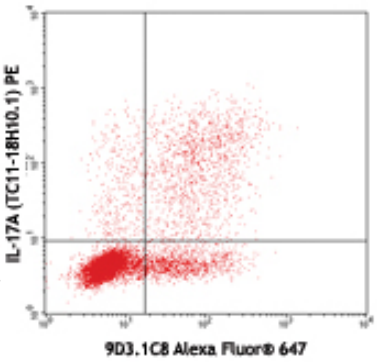
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



PdBU/ionomycin-stimulated (5 hours) Th17-polarized CD4$^+$ T cells from C57BL/6 mouse lymph nodes surface stained with CD4 (GK1.5) PE, then intracellularly stained with 9D3.1C8 Alexa Fluor® 647



PdBU/ionomycin-stimulated (5 hours) Th17-polarized CD4$^+$ T cells from C57BL/6 mouse lymph nodes intracellularly stained with IL-17A (TC11-18H10.1) PE and 9D3.1C8 Alexa Fluor® 647

Applications:

Applications: ICFC - *Quality tested*

Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.
** Alexa Fluor® 647 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 647 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Description: Interleukin 17F (IL-17F) is a 37 kD IL-17 family member. The IL-17 family consists of six members including IL-17 (also called IL-17A), IL-17B, IL-17C, IL-17D, IL-17E (also called IL-25), and IL-17F. IL-17F shares the strongest similarity to IL-17A and forms a homodimer or heterodimer with IL-17A. It is produced by Th17 cells, mast cells, basophils, and epithelial cells. IL-17F is an important regulator of inflammatory responses. It is involved in host defense against mucoepithelial infection by Staphylococcus aureus and Citrobacter rodentium. Over expression of IL-17F gene in the airway of mice is associated with airway neutrophilia, the induction of many cytokines, an increase in airway hyperreactivity, and mucus hyper-secretion. IL-17F is also involved in cancer immunity and autoimmune responses. IL-17F, like IL-17A, depends on IL-17R for its signaling *in vitro* and *in vivo*. P38 MAPK, ERK1/2, Act1 (NF-$_K$B activator protein 1), and TRAF6 are involved in IL-17F signaling.

Antigen References:
1. Dong C. 2008. *Immunol. Rev.* 226:80.
2. Kolls JK, *et al.* 2004. *Immunity* 21:467.
3. Aggarwal S, *et al.* 2002. *J. Leukoc. Biol.* 71:1.
4. Yang XO, *et al.* 2008. *J. Exp. Med.* 205:1063.
5. Ishigame H, *et al.* 2009. *Immunity* 30:108.
6. Hu Y, *et al.* 2010. *J. Immunol.* 184:4307.

Related Products:

Product	Clone	Application
Alexa Fluor® 647 Mouse IgG1, κ Isotype Ctrl (ICFC)	MOPC-21	ICFC, IF
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC

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