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Product Data Sheet

Alexa Fluor® 647 anti-mouse IL-27 p28

Catalog # / Size: 516903 / 25 µg
516904 / 100 µg

Clone: MM27-7B1

Isotype: Mouse IgG2a

Immunogen: Mouse IL-27-OVA

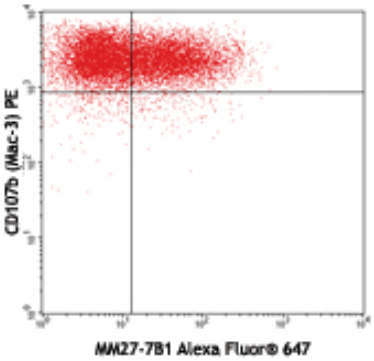
Reactivity: Mouse

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.

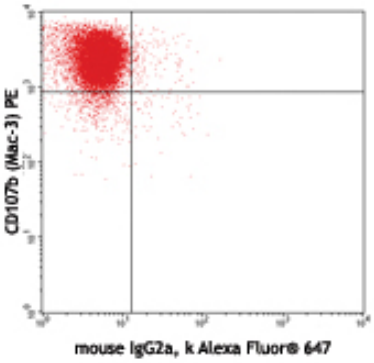
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

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.**



Thioglycolate-elicited Balb/c peritoneal macrophages primed with IFN-γ for 2 hours, followed by overnight LPS-stimulation, then intracellularly stained with CD107b (Mac-3) PE and MM27-7B1 Alexa Fluor® 647 (top) or mouse IgG2a Alexa Fluor® 647 isotype control (bottom).



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 ≤ 0.06 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.

Application Notes: Clone MM27-7B1 specifically recognizes the p28 subunit of IL-27.[1]

Application References:
1. Uyttenhove C, *et al.* 2011. *J. Leukoc. Biol.* 89:1001.

Description: Interleukin IL-27 is a heterodimeric cytokine consisting of EBV-induced gene-3 (EBI3, an IL-12 P40-related protein) and P28 (a newly discovered IL-12 P35-related protein). It is a member of the IL-6/IL-12 cytokine family and mainly produced by antigen-presenting cells, including macrophages and dendritic cells. IL-27 acts on T cells and NK cells. It has been reported that IL-27 drives rapid clonal expansion of naïve $CD4^+$ T cells, promotes Th1 polarization, and IFN-γ production in synergy with IL-12. The IL-27 induced Th1 differentiation was mediated by rapid and marked up-regulation of ICAM-1/LFA-1 interaction in a STAT1-dependent manner. IL-27 has an anti-inflammatory function by enhancing Th1 cell differentiation, a potent antitumor activity, through $CD8^+$ T cell and NK cell activation and a potential therapeutic role for autoimmune disease by inhibiting Th-17 development. IL-27 mediates its biological effects through its receptor, WSX-1/T cell cytokine receptor (TCCR), which is homologous to the IL-12Rβ2 subunit. Protein gp130 serves as a functional signal-transducing molecule for IL-27.

Antigen References:
1. Salcedo R, *et al.* 2004. *J. Immunol.* 173:7170.
2. Owaki T, *et al.* 2005. *J. Immunol.* 175:2191.
3. Pflanz S, *et al.* 2002. *Immunity* 16:779.
4. Diveu C, *et al.* 2009. *J. Immunol.* 182:5748.
5. Morishima N, *et al.* 2005. *J. Immunol.* 175:1686.
6. Liu J, *et al.* 2007. *J. Exp. Med.* 204:141.

Related Products:

Product	Clone	Application
Alexa Fluor® 647 Mouse IgG2a, κ Isotype Ctrl (ICFC)	MOPC-173	ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC

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