SONY

Product Data Sheet

PE/Cy7 anti-mouse IL-27 p28

Catalog # / Size: 3184550 / 100 µg

Clone: MM27-7B1

Isotype: Mouse IgG2a

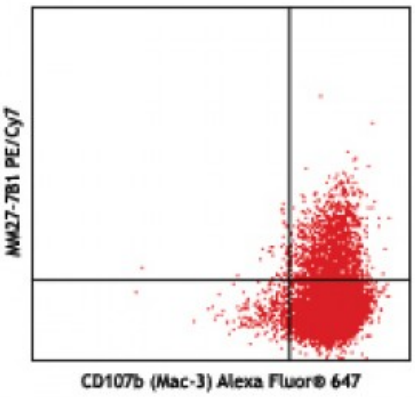
Immunogen: Mouse IL-27-OVA

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

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

Concentration: 0.2



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) Alexa Fluor® 647 and MM27-7B1 PE/Cy7

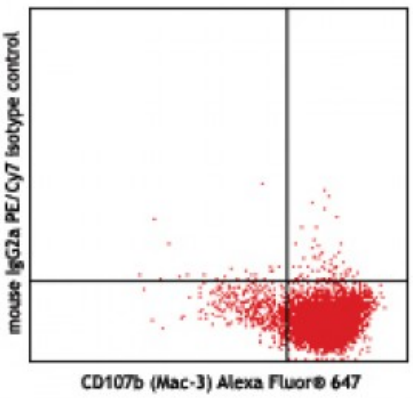
Applications:

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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Clone MM27-7B1 specifically recognizes the p28 subunit of IL-27.1

ELISA Capture: To measure mouse IL-27 p28, this antibody can be used as a capture antibody in sandwich ELISA format and paired with the biotinylated B02P6E6 antibody (Cat. No. 525904) as the detection antibody. Recombinant Mouse IL-27 (ELISA Std.) (Cat. No. 577409) can be used as the protein standard.
Flow Cytometry: The fluorochrome-labeled MM27-7B1 antibody is useful for intracellular and membrane-bound immunofluorescent staining and flow cytometric analysis to identify granulysin-producing cells within mixed cell populations.
Note: For testing mouse IL-27 p28



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) Alexa Fluor® 647 and mouse IgG2a PE/Cy7 isotype control

heterodimer, plasma or cell culture supernatant, LEGEND MAX™ Mouse IL-27 Heterodimer ELISA Kit with Pre-coated Plates (Cat. No. 438707 & 438708) are specially developed and recommended.

Application References:

1. Uyttenhove C, *et al.* 2011. *J. Leuko. Biol.* 89:1001.

Description: 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, and promotes Th1 polarization and IFN-γ production in synergy with IL-12. The IL-27-induced Th1 differentiation was mediated by rapid and marked upregulation of ICAM-1/LFA-1 interaction in a STAT1-dependent manner. IL-27 exhibits anti-inflammatory function by enhancing Th1 cell differentiation, a potent antitumor activity, through $CD8^+$ T cell and NK cell activation. It also plays a potential therapeutic role in 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*&nb