

**PE anti-mouse LAP (TGF-β1)**

**Catalog # / Size:** 1307020 / 100 µg  
1307015 / 25 µg

**Clone:** TW7-16B4

**Isotype:** Mouse IgG1, κ

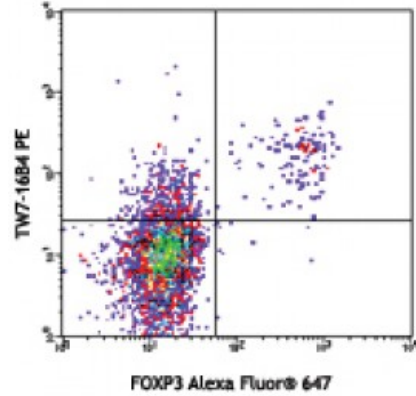
**Immunogen:** Mouse *Tgfb1*-transduced P3U1 cells

**Reactivity:** Mouse

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

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

**Concentration:** NULL



C57BL/6 mouse splenocytes were stimulated with anti-mouse CD3, CD28, and recombinant mouse IL-2 for 48-hours, then surface stained with CD4 FITC and LAP (TGF-β1) (clone TW7-16B4) PE (top) or mouse IgG1, κ PE isotype control (bottom). This was f

**Applications:**

**Applications:** Flow Cytometry

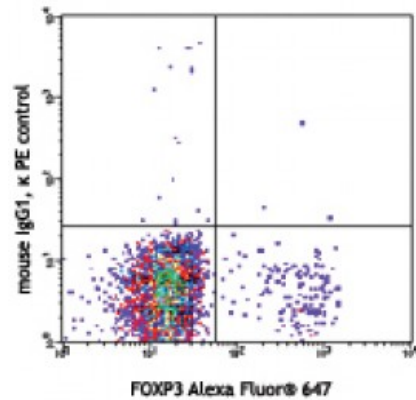
**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Clone TW7-16B4 has been reported to not cross-react with bovine LAP.<sup>2</sup> Several anti-LAP antibody clones have been compared and characterized for their LAP reactivity.<sup>2</sup> TW7-16B4 recognizes recombinant LAP, latent TGF-β, and pro-TGF-β.

Additional reported applications (for relevant formats) include: Western blotting<sup>1</sup> and immunoprecipitation<sup>1</sup>.

**Application References:**

1. Oida T, *et al.* 2010. *PLoS One* 5:e15523. (FC, IP, WB)
2. Oida T, *et al.* 2011. *PLoS One* 6:e18365. (Neut)
3. Joly MS, *et al.* 2014. *J Immunol.* 193:3947. [PubMed](#)



**Description:** Transforming growth factor β (TGF-β) is a cytokine that has critical functions in

the immune response by regulating Treg and Th17 cells. TGF- $\beta$  is first synthesized as pro-TGF- $\beta$  and then it is cleaved by furin proprotein convertase in the Golgi apparatus to produce the dimeric propeptides called latency-associated peptide (LAP) that non-covalently associates with the dimeric mature TGF- $\beta$  to prevent its activity. This complex can further associate with latent-TGF- $\beta$ -binding protein (LTBP) to produce a large latent form for deposition onto the extracellular matrix. The latent-TGF- $\beta$  can be expressed on the membrane of activated Treg cells, immature dendritic cells, megakaryocytes, and platelets.

**Antigen  
References:**

1. Oida T, *et al.* 2010. *PLoS One* 5:e15523.
2. Tran D, *et al.* 2009. *P. Natl. Acad. Sci. USA* 106:13445.
3. Ochi H, *et al.* 2006. *Nat. Med.* 12:627.
4. Oida T, *et al.* 2003.