

APC anti-mouse LAP (TGF-β1)

Catalog # / Size: 1307025 / 25 µg
1307030 / 100 µg

Clone: TW7-16B4

Isotype: Mouse IgG1, κ

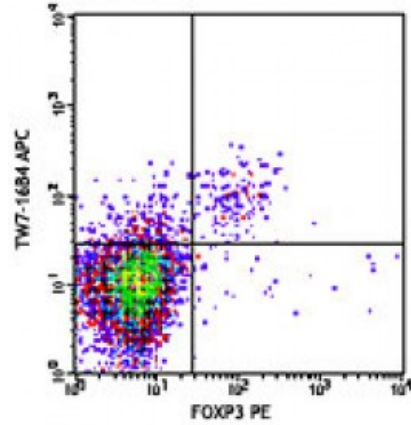
Immunogen: Mouse *Tgfb1*-transduced P3U1 cells

Reactivity: Mouse

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

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

Concentration: 0.2



CD3+CD28+IL-2-stimulated C57BL/6 mouse splenocytes (48 hours) were surface stained with CD4 FITC and LAP (clone TW7-16B4) APC (top) or mouse IgG1, κ APC isotype control (bottom), then intracellularly stained with FOXP3 PE. Data shown was generated b

Applications:

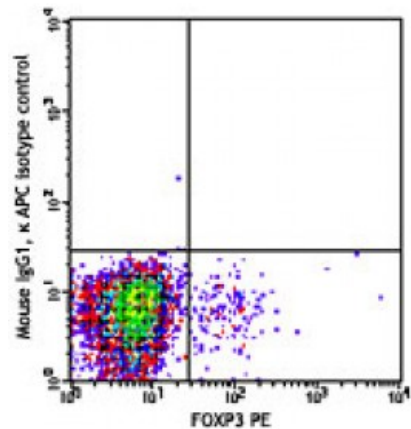
Applications: Flow Cytometry

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.² Several anti-LAP antibody clones have been compared and characterized for their LAP reactivity.² TW7-16B4 recognizes recombinant LAP, latent TGF-β, and pro-TGF-β.

Additional reported applications (for relevant formats) include: Western blotting¹ and immunoprecipitation¹.

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)



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-β is first synthesized

as pro-TGF- β and then it is cleaved by furin proprotein convertase in the Golgi apparatus to produce the dimeric propeptides called latency-associate peptide (LAP) that non-covalently associates with the dimeric mature TGF- β to prevent its activity. This complex can further associate with latent-TGF- β -binding protein (LTBP) to produce a large latent form for deposition onto the extracellular matrix. The latent-TGF- β 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.