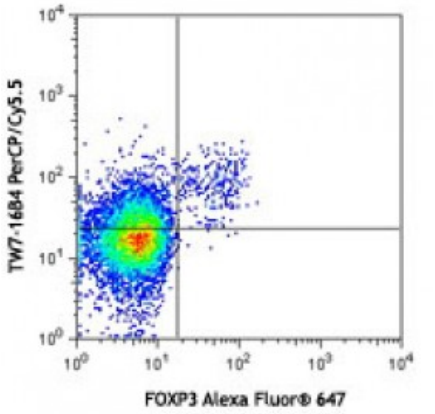
SONY

Product Data Sheet

PerCP/Cy5.5 anti-mouse LAP (TGF-β1)

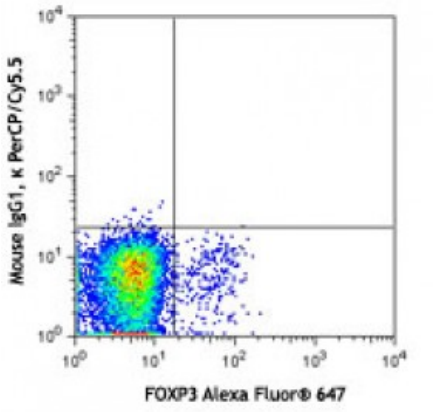
Catalog # / Size:	1307050 / 100 µg 1307045 / 25 µg
Clone:	TW7-16B4
Isotype:	Mouse IgG1, κ
Immunogen:	Mouse *Tgfb1*-transduced P3U1 cells
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.2



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) PerCP/Cy5.5 (top) or mouse IgG1, κ PerCP/Cy5.5 isotype control (

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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
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)
3. Sharma SK, *et al.* 2015. *J Immunol.* 194:5529. 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-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.