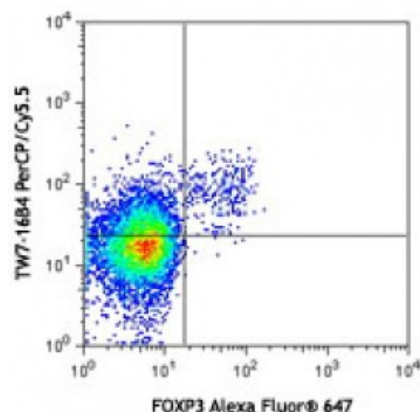


## PerCP/Cy5.5 anti-mouse LAP (TGF- $\beta$ 1)

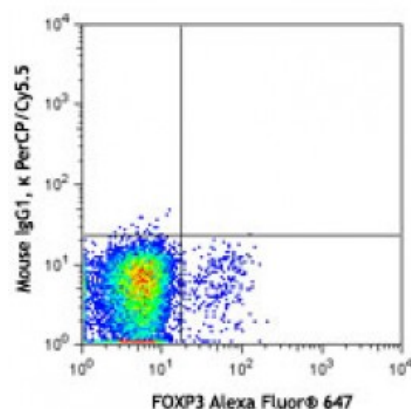
<b>Catalog # / Size:</b>	1307045 / 25 $\mu$ g 1307050 / 100 $\mu$ g
<b>Clone:</b>	TW7-16B4
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Immunogen:</b>	Mouse <i>Tgfb1</i> -transduced P3U1 cells
<b>Reactivity:</b>	Mouse
<b>Preparation:</b>	The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Concentration:</b>	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- $\beta$ 1) (clone TW7-16B4) PerCP/Cy5.5 (top) or mouse IgG1,  $\kappa$  PerCP/Cy5.5 isotype control (

## Applications:

<b>Applications:</b>	Flow Cytometry
<b>Recommended Usage:</b>	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 $\leq 0.25$ 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.

<b>Application Notes:</b>	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- $\beta$ , and pro-TGF- $\beta$ .
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Additional reported applications (for relevant formats) include: Western blotting1 and immunoprecipitation1.

<b>Application References:</b>	1. Oida T, <i>et al.</i> 2010. <i>PLoS One</i> 5:e15523. (FC, IP, WB) 2. Oida T, <i>et al.</i> 2011. <i>PLoS One</i> 6:e18365. (Neut) 3. Sharma SK, <i>et al.</i> 2015. <i>J Immunol.</i> 194:5529. <a href="#">PubMed</a>
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**Description:** Transforming growth factor  $\beta$  (TGF- $\beta$ ) 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-associate 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.