

APC anti-human LAP (TGF- β 1) Antibody

| | |
|--------------------------|---|
| Catalog# / Size | 300005 / 25 tests 300006 / 100 tests |
| Clone | S20006A |
| Regulatory Status | RUO |
| Other Names | Latency Associated Peptide (LAP), Transforming growth factor beta 1 (TGF-b1), TGFB1, DPD1 |
| Isotype | Mouse IgG1, κ |
| Description | TGF- β 1 (transforming growth factor β 1) is a multifunctional cytokine which regulates cellular proliferation and differentiation. It is ubiquitously expressed by many types of cells. Platelets express high level of TGF- β . TGF- β is synthesized as a large protein precursor and then secreted as a complex of TGF- β and LAP (latency-associated peptide), in which LAP noncovalently associates with the dimeric mature TGF- β to prevent its activity. TGF- β requires activation before it binds to its receptors and exerts functions. It has been reported that LAP-TGF- β binds to the integrins α v β 1, α v β 6, α v β 8, and α 8 β 1 through RGD domain. TGF- β plays important roles in control proliferation and differentiation of epithelial cells, endothelial cells, fibroblasts, neurons, osteoclasts, and osteoblasts. TGF- β is believed to be important in the regulation of the development of Treg, Th17, and Th9 cells. A recent study has shown that LAP is an activated Treg surface marker. |

Product Details

| | |
|-------------------------------|---|
| Reactivity | Human |
| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Immunogen | Human TGF- β 1 transfected cells |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.) |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze. |
| Application | FC - Quality tested |
| 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 5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. |
| Excitation Laser | Red Laser (633 nm) |
| Application Notes | Clone S2006A can completely block the binding of clones TW4-2F8 and TW4-6H10 on target cells. |
| RRID | AB_2894445 (BioLegend Cat. No. 300005) AB_2894445 (BioLegend Cat. No. 300006) |

Antigen Details

| | |
|------------------|--|
| Structure | About 400 amino acids, N-terminal signal peptide is required for secretion from a cell, a pro-region (LAP) and C-terminal region that becomes the mature TGF- β molecule following its |
|------------------|--|

release from the pro-region by proteolytic cleavage.

| | |
|---------------------------|--|
| Distribution | Ubiquitously expressed by many kinds of cells |
| Function | Multifunctional cytokine, regulates cells proliferation, and differentiation |
| Ligand/Receptor | TGF- β RI, -RII, -RIII, CD105, LTBP, integrins |
| Cell Type | B cells, Dendritic cells, T cells, Tregs |
| Biology Area | Adaptive Immunity, Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Immunology, Inhibitory Molecules, Neuroinflammation, Neuroscience, Signal Transduction |
| Molecular Family | Cytokines/Chemokines, Growth Factors |
| Antigen References | <ol style="list-style-type: none">1. Yi JJ, <i>et al.</i> 2010. <i>Cell</i>. 142:144.2. Tran DQ, <i>et al.</i> 2009. <i>Blood</i>. 113:5125.3. Lu M, <i>et al.</i> 2002. <i>J Cell Sci</i>. 115:4641.4. Khalil N. 1999. <i>Microbes Infect</i>. 1:1255. |
| Gene ID | 7040 |

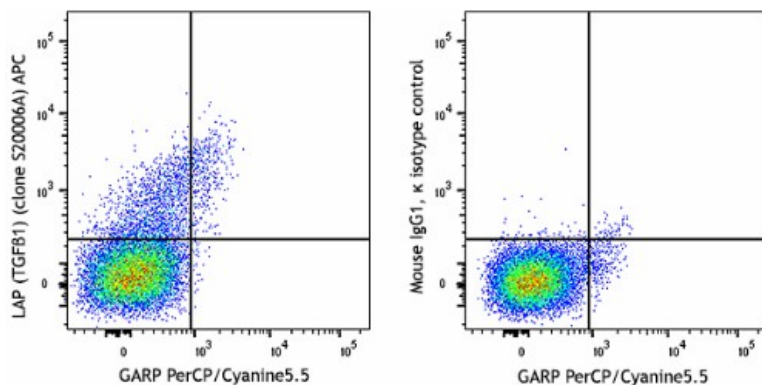
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human LAP (TGF- β 1), PE anti-human LAP (TGF- β 1), APC anti-human LAP (TGF- β 1), FITC anti-human LAP (TGF- β 1), PE/Cyanine7 anti-human LAP (TGF- β 1), TotalSeq™-A1244 anti-human LAP (TGF- β 1), TotalSeq™-B1244 anti-human LAP (TGF- β 1), TotalSeq™-C1244 anti-human LAP (TGF- β 1)

Product Data



Human peripheral blood mononuclear cells were stimulated with PHA for 2 days. Cells were then stained with GARP (LRRC32) PerCP/Cyanine5.5 and anti-human LAP (TGF β 1 Clone S20006A) APC (left) or mouse IgG1, κ APC isotype control (right).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587