

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human LAP in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 27235
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human LAP (TGF- $\beta$ 1)
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m filtered solution in PBS.

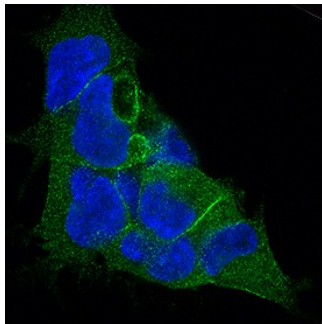
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
<b>Immunocytochemistry</b>	3-25 $\mu$ g/mL	See Below
<b>Neutralization</b>	Measured by its ability to neutralize LAP TGF- $\beta$ 1 inhibition of TGF- $\beta$ 1 growth inhibition in the HT-2 mouse T cell line. Tsang, M. <i>et al.</i> (1995) Cytokine 7:389. The Neutralization Dose (ND <sub>50</sub> ) is typically 1-5 $\mu$ g/mL in the presence of 500 ng/mL Recombinant Human LAP TGF- $\beta$ 1 and 1 ng/mL Recombinant Human TGF- $\beta$ 1.	

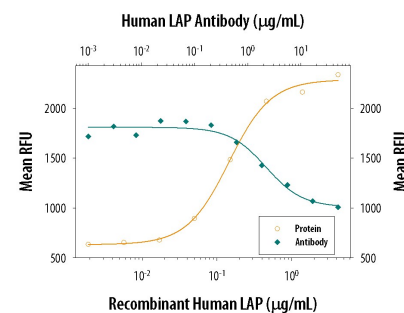
## DATA

### Immunocytochemistry



**LAP (TGF- $\beta$ 1) in HEK293 Human Cell Line.** LAP (TGF- $\beta$ 1) was detected in immersion fixed HEK293 human embryonic kidney cell line using Mouse Anti-Human LAP (TGF- $\beta$ 1) Monoclonal Antibody (Catalog # MAB246) at 3  $\mu$ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Mouse IgG Secondary Antibody (green; Catalog # NL009) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Neutralization



**LAP TGF- $\beta$ 1 Inhibition of TGF- $\beta$ 1 Activity and Neutralization by Human LAP TGF- $\beta$ 1 Antibody.** Recombinant Human LAP TGF- $\beta$ 1 (Catalog # 246-LP) inhibits Recombinant Human TGF- $\beta$ 1 (Catalog # 240-B) growth inhibition activity in the HT-2 mouse T cell line in a dose-dependent manner (orange line). Inhibition of Recombinant Human TGF- $\beta$ 1 (1 ng/mL) activity elicited by Recombinant Human LAP TGF- $\beta$ 1 (500 ng/mL) is neutralized (green line) by increasing concentrations of Human LAP TGF- $\beta$ 1 Monoclonal Antibody (Catalog # MAB246). The ND<sub>50</sub> is typically 1-5  $\mu$ g/mL.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

The TGF- $\beta$  family includes several related proteins (70-80% sequence homology) from mammalian, avian, or *Xenopus* systems that are now designated TGF- $\beta$ 1, TGF- $\beta$ 2, TGF- $\beta$ 1.2, TGF- $\beta$ 3, TGF- $\beta$ 4, and TGF- $\beta$ 5. These proteins are secreted by cells in the form of an inactive complex, referred to as latent TGF- $\beta$ , that consists of TGF- $\beta$  associated non-covalently with a Latency-associated peptide (LAP). These two proteins are synthesized as a single pro-peptide that is cleaved in a post Golgi compartment prior to secretion. Different TGF- $\beta$  family members are naturally associated with their own distinct LAPs.