

DESCRIPTION

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

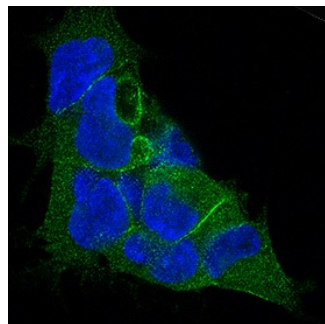
APPLICATIONS

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

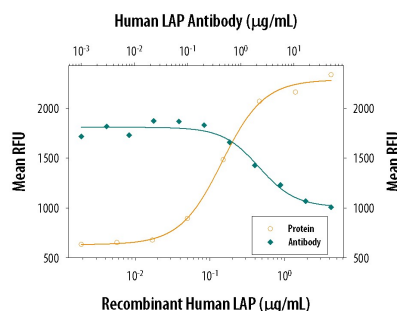
DATA

Immunocytochemistry



LAP (TGF- β 1) in HEK293 Human Cell Line. LAP (TGF- β 1) was detected in immersion fixed HEK293 human embryonic kidney cell line using Mouse Anti-Human LAP (TGF- β 1) Monoclonal Antibody (Catalog # MAB246) at 3 μ 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- β 1 Inhibition of TGF- β 1 Activity and Neutralization by Human LAP TGF- β 1 Antibody. Recombinant Human LAP TGF- β 1 (Catalog # 246-LP) inhibits Recombinant Human TGF- β 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- β 1 (1 ng/mL) activity elicited by Recombinant Human LAP TGF- β 1 (500 ng/mL) is neutralized (green line) by increasing concentrations of Human LAP TGF- β 1 Monoclonal Antibody (Catalog # MAB246). The ND₅₀ is typically 1-5 μ g/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The TGF- β family includes several related proteins (70-80% sequence homology) from mammalian, avian, or *Xenopus* systems that are now designated TGF- β 1, TGF- β 2, TGF- β 1.2, TGF- β 3, TGF- β 4, and TGF- β 5. These proteins are secreted by cells in the form of an inactive complex, referred to as latent TGF- β , that consists of TGF- β 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- β family members are naturally associated with their own distinct LAPs.