

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TGF- $\beta$ RI/ALK-5 in direct ELISAs and Western blots. In direct ELISAs, less than 25% cross-reactivity with recombinant mouse TGF- $\beta$ RI is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human TGF- $\beta$ RI/ALK-5 Leu34-Glu125 Accession # P36897
<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 either lyophilized or as a 0.2 $\mu$ m filtered solution in PBS.

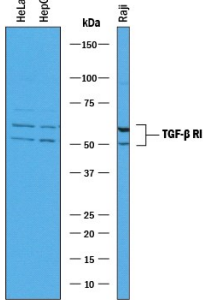
## APPLICATIONS

**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>Western Blot</b>	0.1-0.3 $\mu$ g/mL	See Below
<b>Immunocytochemistry</b>	5-15 $\mu$ g/mL	See Below
<b>ELISA</b>	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human TGF- $\beta$ RI/ALK-5 Monoclonal Antibody (Catalog # <a href="#">MAB3025</a> ).  <i>This product is intended for assay development on various assay platforms requiring antibody pairs.</i>	

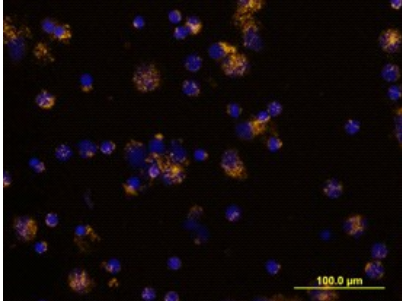
## DATA

**Western Blot**



**Detection of Human TGF- $\beta$  RI/ALK-5 by Western Blot.** Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, HepG2 human hepatocellular carcinoma cell line, and Raji human Burkitt's lymphoma cell line. PVDF membrane was probed with 0.2  $\mu$ g/mL of Goat Anti-Human TGF- $\beta$  RI/ALK-5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3025) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). Specific bands were detected for TGF- $\beta$  RI/ALK-5 at approximately 50 & 56 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunocytochemistry**



**TGF- $\beta$  RI/ALK-5 in Human PBMCs.** TGF- $\beta$  RI/ALK-5 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) stimulated with LPS and monensin using Goat Anti-Human TGF- $\beta$  RI/ALK-5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3025) at 10  $\mu$ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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

TGF- $\beta$  RI, also known as activin-like kinase 5 (ALK-5), is a 55 kDa type I transmembrane serine/threonine receptor kinase. It is ubiquitously expressed and forms a functional heterotetrameric signaling TGF- $\beta$  receptor complex with TGF- $\beta$  RII. The amino acid sequence of human TGF- $\beta$  RI extracellular domain is 91%, 90%, 91%, and 93% identical to that of porcine, mouse, bovine, and rat TGF- $\beta$  RI, respectively.