

DESCRIPTION

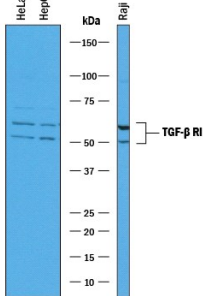
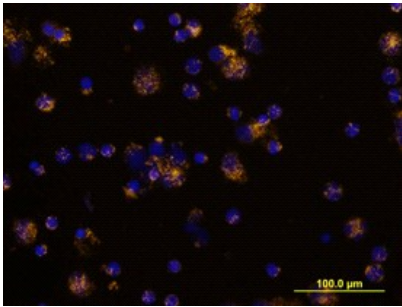
Species Reactivity	Human
Specificity	Detects human TGF- β RI/ALK-5 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse TGF- β RI is observed and less than 5% cross-reactivity with recombinant human (rh) TGF- β RII and rhTGF- β RIII is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human TGF- β RI/ALK-5 Leu34-Glu125 Accession # P36897
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 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
Western Blot	0.1-0.3 μ g/mL	See Below
Immunocytochemistry	5-15 μ g/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human TGF-β 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 μg/mL of Goat Anti-Human TGF-β 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-β RI/ALK-5 at approximately 50 & 56 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>TGF-β RI/ALK-5 in Human PBMCs. TGF-β RI/ALK-5 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) stimulated with LPS and monensin using Goat Anti-Human TGF-β RI/ALK-5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3025) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow; Catalog # NL001) and counter-stained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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

TGF- β 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- β receptor complex with TGF- β RII. The amino acid sequence of human TGF- β RI extracellular domain is 91%, 90%, 91%, and 93% identical to that of porcine, mouse, bovine, and rat TGF- β RI, respectively.