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Datasheet for ABIN7171957

## anti-TGFBR1 antibody (AA 157-244)

### 3 Images

#### Overview

Quantity:	100 µg
Target:	TGFBR1
Binding Specificity:	AA 157-244
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TGFBR1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

#### Product Details

Immunogen:	Recombinant Human TGF-beta receptor type-1 protein (157-244AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

#### Target Details

Target:	TGFBR1
Alternative Name:	TGFBR1 ( <a href="#">TGFBR1 Products</a> )
Background:	Background: Transmembrane serine/threonine kinase forming with the TGF-beta type II serine/threonine kinase receptor, TGFBR2, the non-promiscuous receptor for the TGF-beta

cytokines TGFB1, TGFB2 and TGFB3. Transduces the TGFB1, TGFB2 and TGFB3 signal from the cell surface to the cytoplasm and is thus regulating a plethora of physiological and pathological processes including cell cycle arrest in epithelial and hematopoietic cells, control of mesenchymal cell proliferation and differentiation, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. The formation of the receptor complex composed of 2 TGFBR1 and 2 TGFBR2 Molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFBR1 by the constitutively active TGFBR2. Activated TGFBR1 phosphorylates SMAD2 which dissociates from the receptor and interacts with SMAD4. The SMAD2-SMAD4 complex is subsequently translocated to the nucleus where it modulates the transcription of the TGF-beta-regulated genes. This constitutes the canonical SMAD-dependent TGF-beta signaling cascade. Also involved in non-canonical, SMAD-independent TGF-beta signaling pathways. For instance, TGFBR1 induces TRAF6 autoubiquitination which in turn results in MAP3K7 ubiquitination and activation to trigger apoptosis. Also regulates epithelial to mesenchymal transition through a SMAD-independent signaling pathway through PARD6A phosphorylation and activation.

Aliases: AAT 5 antibody, AAT5 antibody, Activin A receptor type II like kinase 53 kDa antibody, Activin A receptor type II like kinase antibody, Activin A receptor type II like kinase, 53kD antibody, Activin A receptor type II like protein kinase of 53kD antibody, activin A receptor type II-like kinase, 53 kDa antibody, activin A receptor type II-like protein kinase of 53kD antibody, Activin receptor like kinase 5 antibody, Activin receptor-like kinase 5 antibody, ACVRLK 4 antibody, ACVRLK4 antibody, ALK 5 antibody, ALK-5 antibody, ALK5 antibody, LDS1A antibody, LDS2A antibody, MSSE antibody, Serine/threonine protein kinase receptor R4 antibody, Serine/threonine-protein kinase receptor R4 antibody, SKR 4 antibody, SKR4 antibody, TbetaR I antibody, TbetaR-I antibody, TGF beta receptor type 1 antibody, TGF beta receptor type I antibody, TGF beta type I receptor antibody, TGF-beta receptor type I antibody, TGF-beta receptor type-1 antibody, TGF-beta type I receptor antibody, TGFBR 1 antibody, TGFBR1 antibody, TGFBR1 protein antibody, TGFR 1 antibody, TGFR-1 antibody, TGFR1 antibody, TGFR1\_HUMAN antibody, Transforming growth factor beta receptor 1 antibody, Transforming growth factor beta receptor I (activin A receptor type II like kinase, 53kD) antibody, Transforming growth factor beta receptor I antibody, transforming growth factor, beta receptor 1 antibody, transforming growth factor, beta receptor I (activin A receptor type II-like kinase, 53kD) antibody, Transforming growth factor-beta receptor type I antibody

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UniProt: [P36897](#)

Pathways: [Growth Factor Binding](#)

## Application Details

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Application Notes: Recommended dilution: WB:1:500-1:5000, IHC:1:1000-1:2000, IF:1:200-1:500,

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300  
Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4

Preservative: ProClin

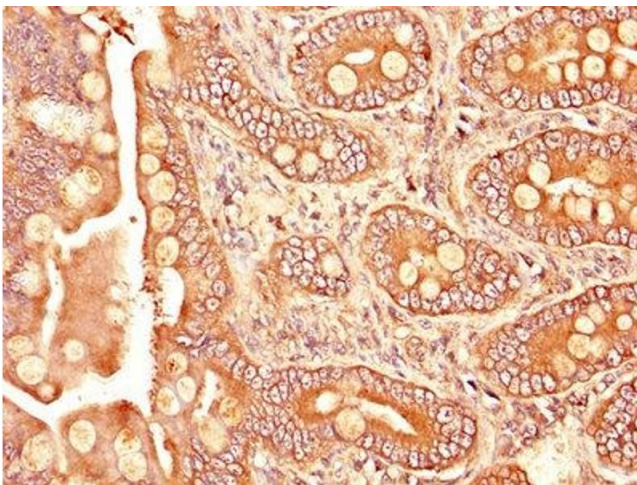
Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C,-80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

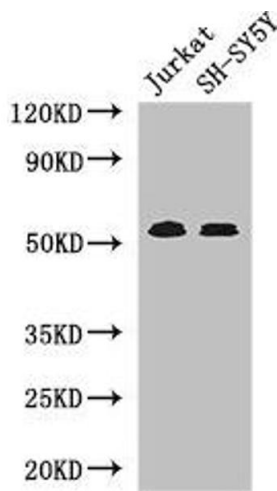
## Images

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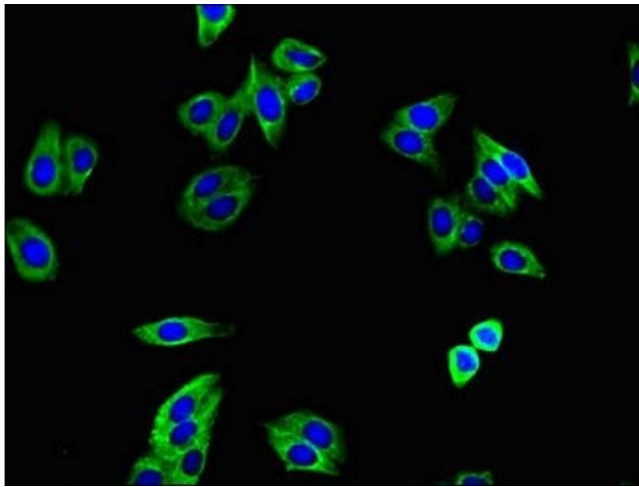
### Immunohistochemistry

**Image 1.** IHC image of ABIN7171957 diluted at 1:1200 and staining in paraffin-embedded human small intestine tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



### Western Blotting

**Image 2.** Western Blot Positive WB detected in: Jurkat whole cell lysate, SH-SY5Y whole cell lysate All lanes: TGFBR1 antibody at 4 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 56, 57, 48 kDa Observed band size: 56 kDa



### Immunofluorescence

**Image 3.** Immunofluorescence staining of HepG2 cells with ABIN7171957 at 1:400, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).