

Datasheet for ABIN4886739

anti-TGFR1 antibody (N-Term)



[Go to Product page](#)

1 Image

3 Publications

Overview

Quantity:	100 µg
Target:	TGFR1
Binding Specificity:	AA 149-186, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TGFR1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-TGF beta Receptor I/TGFR1 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human TGFR1, identical to the related mouse and rat sequences.
Sequence:	HNRTVIHHRV PNEEDPSLDR PFISEGTTLK DLIYDMTT
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-TGF beta Receptor I/TGFR1 Antibody Picoband® (ABIN4886739). Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: TGFBR1

Alternative Name: TGFBR1 ([TGFBR1 Products](#))

Background: Synonyms: TGF-beta receptor type-1, TGFR-1, 2.7.11.30, Activin A receptor type II-like protein kinase of 53kD, Activin receptor-like kinase 5, ALK-5, ALK5, Serine/threonine-protein kinase receptor R4, SKR4, TGF-beta type I receptor, Transforming growth factor-beta receptor type I, TGF-beta receptor type I, TbetaR-I, TGFBR1, ALK5, SKR4,
Tissue Specificity: Found in all tissues examined, most abundant in placenta and least abundant in brain and heart.
Background: Transforming growth factor, beta receptor I is a TGF beta receptor. TGFBR1 is its human gene. The protein encoded by this gene forms a heteromeric complex with type II TGF-beta receptors when bound to TGF-beta, transducing the TGF-beta signal from the cell surface to the cytoplasm. Mutations in this gene have been associated with Loeys-Dietz aortic aneurysm syndrome (LDAS). TGFBR1 regulates cell cycle progression by a unique signaling mechanism that involves its binding to TGFBR2 and activation of TGFBR1. Both are transmembrane serine/threonine receptor kinases. The TGFBR1 receptor may be inactivated in many of the cases of human tumor cells refractory to TGF-beta-mediated cell cycle arrest.

Molecular Weight: 56 kDa

Gene ID: 7046

UniProt: [P36897](#)

Pathways: [Growth Factor Binding](#)

Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat
1. Drera, B., Tadini, G., Barlati, S., Colombi, M. Identification of a novel TGFBR1 mutation in a Loeys-Dietz syndrome type II patient with vascular Ehlers-Danlos syndrome phenotype. (Letter) Clin. Genet. 73: 290-293, 2008. 2. Goudie, D. R., D'Alessandro, M., Merriman, B., Lee, H., Szeverenyi, I., Avery, S., O'Connor, B. D., Nelson, S. F., Coats, S. E., Stewart, A., Christie, L., Pichert, G., and 11 others. Multiple self-healing squamous epithelioma is caused by a disease-specific spectrum of mutations in TGFBR1. Nature Genet. 43: 365-369, 2011. 3. Vellucci, V. F., Reiss, M. Cloning and genomic organization of the human transforming growth factor-beta type I

Application Details

receptor gene. Genomics 46: 278-283, 1997.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na₂HPO₄.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C, -20 °C

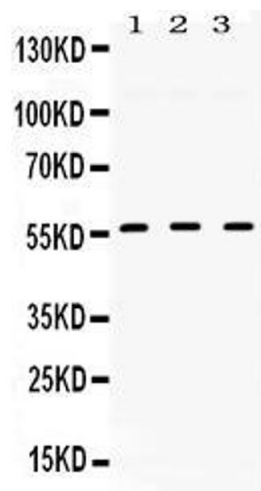
Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

Product cited in: Wang, Qin, Deng, Yao: "Different localization and expression of protein kinase C-beta in kidney cortex of diabetic nephropathy mice and its role in telmisartan treatment." in: **American journal of translational research**, Vol. 7, Issue 6, pp. 1116-25, (2015) ([PubMed](#)).

Li, Yang: "[Effect of interferon-α on rat liver fibrosis induced by CCl₄]." in: **Zhong nan da xue xue bao. Yi xue ban = Journal of Central South University. Medical sciences**, Vol. 36, Issue 3, pp. 243-8, (2012) ([PubMed](#)).

Wei, Lu, Li, Zhan, Wang, Huang: "The expression of AT1 receptor on hepatic stellate cells in rat fibrosis induced by CCl₄." in: **Chinese medical journal**, Vol. 114, Issue 6, pp. 583-7, (2002) ([PubMed](#)).



Western Blotting

Image 1. Western blot analysis of TGFBR1 expression in rat cardiac muscle extract (Lane 1), mouse liver extract (Lane 2) and HELA whole cell lysates (Lane 3). TGFBR1 at 56KD was detected using rabbit anti- TGFBR1 Antigen Affinity purified polyclonal antibody (Catalog #) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).