Datasheet for ABIN1881880

anti-TGFBR1 antibody (AA 145-172)

2 Images

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Overview

Quantity:	400 µL
Target:	TGFBR1
Binding Specificity:	AA 145-172
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB)

Product Details

Immunogen:	This TGFBR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 145-172 amino acids from the Central region of human TGFBR1.
Clone:	RB43638
Isotype:	Ig Fraction
Predicted Reactivity:	B, Pig, Rat
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	TGFBR1
Alternative Name:	TGFBR1 (TGFBR1 Products)
Background:	Transmembrane serine/threonine kinase forming with the TGF-beta type II serine/threonine

Target Details

	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.
Molecular Weight:	55960
NCBI Accession:	NP_001124388, NP_004603
UniProt:	P36897
Pathways:	Growth Factor Binding

Application Details

Application Notes:	WB: 1:2000. WB: 1:2000
Restrictions:	For Research Use only

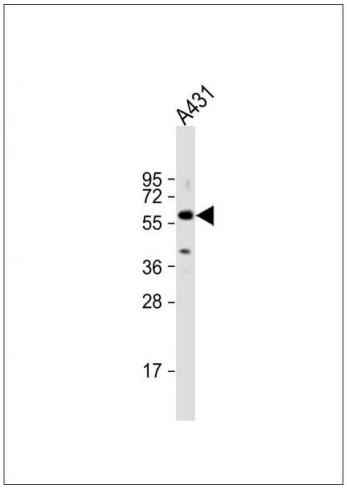
Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C

Handling

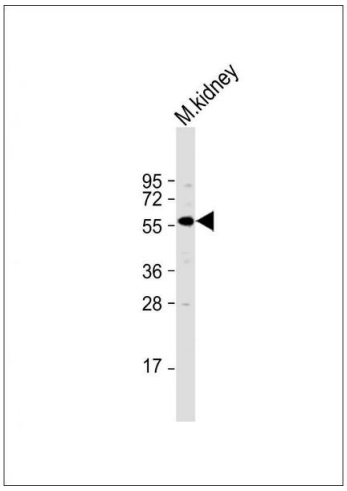
Expiry Date:	6 months

Images



Western Blotting

Image 1. Anti-TGFBR1 Antibody (Center) at 1:2000 dilution + A431 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 56 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.



Western Blotting

Image 2. Anti-TGFBR1 Antibody (Center) at 1:2000 dilution + mouse kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 56 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.

