

# anti- TGFBR1 antibody

## **Product Information**

Catalog No.:	FNab08643	
Size:	100µg	
Form:	liquid	
Purification:	Immunogen affinity purified	
Purity:	≥95% as determined by SDS-PAGE	
Host:	Rabbit	
Clonality:	polyclonal	
Clone ID:	None	
IsoType:	IgG	
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months (Avoid repeated freeze / thaw cycles.)	

## 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 SMADdependent 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.

#### **Immunogen information**

#### Wuhan Fine Biotech Co., Ltd.

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Immunogen:	transforming growth factor, beta receptor 1
Synonyms:	TGFBR1, AAT5, ACVRLK4, ALK-5, ALK5, ESS1, LDS1, LDS1A, LDS2A, MSSE, SKR4, TGFR-1, tbetaR-I, TGF-beta receptor type-1
Observed MW:	60 kDa
UniprotID :	P36897

# Application

Reactivity:	Human, Mouse, Rat
Tested Application:	ELISA, WB
Recommended dilution	WB: 1:200-1:2000
Image:	



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