

Datasheet for ABIN3029223
anti-TGFBR1 antibody (AA 145-172)[Go to Product page](#)

3 Images

Overview

Quantity:	0.4 mL
Target:	TGFBR1
Binding Specificity:	AA 145-172
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TGFBR1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	A portion of amino acids 145-172 from the human protein was used as the immunogen for this TGFBR1 antibody.
Isotype:	Ig Fraction
Cross-Reactivity (Details):	Expected species reactivity: Rat, Bovine, Pig
Purification:	Antigen affinity purified

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.

UniProt: [P36897](#)

Pathways: [Growth Factor Binding](#)

Application Details

Application Notes: Titration of the TGFBR1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot: 1:1000

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: In 1X PBS, pH 7.4, with 0.09 % 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: -20 °C

Storage Comment: Aliquot the TGFBR1 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw

cycles.

Images



Western Blotting

Image 1. TGFBR1 antibody western blot analysis in human HL-60 lysate.

Western Blotting

Image 2. TGFBR1 antibody western blot analysis in mouse Neuro-2a lysate

Western Blotting

Image 3. TGFBR1 antibody western blot analysis in human HL-60 lysate.