

**Mouse Tgfbr1 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14778c**

**Specification**

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**Mouse Tgfbr1 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q64729</a>
Other Accession	<a href="#">P80204</a> , <a href="#">Q5CD18</a> , <a href="#">P36897</a> , <a href="#">Q46680</a> , <a href="#">NP_033396.1</a>
Reactivity	Mouse
Predicted	Bovine, Human, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	56179
Antigen Region	141-169

**Mouse Tgfbr1 Antibody (Center) - Additional Information**

**Gene ID** 21812

**Other Names**

TGF-beta receptor type-1, TGFR-1, ESK2, Transforming growth factor-beta receptor type I,  
TGF-beta receptor type I, TbetaR-I, Tgfbr1

**Target/Specificity**

This Mouse Tgfbr1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 141-169 amino acids from the Central region of mouse Tgfbr1.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Mouse Tgfbr1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**Mouse Tgfbr1 Antibody (Center) - Protein Information**

**Name** Tgfbfr1

**Function** 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 (By similarity).

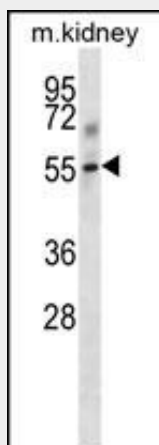
**Cellular Location**

Cell membrane {ECO:0000250|UniProtKB:P36897}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P36897} Cell junction, tight junction {ECO:0000250|UniProtKB:P36897}. Membrane raft {ECO:0000250|UniProtKB:P36897}. Cell surface {ECO:0000250|UniProtKB:P36897}

**Mouse Tgfbfr1 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Mouse Tgfbfr1 Antibody (Center) - Images**

Mouse Tgfbr1 Antibody (Center) (Cat. #AP14778c) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the Tgfbr1 antibody detected the Tgfbr1 protein (arrow).

#### **Mouse Tgfbr1 Antibody (Center) - Background**

On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for TGF-beta.

#### **Mouse Tgfbr1 Antibody (Center) - References**

Ghoreschi, K., et al. Nature 467(7318):967-971(2010)  
Kel, J.M., et al. J. Immunol. 185(6):3248-3255(2010)  
Droguett, R., et al. Exp. Cell Res. 316(15):2487-2503(2010)  
Moreno, S.G., et al. Dev. Biol. 342(1):74-84(2010)  
Shimogori, T., et al. Nat. Neurosci. 13(6):767-775(2010)