



## Rabbit anti TGF beta R1 Polyclonal Antibody

Alternative Name(s): Transforming Growth Factor beta Receptor 1 (TGFbR1)

### Order Information

- **Description:** TGF beta R1
- **Catalogue:** 500-12344
- **Lot:** See label
- **Size:** 100ug/200ul
- **Host:** Rabbit
- **Clone:** nan
- **Application:** IHC(P), WB, IP
- **Reactivity:** hu, Ms, Rt,

### **ANTIGEN PREPARATION**

A synthetic peptide of human TGFbR1

### **BACKGROUND**

Transforming growth factor  $\beta$  isoforms (TGF- $\beta$ 1, 2, 3) play vital roles in regulating cellular growth and differentiation, and they signal through a highly restricted subset of receptors known as TGF- $\beta$  type I receptor (T $\beta$ R-I) and TGF- $\beta$  type II receptor (T $\beta$ R-II). Expression of T beta R-I is more ubiquitous than that of T beta R-II. There was no staining of T beta R-II in the central nervous system, while intense T beta R-I staining was found specifically in nervous tissues. Expression of T beta R-I and T beta R-II was mostly coincident with that of their ligands, suggesting that TGF-beta s act as multiple mediators during organogenesis. TGF- $\beta$  binds with high affinity to its receptor, a transmembrane protein with a cytoplasmic serine/threonine kinase domain, to form a dynamic dimer with phosphorylation in the cytoplasmic Ser/Thr residuals which cause its kinase activity and association with another TGF beta-binding protein, the type I receptor, to signal growth inhibition and early gene responses.

### **PURIFICATION**

The Rabbit IgG is purified by Epitope Affinity Purification.

### **FORMULATION**

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

### **SPECIFICITY**

This antibody recognizes human TGF beta R1. It cross reacts to mice and rat.

### **STORAGE**

The antibodies are stable for 24 months from date of receipt when stored at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . The antibodies can be stored at  $2^{\circ}\text{C}$ - $8^{\circ}\text{C}$  for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

### **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

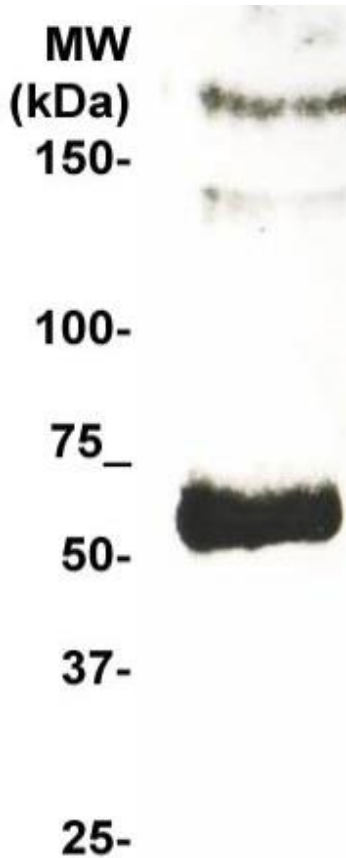
- Western Blot: 0.1-1  $\mu\text{g/ml}$
- ELISA: 0.01-0.1  $\mu\text{g/ml}$
- Immunoprecipitation: 2-5  $\mu\text{g/ml}$
- IHC: 2-10  $\mu\text{g/ml}$
- Flow cytometry: Not tested
- Molecular Weight: 48.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

\*Optimal dilutions should be determined by researchers for the specific applications.

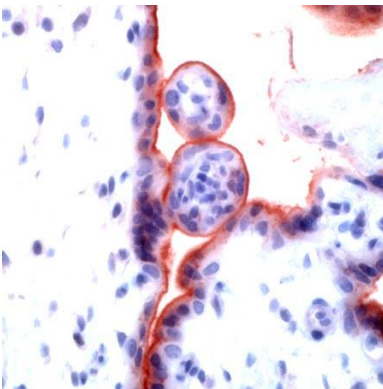
### **FOR RESEARCH USE ONLY.**

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**DATA ATTACHMENTS**



Western Blot: The whole lysate derived from HeLa (20 ug/lane) immunoblotted by Rabbit anti – TGFbR1 (Cat# 500-12344) at 1:500. Observed a major immunoreactive band at molecular weight ~48kDa.



Immunohistochemistry: Human placenta (FFPE) stained with Rabbit anti-TGFbR1 (Cat# 500-12344) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

**REFERENCES**

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