

## TGFβ RI (phospho Ser165) Polyclonal Antibody

Catalog No: YP1191

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

**Target:** TGF β Receptor I

**Fields:** >>MAPK signaling pathway;>>Cytokine-cytokine receptor interaction;>>FoxO

signaling pathway;>>Endocytosis;>>Cellular senescence;>>TGF-beta signaling pathway;>>Apelin signaling pathway;>>Osteoclast differentiation;>>Hippo signaling pathway;>>Adherens junction;>>Th17 cell differentiation;>>Relaxin

signaling pathway;>>AGE-RAGE signaling pathway in diabetic

complications;>>Chagas disease;>>Hepatitis B;>>Human T-cell leukemia virus 1

infection;>>Pathways in cancer;>>Colorectal cancer;>>Pancreatic

cancer;>>Chronic myeloid leukemia;>>Hepatocellular carcinoma;>>Gastric

cancer;>>Diabetic cardiomyopathy

Gene Name: TGFBR1

**Protein Name:** TGF-beta receptor type-1

P36897

Q64729

Human Gene Id: 7046

**Human Swiss Prot** 

No:

Mouse Gene Id: 21812

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: P80204

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

TGF beta Receptor I around the phosphorylation site of Ser165. AA

range:131-180

Specificity: Phospho-TGFβ RI (S165) Polyclonal Antibody detects endogenous levels of

TGF $\beta$  RI protein only when phosphorylated at S165.



**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500-2000, IF 1:50-300, IHC 1:50-300

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 56kD

**Cell Pathway :** MAPK\_ERK\_Growth;MAPK\_G\_Protein;Cytokine-cytokine receptor

interaction; Endocytosis; TGF-beta; Adherens\_Junction; Pathways in cancer; Colorectal cancer; Pancreatic cancer; Chronic myeloid leukemia;

Background: The protein encoded by this gene forms a heteromeric complex with type II TGF-

beta receptors when bound to TGF-beta, transducing the TGF-beta signal from the cell surface to the cytoplasm. The encoded protein is a serine/threonine protein kinase. Mutations in this gene have been associated with Loeys-Dietz aortic aneurysm syndrome (LDAS). Multiple transcript variants encoding different

isoforms have been found for this gene. [provided by RefSeq, Aug 2008],

**Function:** catalytic activity:ATP + [receptor-protein] = ADP + [receptor-protein]

phosphate.,cofactor:Magnesium or manganese.,disease:Defects in TGFBR1 are

the cause of aortic aneurysm familial thoracic type 5 (AAT5) [MIM:608967]. Aneurysms and dissections of the aorta usually result from degenerative changes

in the aortic wall. Thoracic aortic aneurysms and dissections are primarily

associated with a characteristic histologic appearance known as 'medial necrosis' in which there is degeneration and fragmentation of elastic fibers, loss of smooth

muscle cells, and an accumulation of basophilic ground

substance., disease: Defects in TGFBR1 are the cause of Loeys-Dietz syndrome type 1A (LDS1A) [MIM:609192]; also known as Furlong syndrome or Loeys-Dietz

aortic aneurysm syndrome (LDAS). LDS1 is an aortic aneurysm syndrome with widespread systemic involvement. The disorder is characterized by arterial tort

Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Cell junction, tight

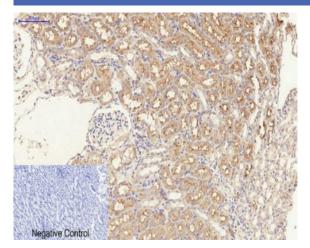
junction. Cell surface. Membrane raft.

**Expression:** Found in all tissues examined, most abundant in placenta and least abundant in

brain and heart. Expressed in a variety of cancer cell lines (PubMed:25893292).



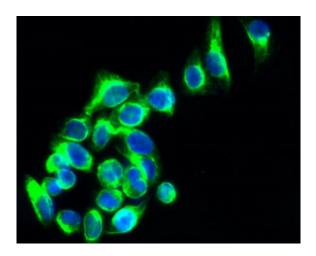
## **Products Images**



Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,TGF $\beta$  RI (phospho Ser165) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of MOUSE-LIVER cells using Phospho-TGFβ RI (S165) Polyclonal Antibody diluted at 1:1000



Immunofluorescence analysis of HepG2 cells, Antibody diluted at 1:50. The picture on the right is blocked with the synthesized peptide.