

## TGFβ RI Polyclonal Antibody

Catalog No: YT4627

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;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. AA range:131-180

**Specificity:** TGFβ RI Polyclonal Antibody detects endogenous levels of TGFβ RI protein.

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

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. ELISA: 1:20000. IF 1:100-300 Not yet tested in other

applications.

**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)

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

**Location :** 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).

Tag: orthogonal

Sort:

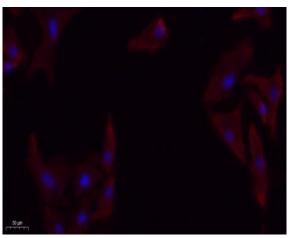
**No3:** ab235578

**No4:** 1

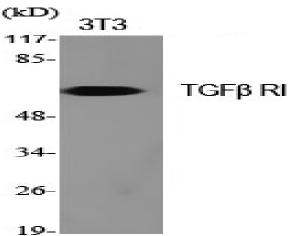
Host: Rabbit

Modifications: Unmodified

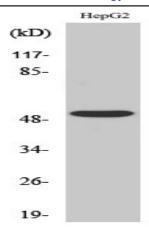
## **Products Images**



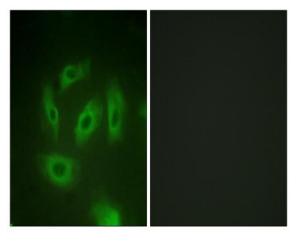
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



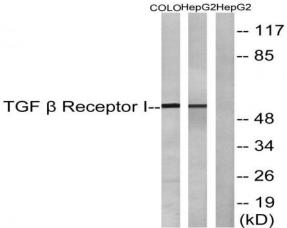
Western Blot analysis of various cells using TGF $\!\beta$  RI Polyclonal Antibody diluted at 1:500



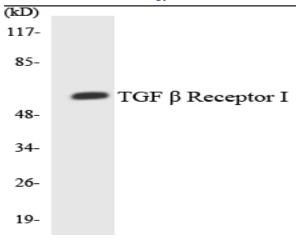
Western Blot analysis of COLO205 cells using TGF $\beta$  RI Polyclonal Antibody diluted at 1:500



Immunofluorescence analysis of HeLa cells, using TGF beta Receptor I Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2 and COLO cells, using TGF beta Receptor I Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using TGF  $\beta$  Receptor I antibody.