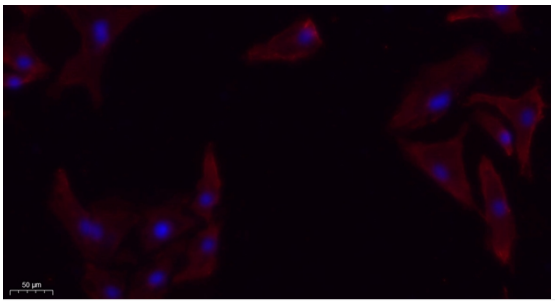
TGFβ RI Polyclonal Antibody

Catalog No	YP-Ab-13695
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;ELISA
Gene Name	TGFBR1
Protein Name	TGF-beta receptor type-1
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. IF 1:100-300 Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TGFBR1; ALK5; SKR4; TGF-beta receptor type-1; TGFR-1; Activin A receptor type II-like protein kinase of 53kD; Activin receptor-like kinase 5; ALK-5; ALK5; Serine/threonine-protein kinase receptor R4; SKR4; TGF-beta type I receptor; Transfor
Observed Band	56kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Cell junction, tight junction . Cell surface . Membrane raft .
Tissue Specificity	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).
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

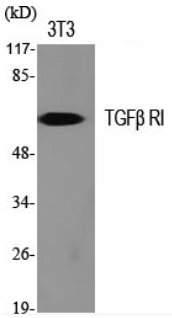
widespread systemic involvement. The disorder is characterized by arterial tort

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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

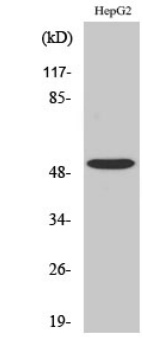
Products Images



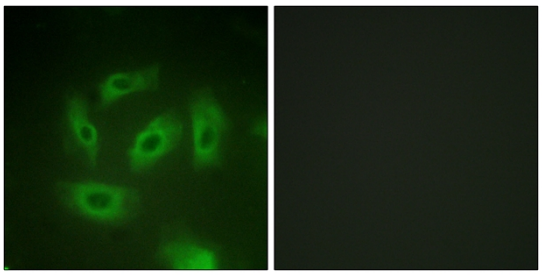
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



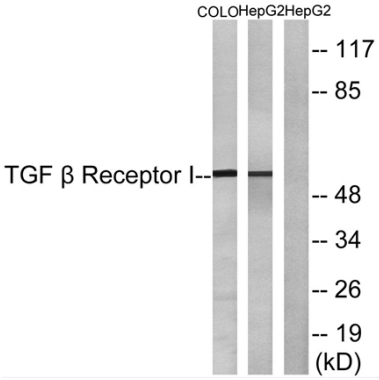
Western Blot analysis of various cells using TGFβ RI Polyclonal Antibody diluted at 1:500



Western Blot analysis of COLO205 cells using TGFβ R 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.