

**TGF  $\beta$  Receptor I (ABT-TGFR1) mouse mAb**

<b>Catalog No :</b>	YM6100
<b>Reactivity :</b>	Human;Mouse;Rat;Bovine;
<b>Applications :</b>	IHC;IF;ELISA
<b>Target :</b>	TGF $\beta$ Receptor I
<b>Fields :</b>	>>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
<b>Gene Name :</b>	TGFBR1 ALK5 SKR4
<b>Protein Name :</b>	TGF-beta receptor type-1 (TGFR-1) (EC 2.7.11.30) (Activin A receptor type II-like protein kinase of 53kD) (Activin receptor-like kinase 5) (ALK-5) (ALK5) (Serine/threonine-protein kinase receptor R4)
<b>Human Gene Id :</b>	7046
<b>Human Swiss Prot No :</b>	P36897
<b>Immunogen :</b>	Synthesized peptide derived from human TGF $\beta$ Receptor I AA range: 34-100
<b>Specificity :</b>	This antibody detects endogenous levels of TGF $\beta$ Receptor I protein.
<b>Formulation :</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source :</b>	Mouse, Monoclonal/IgG2a, kappa
<b>Dilution :</b>	IHC 1:50-200. IF 1:50-200. ELISA 1:500-5000
<b>Purification :</b>	The antibody was affinity-purified from ascites by affinity-chromatography using

specific immunogen.

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

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**Molecularweight :** 55kD

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**Observed Band :** 55kD

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**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;

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**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],

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**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

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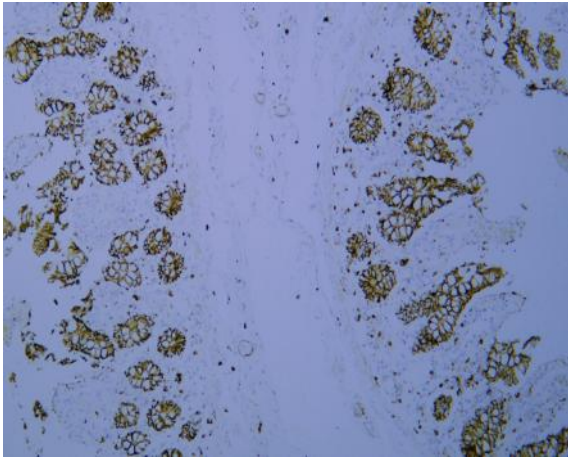
**Subcellular Location :** Membranous

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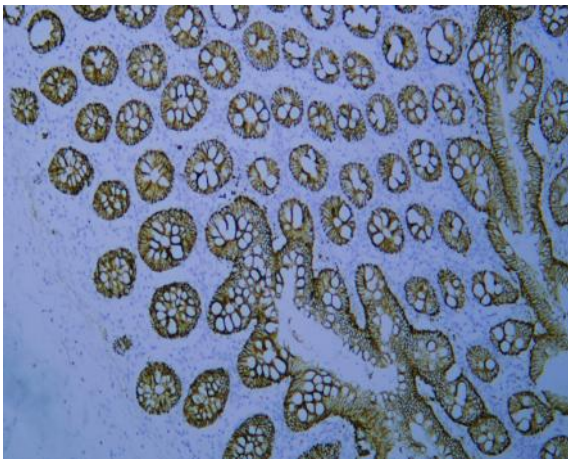
**Expression :** Found in all tissues examined, most abundant in placenta and least abundant in brain and heart. Expressed in a variety of cancer cell lines (PubMed:25893292).

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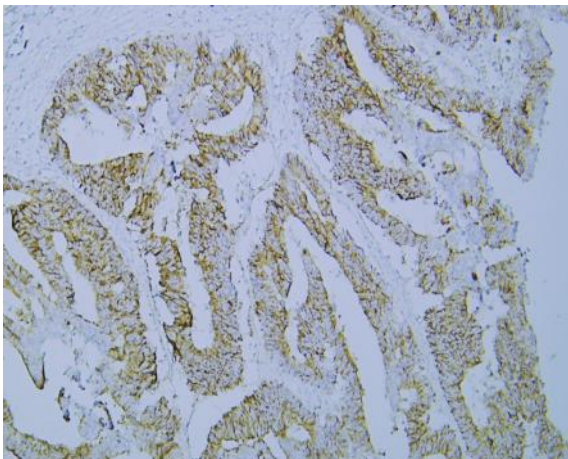
## Products Images



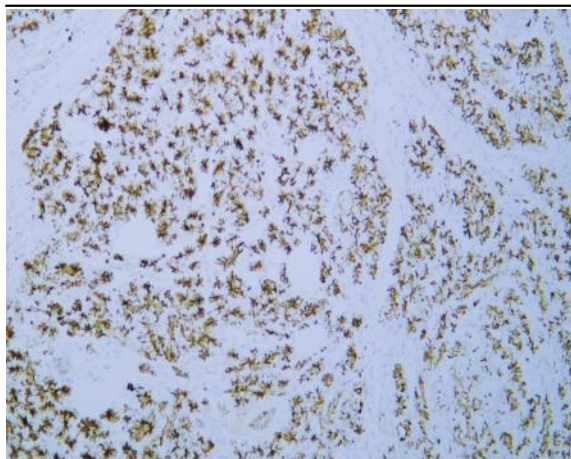
Human colon tissue was stained with Anti-TGF  $\beta$  Receptor I (ABT-TGFR1) Antibody



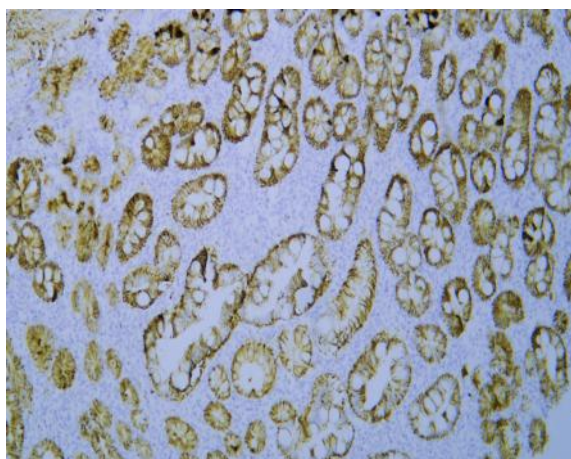
Human colon carcinoma tissue was stained with Anti-TGF  $\beta$  Receptor I (ABT-TGFR1) Antibody



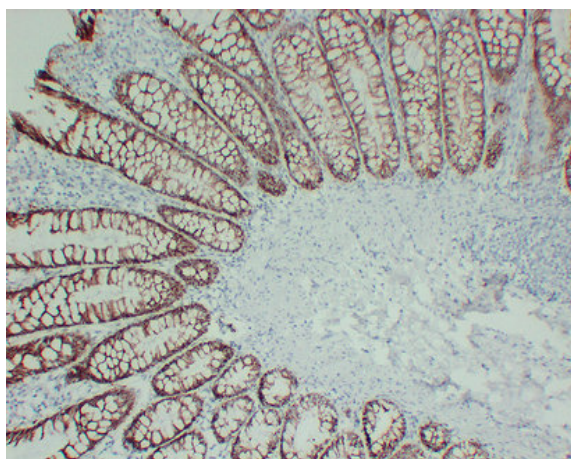
Human colon carcinoma tissue was stained with Anti-TGF  $\beta$  Receptor I (ABT-TGFR1) Antibody



Human pancreas tissue was stained with Anti-TGF  $\beta$  Receptor I (ABT-TGFR1) Antibody



Human stomach tissue was stained with Anti-TGF  $\beta$  Receptor I (ABT-TGFR1) Antibody



Immunohistochemical analysis of paraffin-embedded Colon. 1, Antibody was diluted at 1:200(4° overnight). 2, Citric acid ,pH6.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).