abcam

Product datasheet

Anti-TGF beta Receptor I (phospho S165) antibody ab112095

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Overview

Product name	Anti-TGF beta Receptor I (phospho S165) antibody
Description	Rabbit polyclonal to TGF beta Receptor I (phospho S165)
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human TGF beta Receptor I aa 100-200 (phospho S165). Database link: **P36897**
Positive control	HeLa cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 0.88% Sodium chloride, 49% PBS
Purity	Immunogen affinity purified
Purification notes	ab112095 is affinity-purified from rabbit antiserum by affinity-chromatography using an epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab112095 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 55 kDa.
ICC/IF		1/100 - 1/500.

Target

Function On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for TGF-beta.

Tissue specificity Found in all tissues examined, most abundant in placenta and least abundant in brain and heart.

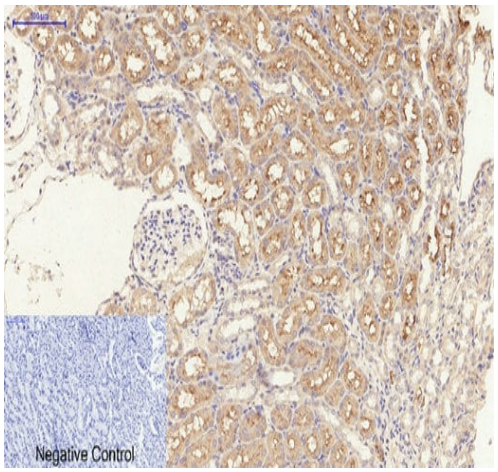
Involvement in disease Defects in TGFBR1 are the cause of Loeys-Dietz syndrome type 1A (LDS1A) [MIM:609192]; also known as Furlong syndrome or Loeys-Dietz aortic aneurysm syndrome (LDAS). LDS1 is an aortic aneurysm syndrome with widespread systemic involvement. The disorder is characterized by arterial tortuosity and aneurysms, craniosynostosis, hypertelorism, and bifid uvula or cleft palate. Other findings include exotropy, micrognathia and retrognathia, structural brain abnormalities, intellectual deficit, congenital heart disease, translucent skin, joint hyperlaxity and aneurysm with dissection throughout the arterial tree.
Defects in TGFBR1 are the cause of Loeys-Dietz syndrome type 2A (LDS2A) [MIM:608967]. LDS2 is an aortic aneurysm syndrome with widespread systemic involvement. Physical findings include prominent joint laxity, easy bruising, wide and atrophic scars, velvety and translucent skin with easily visible veins, spontaneous rupture of the spleen or bowel, diffuse arterial aneurysms and dissections, and catastrophic complications of pregnancy, including rupture of the gravid uterus and the arteries, either during pregnancy or in the immediate postpartum period. LDS2 is characterized by the absence of craniofacial abnormalities with the exception of bifid uvula that can be present in some patients.
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.

Sequence similarities Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.
Contains 1 GS domain.
Contains 1 protein kinase domain.

Post-translational Phosphorylated at basal levels in the absence of ligand binding. Activated by multiple

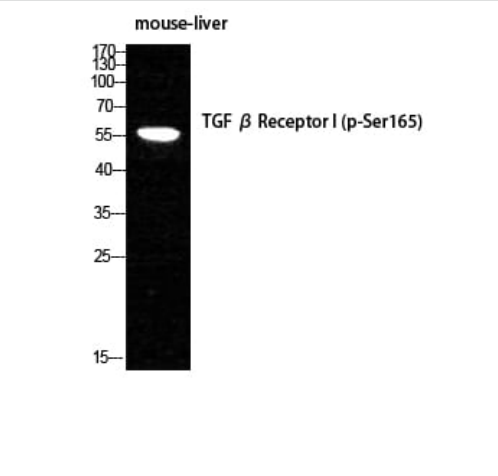
modifications	phosphorylation, mainly in the GS region.
Cellular localization	Membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TGF beta Receptor I (phospho S165) antibody (ab112095)

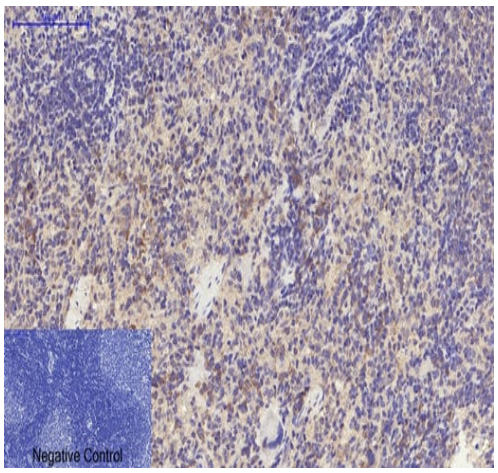
Immunohistochemistry analysis of paraffin-embedded rat kidney tissue staining with ab112095 at 1/200 dilution incubated at 4°C overnight. Sodium citrate pH 6.0 was used for antibody retrieval at 98°C for 20min. Secondary antibody was used at 1/200 dilution at room temperature for 30min. Negative control was the secondary antibody only.



Western blot - Anti-TGF beta Receptor I (phospho S165) antibody (ab112095)

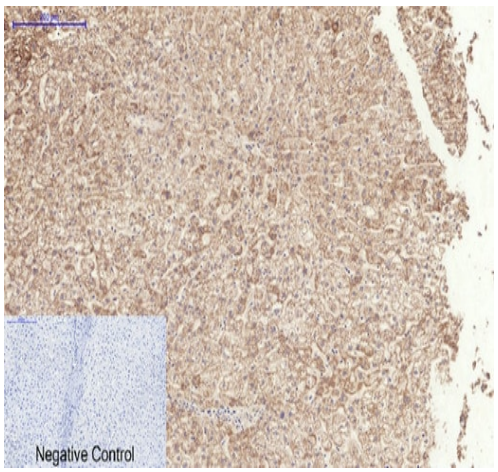
Anti-TGF beta Receptor I (phospho S165) antibody (ab112095) at 1/1000 dilution + mouse liver cells

Predicted band size: 55 kDa



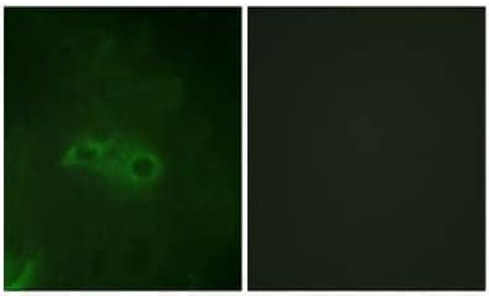
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TGF beta Receptor I (phospho S165) antibody (ab112095)

Immunohistochemistry analysis of paraffin-embedded rat spleen tissue staining with ab112095 at 1/200 dilution incubated at 4°C overnight. Sodium citrate pH 6.0 was used for antibody retrieval at 98°C for 20min. Secondary antibody was used at 1/200 dilution at room temperature for 30min. Negative control was the secondary antibody only.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TGF beta Receptor I (phospho S165) antibody (ab112095)

Immunohistochemistry analysis of paraffin-embedded human-liver tissue staining with ab112095 at 1/200 dilution incubated at 4°C overnight. Sodium citrate pH 6.0 was used for antibody retrieval at 98°C for 20min. Secondary antibody was used at 1/200 dilution at room temperature for 30min. Negative control was the secondary antibody only.



Immunocytochemistry/ Immunofluorescence - Anti-TGF beta Receptor I (phospho S165) antibody (ab112095)

ab112095, at a 1/100 dilution, staining TGF beta Receptor I in HeLa cells by Immunofluorescence, in the absence (left) and presence (right) of the phosphopeptide.

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