10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TGFBR2 Antibody (aa100-150)

Rabbit Polyclonal Antibody
Catalog # ALS16446

Specification

TGFBR2 Antibody (aa100-150) - Product Information

Application	**WB, IHC-P**
Primary Accession	P37173
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**65kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A**

TGFBR2 Antibody (aa100-150) - Additional Information

Gene ID 7048

Other Names
TGF-beta receptor type-2, TGFR-2, 2.7.11.30, TGF-beta type II receptor, Transforming growth factor-beta receptor type II, TGF-beta receptor type II, TbetaR-II, TGFBR2

Target/Specificity
Human TGFBR2

Reconstitution & Storage
Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Precautions
TGFBR2 Antibody (aa100-150) is for research use only and not for use in diagnostic or therapeutic procedures.

TGFBR2 Antibody (aa100-150) - Protein Information

Name TGFBR2

Function
Transmembrane serine/threonine kinase forming with the TGF- beta type I serine/threonine kinase receptor, TGFBR1, the non- promiscuous receptor for the TGF-beta cytokines TGFB1, TGFB2 and TGFB3. Transduces the TGFB1, TGFB2 and TGFB3 signal from the cell surface to the cytoplasm and thus regulates a plethora of physiological and pathological processes including cell cycle arrest in epithelial and hematopoietic cells, control of mesenchymal cell proliferation and differentiation, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. The formation of the receptor complex composed of 2 TGFBR1 and 2 TGFBR2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and activation of TGFBR1 by the constitutively active TGFBR2. Activated TGFBR1 phosphorylates SMAD2 which dissociates from the receptor and interacts with SMAD4. The SMAD2-SMAD4 complex is subsequently translocated to

the nucleus where it modulates the transcription of the TGF-beta-regulated genes. This constitutes the canonical SMAD-dependent TGF-beta signaling cascade. Also involved in non-canonical, SMAD-independent TGF-beta signaling pathways.

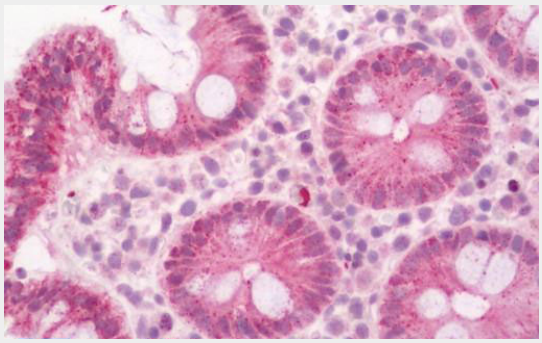
Cellular Location
Cell membrane; Single-pass type I membrane protein. Membrane raft

TGFBR2 Antibody (aa100-150) - Protocols

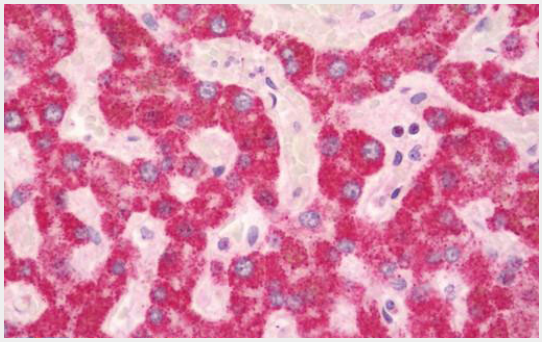
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TGFBR2 Antibody (aa100-150) - Images

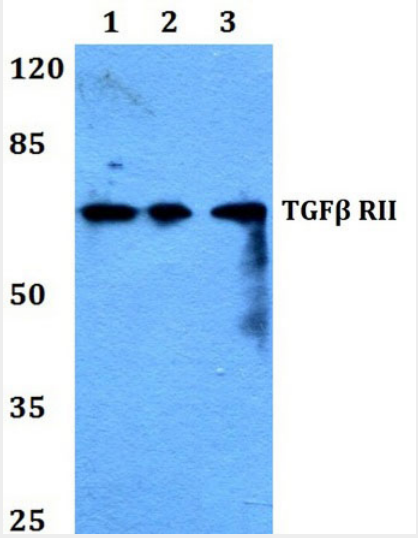


Human Colon: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Liver: Formalin-Fixed, Paraffin-Embedded (FFPE)

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blot analysis of Anti-TGFBR2 Antibody at 1:500 dilution.

TGFBR2 Antibody (aa100-150) - Background

Transmembrane serine/threonine kinase forming with the TGF-beta type I serine/threonine kinase receptor, TGFBR1, the non- promiscuous receptor for the TGF-beta cytokines TGFB1, TGFB2 and TGFB3. Transduces the TGFB1, TGFB2 and TGFB3 signal from the cell surface to the cytoplasm and is thus regulating a plethora of physiological and pathological processes including cell cycle arrest in epithelial and hematopoietic cells, control of mesenchymal cell proliferation and differentiation, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. The formation of the receptor complex composed of 2 TGFBR1 and 2 TGFBR2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFRB1 by the constitutively active TGFBR2. Activated TGFBR1 phosphorylates SMAD2 which dissociates from the receptor and interacts with SMAD4. The SMAD2-SMAD4 complex is subsequently translocated to the nucleus where it modulates the transcription of the TGF-beta-regulated genes. This constitutes the canonical SMAD-dependent TGF-beta signaling cascade. Also involved in non- canonical, SMAD-independent TGF-beta signaling pathways.

TGFBR2 Antibody (aa100-150) - References

Lin H.Y.,et al.Cell 68:775-785(1992).
Lin H.Y.,et al.Cell 70:1069-1069(1992).
Nikawa J.,et al.Gene 149:367-372(1994).
Takenoshita S.,et al.Genomics 36:341-344(1996).
Lu S.-L.,et al.Cancer Res. 56:4595-4598(1996).