

Basic Information

Product Name	Anti-TGFBR2 Antibody (Clone#2F11)	
Gene Name	TGFBR2	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2b	
Species Reactivity	human	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human TGFBR2, different from the related mouse sequence by five amino acids, and from the related rat sequence by eight amino acids.	
Concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	70-85 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

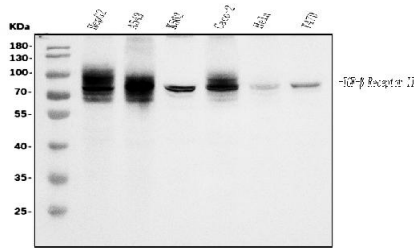
TGFBR2 (transforming growth factor, beta receptor II (70/80kDa)), also known as TGF-beta receptor type-2, TGFR-2, TGF-beta type II receptor, Transforming growth factor-beta receptor type II (TGF-beta receptor type II, TbetaR-II), is a member of the Ser/Thr protein kinase family and the TGFB receptor subfamily. A TGFBR2 cDNA encodes a deduced 565-amino acid protein with a calculated molecular mass of approximately 60 kD in length. The encoded protein is a transmembrane protein that has a protein kinase domain, forms a heterodimeric complex with another receptor protein, and binds TGF-beta. This receptor/ligand complex phosphorylates proteins, which then enter the nucleus and regulate the transcription of a subset of genes related to cell proliferation. Mutations in this gene have been associated with Marfan syndrome, Loeys-Deitz aortic aneurysm syndrome, Osler-

Weber-Rendu syndrome, and the development of various types of tumors. Alternatively spliced transcript variants encoding different isoforms have been characterized.

Reference

Anti-TGFBR2 Antibody (Clone#2F11)被引用在3文献中。

Selected Validation Data



Western blot analysis of TGFBR2 using anti-TGFBR2 antibody (M00759-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HEPG2 whole cell lysates,

Lane 2: human A549 whole cell lysates,

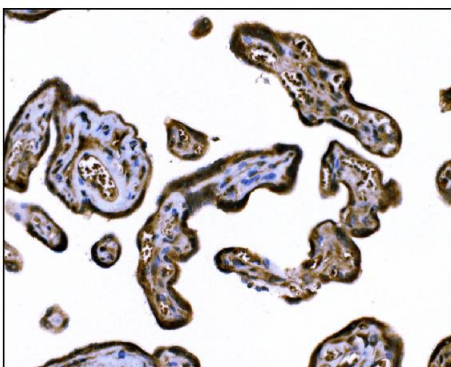
Lane 3: human K562 whole cell lysates,

Lane 4: human CACO-2 whole cell lysates,

Lane 5: human HELA whole cell lysates,

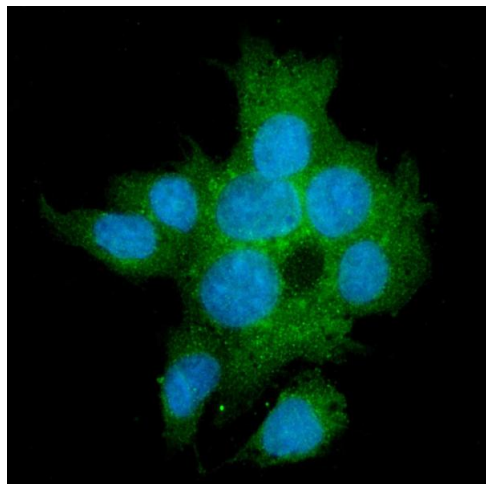
Lane 6: human T47D whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-TGFBR2 antigen affinity purified monoclonal antibody (M00759-2) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TGFBR2 at approximately 70-85 kDa. The expected band size for TGFBR2 is at 65 kDa.



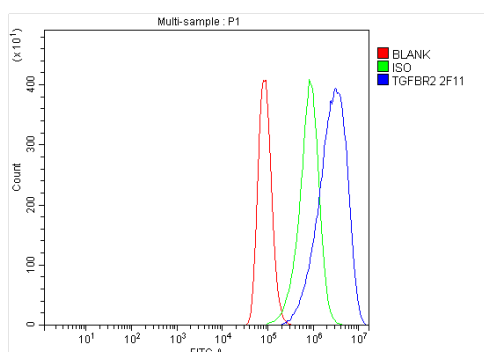
IHC analysis of TGFBR2 using anti-TGFBR2 antibody (M00759-2).

TGFBR2 was detected in a paraffin-embedded section of human placenta tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-TGFBR2 Antibody (M00759-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of TGFBR2 using anti-TGFBR2 antibody (M00759-2).

TGFBR2 was detected in an immunocytochemical section of HepG2 cells. The section was incubated with mouse anti-TGFBR2 Antibody (M00759-2) at a dilution of 1:100. Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of A549 cells using anti-TGFBR2 antibody (M00759-2).

Overlay histogram showing A549 cells stained with M00759-2 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with mouse anti-TGFBR2 Antibody (M00759-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.