

Anti-TGFBR2 Picoband Antibody

Catalog # ABO12515

Product Information

Application	WB
Primary Accession	P37173
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for TGF-beta receptor type-2(TGFBR2) detection. Tested with WB in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	64568
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cell membrane ; Single-pass type I membrane protein .
Source	Eukaryota
Protein Name	TGF-beta receptor type-2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human TGFBR2 (96-128aa TLETVCHDPKLPYHDFILEDAAAPKCIMKEKKK), different from the related mouse sequence by five amino acids, and from the related rat sequence by eight amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	TGFB2
Function	Transmembrane serine/threonine kinase forming with the TGF- beta type I serine/threonine kinase receptor, TGFB1, 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 TGFB1 and 2 TGFB2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and activation of TGFB1 by the constitutively active TGFB2. Activated TGFB1 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

Background

TGFB2 (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 TGFB2 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 informs have been characterized.

Images



Anti-TGFB2 Picoband antibody, ABO12515, Western blottingAll lanes: Anti TGFB2 (ABO12515) at 0.5ug/mlLane 1: MCF-7 Whole Cell Lysate at 40ugLane 2: SW620 Whole Cell Lysate at 40ugLane 3: 22RV1 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 85KDObserved bind size: 85KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.