BT LAB
Bioassay Technology Laboratory
Optimize Your Research

Smad2 Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP08381
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	The antiserum was produced against synthesized peptide derived from human Smad2. AA range:186-235
Mol wt	52306
Species reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Recommended application	WB, IHC-p, IF, ELISA
Concentration	1 mg/ml
Full name	Smad2 Antibody
Synonyms	SMAD2; MADH2; MADR2; Mothers against decapentaplegic homolog 2; MAD homolog 2; Mothers against DPP homolog 2; JV18-1; Mad-related protein 2; hMAD-2; SMAD family member 2; SMAD 2; Smad2; hSMAD2

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

Mothers against decapentaplegic homolog 2 encoded by SMAD2 belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene ‘mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene.

Recommended Dilution

WB: 1: 500 - 1: 2000

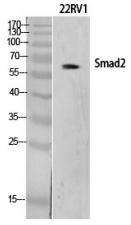
IHC: 1: 100 - 1: 300

IF: 1: 200 - 1: 1000

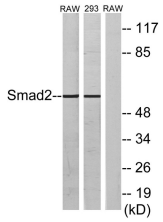
ELISA: 1: 10000

Not yet tested in other applications.

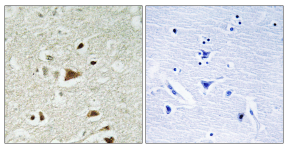
Images



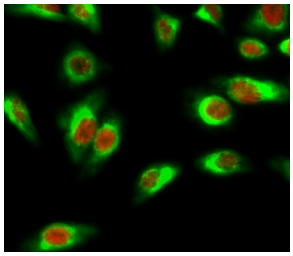
Western Blot analysis of various cells using Smad2 Polyclonal Antibody diluted at 1:500



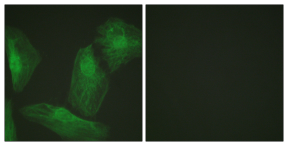
Western blot analysis of lysates from RAW264.7 and 293 cells, using Smad2 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Smad2 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunofluorescence analysis of Hela cell. 1,Smad2 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). β-tubulin Monoclonal Antibody(M7)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 was diluted at 1:1000(room temperature, 50min).



Immunofluorescence analysis of HeLa cells, using Smad2 Antibody. The picture on the right is blocked with the synthesized peptide.

Storage

-20°C for one year

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