Data Sheet (Cat.No.TMAY-01523)

TargetMol

Anti-Phospho-SMAD2 (Ser465, 467) Antibody (3X677)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human; Predicted to React with:Species predicted to react based on 100% sequence homology: Mouse, Rat, Cynomolgus, Bovine, Zebrafish
Conjugation:	Unconjugated
Clone:	3X677
Purification:	Protein A

Applications

Verified Activity:	1. Western blot analysis of extracts from serum-starved Hela, untreated(line A) or treated with TGF beta 1 (5 ng/mL, 120min; +)(line B), using Phospho-SMAD2 (Ser465, 467) rabbit monoclonal Antibody at 1:1000 dilution (upper) or Anti-SMAD2 Antibody, Rabbit polyclonal at 1:100000 dilution (lower). 2. Western blot analysis of extracts from serum-starved Hela, untreated (line A); treated with TGFβ1 (5 ng/mL, 120 min), without peptide (line B) or antigen-specific phosphopeptide (line C) or antigen-specific peptide (line D) using Phospho-SMAD2 (Ser465, 467) rabbit monoclonal Antibody at 1:1000 dilution. (Validation Experiment) 3. Western blot analysis of extracts from serum-starved Hela, untreated (line A); treated with TGFβ1 (5 ng/mL, 120min; +); treated with TGFβ1 and λ-phosphatase (line C) using Phospho-SMAD2 (Ser465, 467) rabbit monoclonal Antibody at 1:1000 dilution. (Validation Experiment)
Application:	WB
Recommended	WB: 1:500-1:2000

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: residues around (Ser465, 467) of Human Phospho-SMAD2
Antigen Species:	Human
Synonyms:	hMAD-2;SMAD2;CHTD8;Phospho-SMAD2 (S465, 467);JV18-1;SMAD2 (p-Ser465, 467);p-SMAD2 (Ser465, 467);p-SMAD2 (S465, 467);SMAD2 (p-S465, 467);hSMAD2;MADH2;MADR2;JV18;LDS6

Research Background

SMAD2 is a member of the SMAD family. Members of this family mediate signal transduction by the TGF-beta/activin/BMP-2/4 cytokine superfamily from receptor Ser/Thr protein kinases at the cell surface to the nucleus. SMAD2 mediates the signal of the TGF-beta, and therefore regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. SMAD2 is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. SMAD2 is the downstream signal transducers of TGF-beta-1 in human dental pulp cells. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta

receptors. Phosphorylated SMAD2 is able to form a complex with SMAD4 or SARA. These complexes accumulate in the cell nucleus, where they are directly participating in the regulation of gene expression.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481