

Basic Information

Product Name	Anti-SMAD2 (Phospho-S250) Antibody (Clone#HBC-19)
Gene Name	SMAD2
Source	Rabbit
Clonality	Monoclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, FCM
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.
Immunogen	A synthesized peptide derived from human Smad2
Concentration	500 ug/ml
Purification	Affinity-chromatography
Observed MW	58 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (FCM):1:20

Storage

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

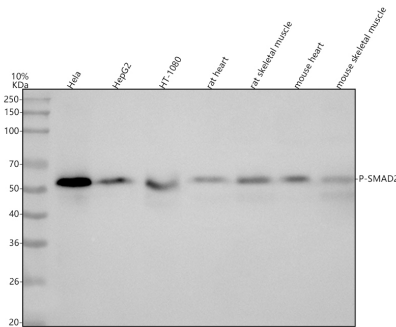
Background Information

Smad2(Mothers against decapentaplegic homolog 2), also known as MADR2, MADH2, SMAD family member 2 or SMAD2, is a protein that in humans is encoded by the SMAD2 gene. MAD homolog 2 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. Eppert et al.(1996) mapped the MADR2 gene close to DPC4 at 18q21, a region which is frequently deleted in colorectal cancers. Riggins et al.(1996) mapped the human MADH2 gene to 18q21. Nakao et al.(1997) refined the localization of the SMAD2 gene to 18q21.1, approximately 3 Mb proximal to DPC4, by fluorescence in situ hybridization. SMAD2 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.

Reference

Anti-SMAD2 (Phospho-S250) Antibody (Clone#HBC-19)被引用在12文献中。

Selected Validation Data



Western blot analysis of anti-SMAD2 (Phospho-S250) antibody (BM4693).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: human HT-1080 whole cell lysates,

Lane 4: rat heart tissue lysates,

Lane 5: rat skeletal muscle tissue lysates,

Lane 6: mouse heart tissue lysates,

Lane 7: mouse skeletal muscle tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SMAD2 (Phospho-S250) antigen affinity purified monoclonal antibody (BM4693) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for SMAD2 (Phospho-S250) at approximately 58 kDa. The expected band size for SMAD2 (Phospho-S250) is at 52 kDa.