

Basic Information

Product Name	Anti-SMAD2 Antibody (Clone#ACI-19)	
Gene Name	SMAD2	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, 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
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200
	Flow Cytometry (FCM):	1:20

Storage

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

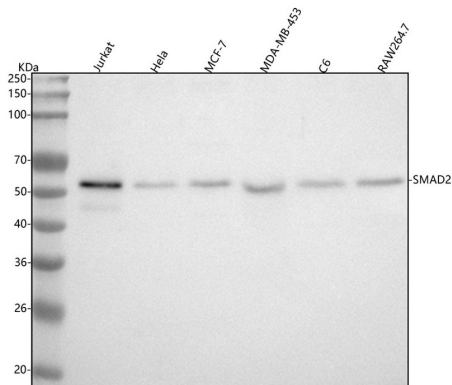
Background Information

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 Antibody (Clone#ACI-19)被引用在7文献中。

Selected Validation Data



Western blot analysis of anti-SMAD2 antibody (BM3992). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human Hela whole cell lysates,

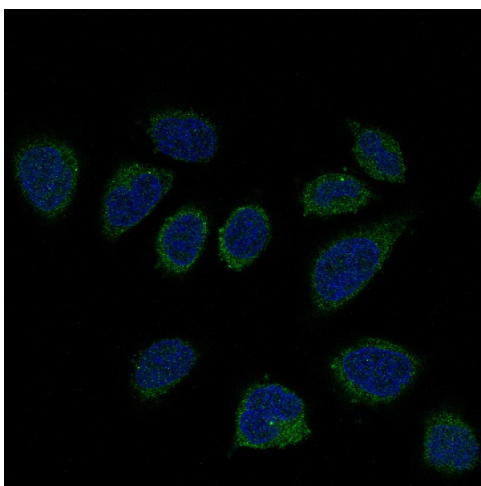
Lane 3: human MCF-7 whole cell lysates,

Lane 4: human MDA-MB-453 whole cell lysates,

Lane 5: rat C6 whole cell lysates,

Lane 6: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SMAD2 antigen affinity purified monoclonal antibody (BM3992) 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 at approximately 58 kDa. The expected band size for SMAD2 is at 52 kDa.



Immunofluorescent analysis of Hela cells, using Smad2 Antibody.