

Product datasheet for **AP08072PU-S**

SMAD2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	Western blot: 1/500 - 1/1000. Immunofluorescence: 1/100 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized non-phosphopeptide derived from human SMAD2 around the phosphorylation site of Serine 467 (C-S-S-M-Sp)
Specificity:	This antibody detects endogenous levels of total SMAD2 protein.
Formulation:	PBS (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol. State: Aff - Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	SMAD family member 2
Database Link:	Entrez Gene 4087 Human Q15796



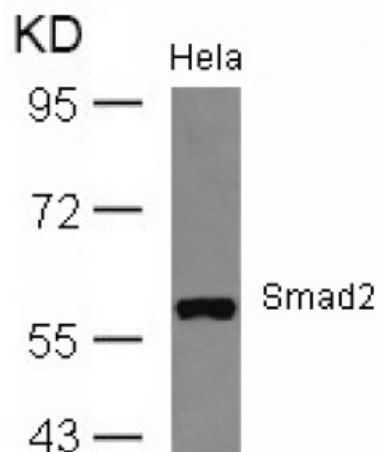
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Background:

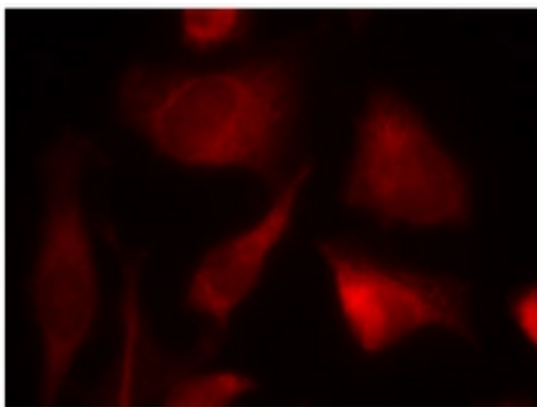
Smad2 is a member of the Smad family of proteins which are similar to the gene products of the *Drosophila* gene 'mothers against decapentaplegic' (Mad) and the *C. elegans* gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein 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 encoding the same protein have been observed.

Synonyms:

SMAD family member 2, SMAD-2, SMAD 2, MADH2, MAD homolog 2, MADR2, Mad-related protein 2, JV18-1

Product images:

Western Blot analysis of extracts from HeLa cells using Smad2 antibody



Immunofluorescence staining of methanol-fixed HeLa cells using SMAD2 antibody (Red).