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Product datasheet for AP08071PU-N

SMAD1 Rabbit Polyclonal Antibody

Product data:

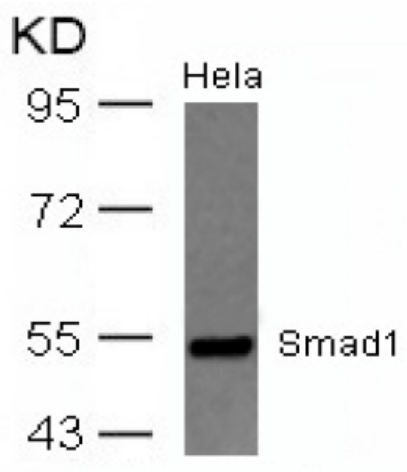
Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	Western blot: 1/500~1/1000. Immunofluorescence: 1/100~1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized non-phosphopeptide derived from Human Smad1 around amino acids 461~465 (I-S-S-V-S).
Specificity:	This antibody detects endogenous levels of total SMAD1 protein.
Formulation:	PBS (without Mg2+ and Ca2+), 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:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	SMAD family member 1
Database Link:	Entrez Gene 4086 Human Q15797

View online »

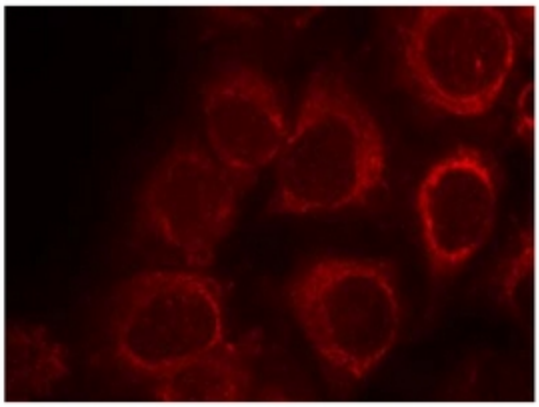
Background: SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. SMAD1, as a transcriptional modulator, is activated by BMP (Bone Morphogenetic Protein) type 1 receptor kinase (it is a receptor-regulated SMAD or R-SMAD). BMPs are involved in a range of biological activities including cell growth, apoptosis, morphogenesis, development and immune responses. SMAD proteins have been implicated as downstream effectors of TGF beta/BMP signaling. In response to BMP ligands, SMAD1 can be phosphorylated (other sites besides the most prominent of S206, are S187, S195, and S214). S-206 is phosphorylated by ERK in response to mitogenic growth factors, or by recombinant ERK in vitro; this can be tested by treating cells with EGF or in cancer cells where Ras is activated. The phosphorylated form of this protein forms a complex with SMAD4, which is important for its function in the transcription regulation. This protein is also a target for SMADspecific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and proteasome-mediated degradation.

Synonyms: SMAD family member 1, SMAD-1, SMAD 1, MADH1, MAD homolog 1, MADR1, Mad-related protein 1, BSP1, BSP-1, JV4-1

Product images:



Western blot analysis of extracts from Hela cells using SMAD1 antibody.



Immunofluorescence staining of methanol-fixed HeLa cells using SMAD1 antibody (Red).