

Product datasheet for TA809092AM

OriGene Technologies, Inc.

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SMAD1 Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI1B9]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1B9
Applications: WB

Recommended Dilution: WB 1:2000

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human SMAD1 (NP_005891) produced in E.coli.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.5 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Biotin

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 52.1 kDa

Gene Name: SMAD family member 1

Database Link: NP 005891

Entrez Gene 17125 MouseEntrez Gene 25671 RatEntrez Gene 4086 Human

Q15797





Background:

The protein encoded by this gene 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. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signals of the bone morphogenetic proteins (BMPs), which are involved in a range of biological activities including cell growth, apoptosis, morphogenesis, development and immune responses. In response to BMP ligands, this protein can be phosphorylated and activated by the BMP receptor kinase. The phosphorylated form of this protein forms a complex with SMAD4, which is important for its function in the transcription regulation. This protein is a target for SMAD-specific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and proteasome-mediated degradation. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq, Jul 2008]

Synonyms:

BSP-1; BSP1; JV4-1; JV41; MADH1; MADR1

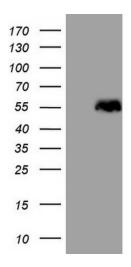
Protein Families:

Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Stem cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant signaling - TGFb/BMP signaling pathway, Transcription Factors

Protein Pathways:

TGF-beta signaling pathway

Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY SMAD1 ([RC223918], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SMAD1 (1:2000). Positive lysates [LY416996] (100ug) and [LC416996] (20ug) can be purchased separately from OriGene.