Polyclonal Anti-Mothers against decapentaplegic homolog 2/3, *SMAD2/3* (Sepharose Bead Conjugate)

Catalogue No. PA1073-S

Lot No. 03D01

Ig type: rabbit

IgG **Size:** 100µg/vial

Specificity

Human, mouse, rat. No cross reactivity with other proteins.

Recommended application

Immunoprecipitation(IP)

Immunogen

A synthetic peptide corresponding to the N-terminal of human SMAD2/3, identical to the related mouse and rat sequence.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN_3a_3 preservative.

Storage

Store at 4˚C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

BACKGROUND

SMAD proteins transmit signals from transmembrane serine/threonine kinase receptors to the nucleus. Transforming growth factor (TGF)-beta stimulation leads to phosphorylation and activation of Smad2 and Smad3, which form complexes with Smad4 that accumulate in the nucleus and regulate transcription of target genes. Smad2 and Smad3 share highly homology. SMAD2/SMAD3 signal transduction appeared to be important in the regulation of muscle-specific genes. SMAD proteins transmit signals from transmembrane serine/threonine kinase receptors to the nucleus. Smad2 is a 58 kDa member of a family of proteins involved in cell proliferation, differentiation and development.Smad3 is a 50 kDa member of a family of proteins that act as key mediators of TGF beta superfamily signaling in cell proliferation, differentiation and development.

REFERENCE

1. Riggins G.J., Thiagalingam S., Rosenblum E., Weinstein C.L., Kern S.E., Hamilton S.R., Willson J.K.V., Markowitz S.D., Kinzler K.W., Vogelstein B.V.;"Mad-related genes in the human."; Nat. Genet. 13:347-349(1996). 2. Zhang Y., Feng X.-H., Wu R.-Y., Derynck R.;"Receptor-associated Mad homologues synergize as effectors of the TGF-beta response.";Nature 383:168-172(1996).

3 Inman, G. J.; Nicolas, F. J.; Hill, C. S. : Nucleocytoplasmic shuttling of Smads 2, 3, and 4 permits sensing of TGF-beta receptor activity. *Molec. Cell* 10: 283-294, 2002.

Contact: Antagene, Inc. | Tel: 1 (866) 964-2589 | Fax: 1 (888) 225-1868 | Email:Info@antageneinc.com