Product Information Sheet

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

Catalogue No. PA1073-M

Lot No. 03D01

Ig type: rabbit IgG

Size: 200µl

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.

Purity

Immunogen affinity purified.

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN_3.

Storage

Store at 4˚C for frequent use.

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation.

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

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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.

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