

SMAD4 antibody (pAb)

Catalog Nos: 61631, 61632

RRID: AB_2793711

Isotype: IgG

Application(s): IP, WB

Reactivity: Human

Volumes: 100 μ l, 10 μ l

Purification: Affinity Purified

Host: Rabbit

Molecular Weight: 72 kDa

Background: **SMAD4** (Mothers Against Decapentaplegic Homolog 4) or common SMAD (co-SMAD) is the coactivator and mediator of signal transduction by TGF-beta (transforming growth factor). Component of the heterotrimeric SMAD2/SMAD3-SMAD4 complex that forms in the nucleus and is required for the TGF-mediated signaling. Promotes binding of the SMAD2/SMAD4/FAST-1 complex to DNA and provides an activation function required for SMAD1 or SMAD2 to stimulate transcription. Component of the multimeric SMAD3/SMAD4/JUN/FOS complex which forms at the AP1 promoter site; required for synergistic transcriptional activity in response to TGF-beta. May act as a tumor suppressor. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

Immunogen: This antibody was raised against a peptide within the N-terminal region of human SMAD4.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

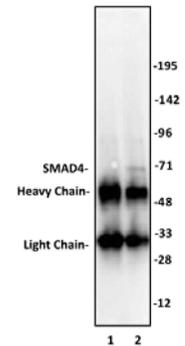
IP: 10 μ l per IP

WB*: 1:500 - 1:1,000 dilution

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

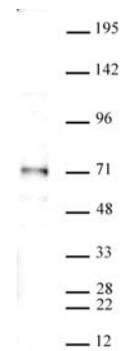
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



SMAD4 antibody (pAb) tested by Immunoprecipitation.

10 μ l of SMAD4 antibody was used to immunoprecipitate SMAD4 from 250 μ g of HeLa nuclear cell extract (lane 2). 10 μ l of rabbit IgG was used as a negative control (lane 1). The immunoprecipitated protein was detected by Western blotting using the SMAD4 antibody at a dilution of 1:500.



SMAD4 antibody (pAb) tested by Western blot.

Detection of SMAD4 by Western blot analysis. Nuclear extract of HeLa cells (30 μ g) probed with SMAD4 antibody at a dilution of 1:500.