



Mouse Monoclonal Antibody **Smad2 (phospho Ser250)** conjugated to Sepharose Beads

CatalogNo: **ANT8030-M**

Size 200ul

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 beads. It is useful for immunoprecipitation.

**Smad2 (phospho Ser250) (ANT0058R) Rabbit mAb**

Formulation: Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg ANaN3.

### Host Species

- Rabbit
- Human, Mouse, Rat,

### Reactivity

- WB, IHC, IF, IP, ELISA

### Applications

### MW

- 58kD (Calculated)
  - IgG, Kappa
- 58kD (Observed)

### Isotype

## Recommended Dilution Ratios

### IP

## Basic Information

### Clonality

Monoclonal

Clone Number ANT0058R

Immunogen Information Specificity

Endogenous

Gene name SMAD2  
Protein Name Mothers against decapentaplegic homolog 2

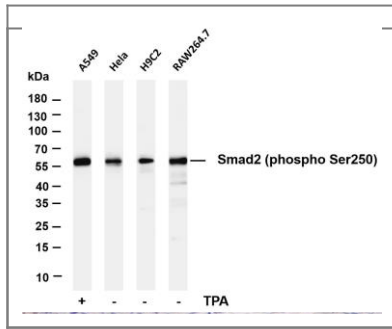
Organism	Gene ID	UniProt ID
Human	<a href="#">4087</a> ;	<a href="#">Q15796</a> ;
Mouse	<a href="#">17126</a> ;	<a href="#">Q62432</a> ;
Rat	<a href="#">29357</a> ;	<a href="#">O70436</a> ;

Cellular Localization Cytoplasm, Nuclear

Tissue specificity Expressed at high levels in skeletal muscle, endothelial cells, heart and placenta.

Function Disease:Defects in SMAD2 are found in sporadic cases of colorectal carcinoma.,Function:Transcriptional modulator activated by TGF-beta and activin type 1 receptor kinase. SMAD2 is a receptor-regulated SMAD (R-SMAD). May act as a tumor suppressor in colorectal carcinoma.,ANTM:Acetylated on Lys-19 by coactivators in response to TGF-beta signaling, which increases transcriptional activity. Isoform short: Acetylation increases DNA binding activity in vitro and enhances its association with target promoters in vivo.,PTM:In response to TGF-beta, ubiquitinated by NEDD4L; which promotes its degradation.,PTM:Phosphorylated on one or several of Thr-220, Ser-245, Ser-250, and Ser-255. In response to TGF-beta, phosphorylated on Ser-465/467 by TGF-beta and activin type 1 receptor kinases. Able to interact with SMURF2 when phosphorylated on Ser-465/467, recruiting other proteins, such as SNON, for degradation. In response to decorin, the naturally occurring inhibitor of TGF-beta signaling, phosphorylated on Ser-240 by CaMK2. Phosphorylated by MAPK3 upon EGF stimulation; which increases transcriptional activity and stability, and is blocked by calmodulin.,similarity:Belongs to the dwarfin/SMAD family.,similarity:Contains 1 MH1 (MAD homology 1) domain.,similarity:Contains 1 MH2 (MAD homology 2) domain.,subcellular location:Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4.,subunit:Found in a complex with SMAD3 and TRIM33 upon addition of TGF-beta. Interacts with SMAD3 and TRIM33. Interacts with SARA (SMAD anchor for receptor activation); may form trimers with the SMAD4 coSMAD. Interacts with FOXH1, homeobox protein TGIF, PEBP2-alpha subunit, CREB-binding protein (CBP), EP300 and SKI. Interacts with SNON; when phosphorylated at Ser-465/467. Interacts (via PY-motif) with SMURF2. Interacts with AIP1 and HGS. Interacts with NEDD4L in response to TGF-beta (By similarity). Interacts with LBXCOR1 and CORL2.,tissue specificity:Expressed at high levels in skeletal muscle, heart and placenta.,

## Validation Data



Human hepatocellular carcinoma was stained with anti-Smad2 (phospho Ser250) (ANT0058R) rabbit antibody

Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Smad2 (phospho Ser250) (ANT0058R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 treated with TPA for 48 hours Lane 2: Hela Lane 3: H9C2 Lane 4: RAW264.7 Predicted band size: 58kDa Observed

band size: 58kDa

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