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

CatalogNo: ANT8030-S

Size 200ul

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.

Smad2 (phospho Ser250) (ANT0058R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN3a3 preservative.

Host Species Reactivity Applications

• Rabbit • Human, Mouse, Rat, • WB, IHC, IF, IP, ELISA

MW Isotype

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

Recommended Dilution Ratios

ΙP

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	<u>4087</u> ;	<u>Q15796</u> ;
Mouse	<u>17126</u> ;	<u>Q62432;</u>
Rat	<u>29357</u> ;	<u>070436</u> ;

Cellular Cytoplasm, Nuclear

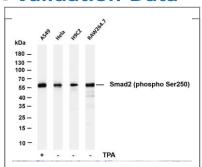
Localization

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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