

# Smad6 (P-20): sc-26401

## BACKGROUND

Smad proteins, the mammalian homologs of the *Drosophila* Mothers against dpp (Mad) have been implicated as downstream effectors of TGF $\beta$ /BMP signaling. Smad1 (also designated Madr1 or JV4-1), Smad5 and mammalian Smad8 (also designated Smad9 or MadH6) are effectors of BMP2 and BMP4 function, while Smad2 (also designated Madr2 or JV18-1) and Smad3 are involved in TGF $\beta$  and activin-mediated growth modulation. Smad4 (also designated DPC4) has been shown to mediate all of the above activities through interaction with various Smad family members. Smad6 and Smad7 regulate the response to activin/TGF $\beta$  signaling by interfering with TGF $\beta$ -mediated phosphorylation of other Smad family members.

## CHROMOSOMAL LOCATION

Genetic locus: SMAD6 (human) mapping to 15q22.31; Smad6 (mouse) mapping to 9 C.

## SOURCE

Smad6 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Smad6 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26401 P, (100  $\mu$ g peptide in 0.5 ml PBS containing 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Smad6 (P-20) is recommended for detection of Smad6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Smad6 (P-20) is also recommended for detection of Smad6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Smad6 siRNA (h): sc-38380, Smad6 siRNA (m): sc-38381, Smad6 shRNA Plasmid (h): sc-38380-SH, Smad6 shRNA Plasmid (m): sc-38381-SH, Smad6 shRNA (h) Lentiviral Particles: sc-38380-V and Smad6 shRNA (m) Lentiviral Particles: sc-38381-V.

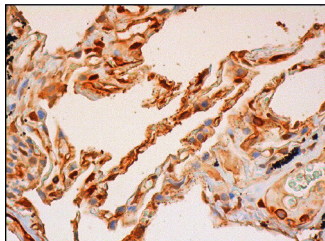
Molecular Weight of Smad6 isoforms: 54/36/26 kDa.

Positive Controls: A549 cell lysate: sc-2413 or Jurkat whole cell lysate: sc-2204.

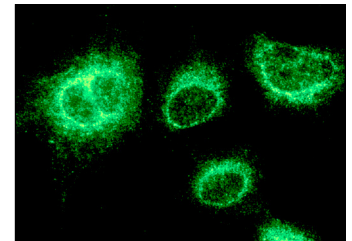
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Smad6 (P-20): sc-26401. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing cytoplasmic and nuclear staining of pneumocytes and cytoplasmic staining of macrophages.



Smad6 (P-20): sc-26401. Immunofluorescence staining of methanol-fixed A549 cells showing cytoplasmic localization.

## PROTOCOLS

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Try **Smad6 (D-4): sc-25321**, our highly recommended monoclonal alternative to Smad6 (P-20).