**BACKGROUND**

Smad proteins, the mammalian homologs of the Drosophila mothers against dpp (Mad) have been implicated as downstream effectors of TGFβ/BMP signaling. Smad1 (also designated Madr1 or JV4-1), Smad5 and mammalian Smad8 (also designated Mad9 or MadH6) are effectors of BMP-2 and BMP-4 function while Smad2 (also designated Madr2 or JV18-1) and Smad3 are involved in TGFβ 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/TGFβ signaling by interfering with TGFβ-mediated phosphorylation of other Smad family members.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: SMAD3 (human) mapping to 15q22.33; Smad3 (mouse) mapping to 9 C.

**SOURCE**

Smad3 (38-Q) is a mouse monoclonal antibody raised against recombinant Smad3 of human origin.

**PRODUCT**

Each vial contains 50 µg IgG2a kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Smad3 (38-Q) is recommended for detection of Smad3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for Smad3 siRNA (h): sc-38376, Smad3 siRNA (m): sc-38377, Smad3 shRNA Plasmid (h): sc-38376-SH, Smad3 shRNA Plasmid (m): sc-38377-SH, Smad3 shRNA (h) Lentiviral Particles: sc-38376-V and Smad3 shRNA (m) Lentiviral Particles: sc-38377-V.

Molecular Weight of Smad3: 54 kDa.

Positive Controls: Smad3 (h): 293T Lysate: sc-116400 or HeLa whole cell lysate: sc-2200.

**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.

**DATA**

![Smad3 (38-Q): sc-101154. Western blot analysis of Smad3 expression in non-transfected: sc-117752 (A) and human Smad3 transfected: sc-116400 (B) 293T whole cell lysates.](image)

**SELECT PRODUCT CITATIONS**