Smad7 (Z8-B): sc-101152

**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 Smad9 or MADH6) are effectors of BMP2 and BMP4 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: SMAD7 (human) mapping to 18q21.1; Smad7 (mouse) mapping to 18 E3.

**SOURCE**

Smad7 (Z8-B) is a mouse monoclonal antibody raised against recombinant Smad7 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Smad7 (Z8-B) is recommended for detection of Smad7 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 Smad7 siRNA (h): sc-36508, Smad7 siRNA (m): sc-36509, Smad7 shRNA Plasmid (h): sc-36508-SH, Smad7 shRNA Plasmid (m): sc-36509-SH, Smad7 shRNA (h) Lentiviral Particles: sc-36508-V and Smad7 shRNA (m) Lentiviral Particles: sc-36509-V.

Molecular Weight of Smad7: 46 KDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or A549 cell lysate: sc-2413.

**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**

![Western blot analysis of Smad7 expression in HeLa whole cell lysate.](image1)

![Immunoperoxidase staining of formalin-fixed, paraffin-embedded human placenta tissue showing nuclear localization.](image2)

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.