

Smad4 (H-552): sc-7154

BACKGROUND

Smad proteins, the mammalian homologs of the *Drosophila* Mothers against dpp (Mad) have been implicated as downstream effectors of TGF β /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 β 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 β signaling by interfering with TGF β -mediated phosphorylation of other Smad family members.

CHROMOSOMAL LOCATION

Genetic locus: SMAD4 (human) mapping to 18q21.2; Smad4 (mouse) mapping to 18 E2.

SOURCE

Smad4 (H-552) is a rabbit polyclonal antibody raised against amino acids 1-552 of Smad4 of human origin.

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-7154 X, 200 μ g/0.1 ml.

APPLICATIONS

Smad4 (H-552) is recommended for detection of Smad4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Smad4 (H-552) is also recommended for detection of Smad4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Smad4 siRNA (h): sc-29484, Smad4 siRNA (m): sc-29485, Smad4 shRNA Plasmid (h): sc-29484-SH, Smad4 shRNA Plasmid (m): sc-29485-SH, Smad4 shRNA (h) Lentiviral Particles: sc-29484-V and Smad4 shRNA (m) Lentiviral Particles: sc-29485-V.

Smad4 (H-552) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Smad4: 61 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, NIH/3T3 whole cell lysate: sc-2210 or 3611-RF whole cell lysate: sc-2215.

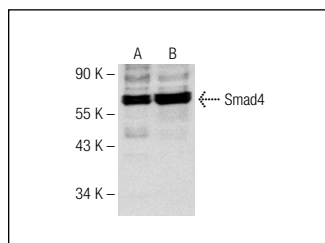
STORAGE

Store at 4 $^{\circ}$ 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



Smad4 (H-552): sc-7154. Western blot analysis of Smad4 expression in Hep G2 (A) and NIH/3T3 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

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Try **Smad4 (B-8): sc-7966** or **Smad4 (DCS-46): sc-73599**, our highly recommended monoclonal alternatives to Smad4 (H-552). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Smad4 (B-8): sc-7966**.