

Smad2 (S-20): sc-6200

BACKGROUND

Smad proteins, the mammalian homologs of the *Drosophila* mothers against decapentaplegic (Mad), have been implicated as downstream effectors of TGF β /BMP signaling. Smad1 (also designated Madr1 or JV4-1) and Smad5 are effectors of BMP-2 and BMP-4 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 proteins.

CHROMOSOMAL LOCATION

Genetic locus: SMAD2 (human) mapping to 18q21.1; Smad2 (mouse) mapping to 18 E3.

SOURCE

Smad2 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Smad2 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.

Blocking peptide available for competition studies, sc-6200 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-6200 X, 200 μ g/0.1 ml.

APPLICATIONS

Smad2 (S-20) is recommended for detection of Smad2 of mouse, rat, human and mink 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).

Smad2 (S-20) is also recommended for detection of Smad2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Smad2 siRNA (h): sc-38374, Smad2 siRNA (m): sc-38375, Smad2 shRNA Plasmid (h): sc-38374-SH, Smad2 shRNA Plasmid (m): sc-38375-SH, Smad2 shRNA (h) Lentiviral Particles: sc-38374-V and Smad2 shRNA (m) Lentiviral Particles: sc-38375-V.

Smad2 (S-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Smad2: 55-60 kDa.

Positive Controls: Smad2 (h2): 293T Lysate: sc-114131, Smad2 (m): 293T Lysate: sc-123638 or HeLa nuclear extract: sc-2120.

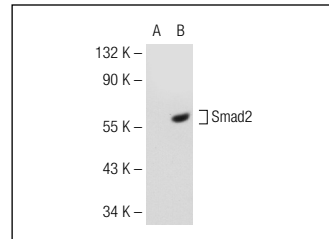
RESEARCH USE

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

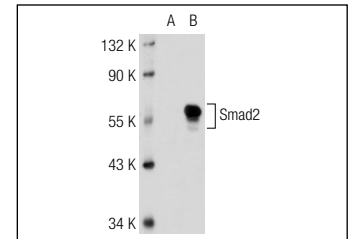
STORAGE

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

DATA



Smad2 (S-20): sc-6200. Western blot analysis of Smad2 expression in non-transfected: sc-117752 (A) and mouse Smad2 transfected: sc-123638 (B) 293T whole cell lysates.



Smad2 (S-20): sc-6200. Western blot analysis of Smad2 expression in non-transfected: sc-117752 (A) and human Smad2 transfected: sc-114131 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

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- Forbes, K., et al. 2010. Transforming growth factor- β (TGF β) receptors I/II differentially regulate TGF β 1 and IGF-binding protein-3 mitogenic effects in the human placenta. Endocrinology 151: 1723-1731.
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