SANTA CRUZ BIOTECHNOLOGY, INC.

Smad1/5 (T-20): sc-6201

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The Power to Question

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.

SOURCE

Smad1/5 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within the amino terminal domain of Smad1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6201 P, (100 µg 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-6201 X, 200 µg/0.1 ml.

APPLICATIONS

Smad1/5 (T-20) is recommended for detection of Smad1, Smad5 and, to a lesser extent, Smad8 and Smad9 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Smad1/5 (T-20) is also recommended for detection of Smad1, Smad5 and, to a lesser extent, Smad8 and Smad9 in additional species, including equine, bovine, porcine and avian.

Smad1 (T-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Smad1: 52-56 kDa.

Molecular Weight of Smad5: 43 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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.

SELECT PRODUCT CITATIONS

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3. Oxburgh, L., et al. 2002. Dynamic regulation of Smad expression during mesenchyme to epithelium transition in the metanephric kidney. Mech. Dev. 112: 207-211.
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7. Maire, M., et al. 2005. Alteration of transforming growth factor-β signaling system expression in adult rat germ cells with a chronic apoptotic cell death process after fetal androgen disruption. Endocrinology 146: 5135-5143.
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