

Smad7 (G-23): sc-134013

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.

REFERENCES

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4. Lagna, G., et al. 1996. Partnership between DPC4 and Smad proteins in TGF β signalling pathways. *Nature* 383: 832-836.
5. Massague, J., et al. 1997. TGF β signalling through the Smad pathway. *Trends Cell Biol.* 7: 187-192.
6. Chen, Y., et al. 1997. Smad8 mediates the signaling of the receptor serine kinase. *Proc. Natl. Acad. Sci. USA* 94: 12938-12943.
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8. Heldin, C.H., et al. 1997. TGF β signalling from cell membrane to nucleus through Smad proteins. *Nature* 390: 465-471.
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CHROMOSOMAL LOCATION

Genetic locus: SMAD7 (human) mapping to 18q21.1.

SOURCE

Smad7 (G-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic Smad7 peptide of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Smad7 (G-23) is recommended for detection of Smad7 of 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)] 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 shRNA Plasmid (h): sc-36508-SH and Smad7 shRNA (h) Lentiviral Particles: sc-36508-V.

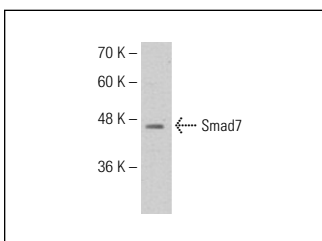
Molecular Weight of Smad7: 46 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz MarkerTM compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz MarkerTM Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Smad7 (G-23): sc-134013. Western blot analysis of Smad7 expression in Jurkat whole cell lysate.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Smad7 (B-8): sc-365846** or **Smad7 (Z8-B): sc-101152**, our highly recommended monoclonal alternatives to Smad7 (G-23). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Smad7 (B-8): sc-365846**.