Anti-Smad2/3 Antibody [4D3]

RT1566

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IF, IHC-P
Molecular Wt:	55-60kDa
Clone number:	4D3

Description: Smad proteins, the mammalian homologs of the Drosophila mothers against decapentaplegic (Mad), have been implicated as downstream effectors of TGFβ/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 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 proteins.

Immunogen: peptide

Positive control: human thyroid tissue.

Subcellular location: Cytoplasm, Nucleus

Database links: SwissProt: Q15796 Human

Recommended Dilutions:

WB	1:1,000
IP	1-2 μg per 100-500 μg of total protein
IF	1:50-500
IHC-P	1:50-500

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at +4℃

Purity: Protein A affinity purified.

Images

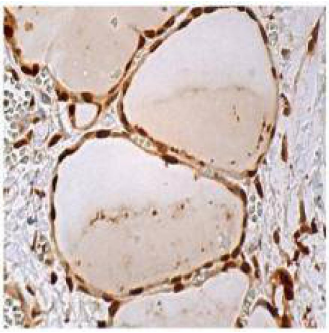

Fig1: Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid tissue showing nuclear staining of glandular cells.

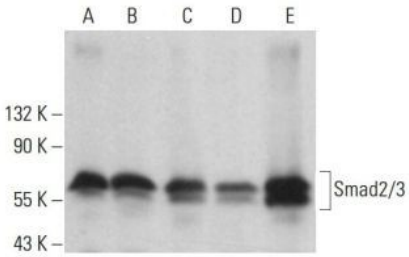

Fig2: Western blot analysis of Smad2/3 expression in K-562 (A), HEL 92.1.7 (B), PC-12 (C), WEHI-231 (D) and NIH/3T3 (E) whole cell lysates.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Liu, F., et al. 1996. A human Mad protein acting as a BMP-regulated transcriptional activator. Nature 381: 620-623.
2. Hoodless, P.A., et al. 1996. Madr1, a Mad-related protein that functions in BMP-2 signaling pathways. Cell 85: 489-500.