

SMAD3 Antibody (Center D201)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6267a

Product Information

Application	WB, IF, FC, E
Primary Accession	P84022
Other Accession	P84025 , P84024 , Q8BUN5 , P84023
Reactivity	Mouse, Rat, Human
Predicted	Chicken, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB07301
Antigen Region	186-215

Additional Information

Other Names	Mothers against decapentaplegic homolog 3, MAD homolog 3, Mad3, Mothers against DPP homolog 3, hMAD-3, JV15-2, SMAD family member 3, SMAD 3, Smad3, hSMAD3, SMAD3, MADH3
Target/Specificity	This SMAD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 186-215 amino acids from the Central region of human SMAD3.
Dilution	WB~~1:1000 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SMAD3 Antibody (Center D201) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

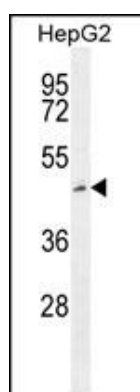
SMAD3, a receptor regulated SMAD (R-SMAD) is a transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinase. SMAD3 is estimated to account for at least

80% of all TGF-beta-mediated response. Activated type I receptor phosphorylates receptor-activated SMADS (RSMADS) at their c-terminal two extreme serines in the SSXS motif. The phosphorylated R-SMADS translocate into the nucleus, where they regulate transcription of target genes. The SMAD3 signal transduction appears to be important in the rgulation of muscle-specific genes. Loss of SMAD3 is a feature of pediatric T-cell lymphoblastic leukemia, while upregulation of SMAD3 may be responsible for TGFB hyperresponsiveness observed in scleroderma.

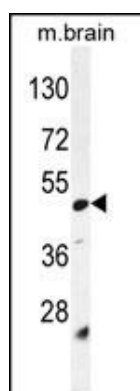
References

Imoto, S., et al., FEBS Lett. 579(13):2853-2862 (2005). Dubrovskaja, A., et al., Oncogene 24(14):2289-2297 (2005). Furumatsu, T., et al., J. Biol. Chem. 280(9):8343-8350 (2005). Kobayashi, T., et al., Biochem. Biophys. Res. Commun. 327(2):393-398 (2005). Kamaraju, A.K., et al., J. Biol. Chem. 280(2):1024-1036 (2005).

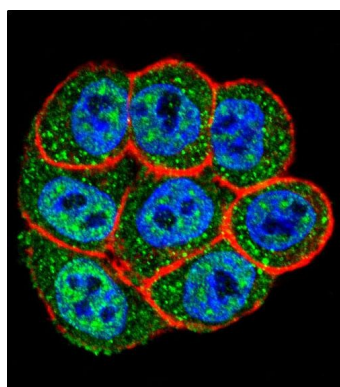
Images



SMAD3 antibody (Center D201)(Cat.#AP6267a) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the SMAD3 antibody detected the SMAD3 protein (arrow).

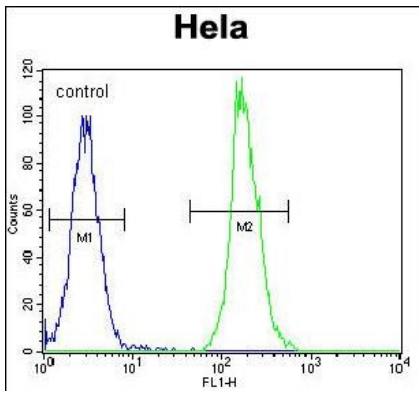


SMAD3 antibody (Center D201)(Cat.#AP6267a) western blot analysis in mouse brain tissue lysates (35ug/lane). This demonstrates the SMAD3 antibody detected the SMAD3 protein (arrow).



Confocal immunofluorescent analysis of SMAD3 Antibody (Center D201)(Cat.#AP6267a) with HeLa cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

SMAD3 Antibody (Center D201) (Cat. #AP6267a) flow cytometric analysis of HeLa cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary



antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.