Rabbit Phospho-SMAD3 (S208) Polyclonal Antibody | anti-SMAD3 antibody

Phospho-SMAD3 (S208) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA289606	**Rabbit**	**Human (Predicted Reactivity: Chicken, Mouse, Pig, Rat)**	**ELISA, Dot Blot, Immunofluorescence**

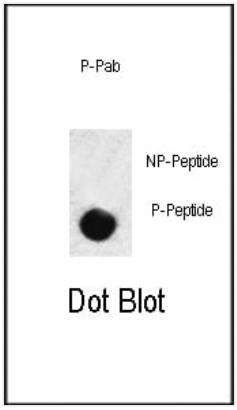
PRODUCT SYNONYMS

Phospho-SMAD3 (S208); Polyclonal Antibody; Phospho-SMAD3 (S208) Antibody; 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; anti-SMAD3 antibody

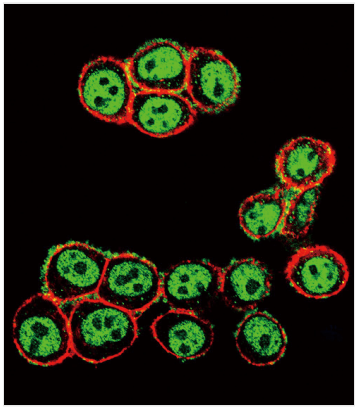
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Chicken, Mouse, Pig, Rat)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This SMAD3 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S208 of human SMAD3.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/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.
Concentration	Vial Concentration: 0.5 (varies by lot)
Sequence Length	230
Applicable Applications for anti-SMAD3 antibody	ELISA, DB (Dot Blot), IF (Immunofluorescence)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

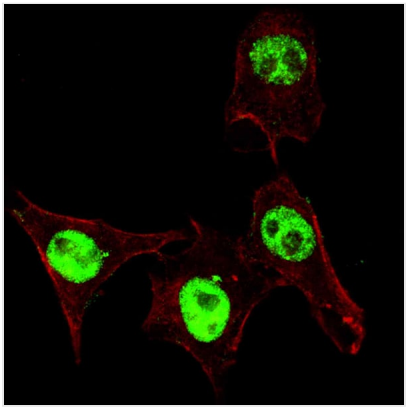
IMAGES



DB (Dot Blot)
Dot blot analysis of anti-hSMAD3-S208 Phospho-specific Pab on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.



IF (Immunofluorescence)
Confocal immunofluorescent analysis of Phospho-SMAD3-S208 Antibody with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).



IF (Immunofluorescence)
Fluorescent confocal image of HeLa cells stained with phospho-SMAD3-S208 antibody. HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AAA289606 phospho-SMAD3-S208 primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (5.25 uM, 25 min). Pictures were taken on a Biorevo microscope (BZ-900, Keyence).Note the highly specific localization of the phospho-SMAD3 mainly to the nucleus, supported by Human Protein Atlas Data (http://www.proteinatlas.org/ENSG00000166949).

ADDITIONAL INFORMATION

Related Product Information for anti-SMAD3 antibody	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-SMAD translocate into nucleus, where they regulate transcription of target genes. 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.
Product Categories/Family for anti-SMAD3 antibody	Cancer; Developmental Biology; Metabolism; Neuroscience; Signal Transduction; Phospho Antibodies

References	References for protein: 1.Imoto, S., et al., FEBS Lett. 579(13):2853-2862 (2005). 2.Dubrovska, A., et al., Oncogene 24(14):2289-2297 (2005). 3.Furumatsu, T., et al., J. Biol. Chem. 280(9):8343-8350 (2005). 4.Kobayashi, T., et al., Biochem. Biophys. Res. Commun. 327(2):393-398 (2005). 5.Kamaraju, A.K., et al., J. Biol. Chem. 280(2):1024-1036 (2005). References for HeLa cell line: 1. Scherer WF, Syverton JT, Gey GO (May 1953). "Studies on the propagation in vitro of poliomyelitis viruses. IV. Viral multiplication in a stable strain of human malignant epithelial cells (strain HeLa) derived from an epidermoid carcinoma of the cervix". J. Exp. Med. 97 (5): 695-710. [PubMed:13052828]. 2. Macville M, Schröck E, Padilla-Nash H, Keck C, Ghadimi BM, Zimonjic D, Popescu N, Ried T (January 1999). "Comprehensive and definitive molecular cytogenetic characterization of HeLa cells by spectral karyotyping". Cancer Res. 59 (1): 141-50. [PubMed: 9892199]. 3. Rahbari R, Sheahan T, Modes V, Collier P, Macfarlane C, Badge RM (April 2009). "A novel L1 retrotransposon marker for HeLa cell line identification". BioTechniques 46 (4): 277-84. [PubMed: 19450234]. 4. Capes-Davis A, Theodosopoulos G, Atkin I, Drexler HG, Kohara A, MacLeod RA, Masters JR, Nakamura Y, Reid YA, Reddel RR, Freshney RI (July 2010). "Check your cultures! A list of cross-contaminated or misidentified cell lines". Int. J. Cancer 127 (1): 1-8. [PubMed:20143388].

NCBI AND UNIPROT INFORMATION

NCBI GI #	223029440
NCBI GeneID	4088
NCBI Accession #	NP_001138574.1; NP_001138575.1; NP_001138576.1; NP_005893.1
NCBI GenBank Nucleotide #	NM_001145102.1
UniProt Accession #	P84022; O09064; O09144; O14510; O35273; Q92940; Q93002; A8K4B6; B7Z4Z5; B7Z6M9; B7Z9Q2; F5H383
Molecular Weight	48081
NCBI Official Full Name	mothers against decapentaplegic homolog 3 isoform 2
NCBI Official Synonym Full Names	SMAD family member 3
NCBI Official Symbol	SMAD3
NCBI Official Synonym Symbols	LDS3; LDS1C; MADH3; JV15-2; HSPC193; HsT17436
NCBI Protein Information	mothers against decapentaplegic homolog 3
UniProt Protein Name	Mothers against decapentaplegic homolog 3
UniProt Gene Name	**SMAD3**
UniProt Synonym Gene Names	MADH3; MAD homolog 3; Mad3; Mothers against DPP homolog 3; hMAD-3; SMAD 3; Smad3; hSMAD3
UniProt Entry Name	SMAD3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/polyclonal/phospho-smad3-s208-antibody-dot-blot-immunofluorescence-elisa/289606