细胞信号转导分子 SMAD6 抗体

产品货号： mIR23329

英文名称： SMAD6

中文名称： 细胞信号转导分子 SMAD6 抗体

别　　名： SMAD Family Member 6; MAD Homolog 6; MADH6; MAD, Mothers Against Decapentaplegic Homolog 6 (Drosophila) ; Mothers Against Decapentaplegic, Drosophila, Homolog Of, 6; SMAD, Mothers Against DPP Homolog 6 (Drosophila) ; Mothers Against Decapentaplegic Homolog 6; SMAD, Mothers Against DPP Homolog 6; Mothers Against DPP Homolog 6; HsT17432; SMAD 6; HSMAD6; AOVD2; MADH7; SMAD6_HUMAN;

研究领域： 肿瘤　细胞生物　信号转导　细胞凋亡

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,

产品应用： WB=1:500-2000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 54kDa

细胞定位： 细胞核

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human SMAD6:351-450/469

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 ° C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ° C.

PubMed : PubMed

产品介绍 : The protein encoded by this gene belongs to the SMAD family of proteins, which are related to Drosophila 'mothers against decapentaplegic' (Mad) and C. elegans Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein functions in the negative regulation of BMP and TGF-beta/activin-signalling. Multiple transcript variants have been found for this gene.[provided by RefSeq, Sep 2014]

Function:

Acts as a mediator of TGF-beta and BMP antiflammatory activity. Suppresses IL1R-TLR signaling through its direct interaction with PEL1, preventing NF-kappa-B activation, nuclear transport and NF-kappa-B-mediated expression of proinflammatory genes. May block the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor-activated SMAD1-binding. Binds to regulatory elements in target promoter regions.

Subunit:

Interacts with NEDD4L (By similarity). Interacts with WWP1 (By similarity). Interacts with STAMBP and PRKX. Interacts with RNF111 and AXIN1. Interacts with TGF-beta type I receptor superfamily members, including ACVR1B, BMPR1B and TGFBR1. In response to BMP2, but not to TGFB treatment, interacts with SMAD1, but not with SMAD2, nor with SMAD4; this interaction may inhibit SMAD1 binding to SMAD4. Interacts with HOXC8 and HOXC9. Interacts with PELI1; this interaction interferes with PELI1 complex formation with TRAF6, IRAK1, IRAK4 and MYD88 in response to IL1B and hence negatively regulates IL1R-TLR signaling.

Subcellular Location:

Nucleus

Tissue Specificity:

Ubiquitous in various organs, with higher levels in lung. Isoform B is up-regulated in diseased heart tissue.

Post-translational modifications:

Phosphorylated by BMP type 1 receptor kinase and by PRKX.

Monoubiquitinated at Lys-173 by the E2/E3 hybrid ubiquitin-protein ligase UBE2O, leading to reduced binding affinity for the activated BMP type I receptor ACVR1/ALK2, thereby enhancing BMP7 and regulating adipocyte differentiation (PubMed:23455153). Ubiquitinated by WWP1 (By similarity). Ubiquitinated by RNF165, promoting proteasomal degradation, leading to enhance the BMP-Smad signaling (By similarity).

Arginine methylation by PRMT1, which is recruited by BMPR2, initiates BMP-Induced signaling and induces dissociation from the BMPR1B receptor at the cell surface leading to derepress downstream Smad1/Smad5 signaling.

DISEASE:

Aortic valve disease 2 (AOVD2): The disease is caused by mutations affecting the gene represented in this entry. SMAD6 variants may contribute to increased risk of congenital cardiovascular malformations (CVM). CVM is a major cause of mortality and morbidity in childhood. In most sporadic cases that cannot be attributed to particular malformation syndromes or teratogenic exposures, there remains a substantial excess familial risk, indicating a significant genetic contribution to disease susceptibility (PubMed:22275001).

Disease descriptionA common defect in the aortic valve in which two rather than three leaflets are present. It is often associated with aortic valve calcification, stenosis and insufficiency. In extreme cases, the blood flow may be so restricted that the left ventricle fails to grow, resulting in hypoplastic left heart syndrome.

Similarity:

Belongs to the dwarfin/SMAD family.

SWISS:

O43541

Gene ID:

4091

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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