abcam

Product datasheet

Anti-Smad2 antibody ab228765

2 References 4 图像

概述

免疫原

产**品名称** Anti-Smad2**抗体**

描述 兔多克隆抗体to Smad2

宿主 Rabbit

经测试应用 适用于: WB, IHC-P, ICC/IF 中属反应性 与反应: Mouse, Rat, Human

预测可用于: Chicken, Cow, Pig, Xenopus laevis, Zebrafish, Rhesus monkey

Recombinant fragment within Human Smad2 (internal sequence). The exact sequence is

proprietary.

Database link: Q15796

阳性对照 WB: Jurkat whole cell lysate. IHC-P: Mouse liver and rat testis tissues. ICC/IF: HeLa cells.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.00

Preservative: 0.01% Thimerosal (merthiolate)

Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol (glycerin, glycerine)

纯**度** Immunogen affinity purified

克隆 多克隆

同种型 lgG

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The Abpromise guarantee

Abpromise™承诺保证使用ab228765于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/500 - 1/3000. Predicted molecular weight: 52 kDa.
IHC-P		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.

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功能

Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD2/SMAD4 complex, activates transcription. May act as a tumor suppressor in colorectal carcinoma.

组织特异性

Expressed at high levels in skeletal muscle, heart and placenta.

序列相似性

Belongs to the dwarfin/SMAD family.

Contains 1 MH1 (MAD homology 1) domain.

Contains 1 MH2 (MAD homology 2) domain.

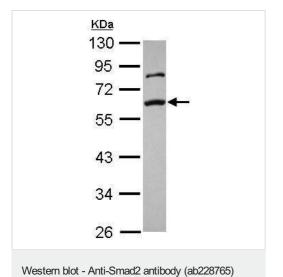
翻译后修饰

Phosphorylated on one or several of Thr-220, Ser-245, Ser-250, and Ser-255. In response to TGF-beta, phosphorylated on Ser-465/467 by TGF-beta and activin type 1 receptor kinases. Able to interact with SMURF2 when phosphorylated on Ser-465/467, recruiting other proteins, such as SNON, for degradation. In response to decorin, the naturally occurring inhibitor of TGF-beta signaling, phosphorylated on Ser-240 by CaMK2. Phosphorylated by MAPK3 upon EGF stimulation; which increases transcriptional activity and stability, and is blocked by calmodulin. In response to TGF-beta, ubiquitinated by NEDD4L; which promotes its degradation. Acetylated on Lys-19 by coactivators in response to TGF-beta signaling, which increases transcriptional activity. Isoform short: Acetylation increases DNA binding activity in vitro and enhances its association with target promoters in vivo. Acetylation in the nucleus by EP300 is enhanced by TGF-beta.

细胞定位

Cytoplasm. Nucleus. Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4. On dephosphorylation by phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1.

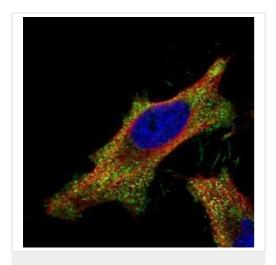
图片



Anti-Smad2 antibody (ab228765) at 1/500 dilution + Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

Predicted band size: 52 kDa

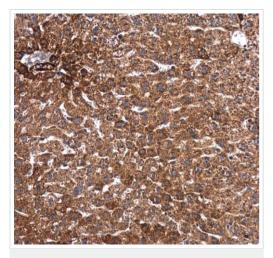
10% SDS-PAGE gel.



Immunocytochemistry/ Immunofluorescence - Anti-Smad2 antibody (ab228765)

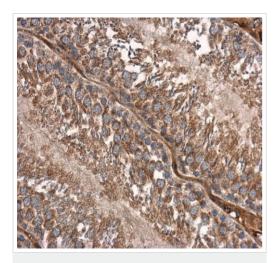
Paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for Smad2 (green) using ab228765 at 1/500 dilution in ICC/IF.

Alpha-tubulin filaments were labeled with an anti-Alpha-tubulin antibody at 1/2000 dilution (red).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Smad2 antibody (ab228765)

Paraffin-embedded mouse liver tissue stained for Smad2 using ab228765 at 1/500 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Smad2 antibody (ab228765)

Paraffin-embedded rat testis tissue stained for Smad2 using ab228765 at 1/500 dilution in immunohistochemical analysis.

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