abcam

Product datasheet

Anti-Smad2 (phospho S467) antibody ab53100

★★★★★ 14 Abreviews 93 References 4 图像

概述

产品名称 Anti-Smad2 (phospho S467)抗体

描述 兔多克隆抗体to Smad2 (phospho S467)

宿主 Rabbit

经**测**试应用 **适用于:** WB, IHC-P

种属反应性 与反应: Human

免疫原 Synthetic peptide corresponding to Human Smad2 (phospho S467).

Database link: Q15796

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 -20°C. Stable for 12 months at -20°C.

存储溶液 pH∷

Preservative: 0.02% Sodium azide

Constituents: 0.87% Sodium chloride, PBS

Without Mg+2 and Ca+2

Some lots contain 50% Glycerol, please contact our scientific support to confirm.

纯**度** Immunogen affinity purified

纯**化**说明 Affinity purified from rabbit antiserum by affinity chromatography using epitope specific

phosphopeptide. The antibody against non phosphopeptide was removed by chromatography

using non phosphopeptide corresponding to the phosphorylation site

克隆 多克隆

1

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab53100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	* * * * * <u>(9)</u>	1/300 - 1/1000. Detects a band of approximately 58 kDa (predicted molecular weight: 58 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

靶标

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

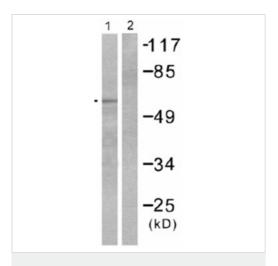
enhanced by TGF-beta.

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

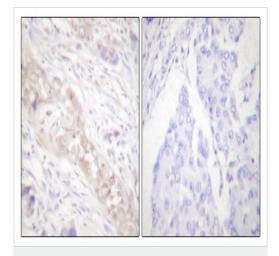


Western blot - Anti-Smad2 (phospho S467) antibody (ab53100)

All lanes : Anti-Smad2 (phospho S467) antibody (ab53100) at 1/300 dilution

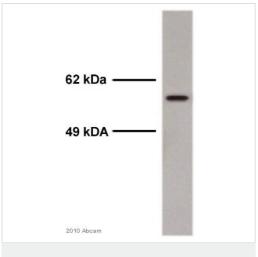
Lane 1: HeLa cell extract treated with PMA (125ng/ml, 15 mins)
Lane 2: HeLa cell extract treated with PMA (125ng/ml, 15 mins)
with phosphopeptide

Predicted band size: 58 kDa **Observed band size:** 58 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Smad2 (phospho S467) antibody (ab53100)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labeling Smad2 (phospho S467) with ab53100. The image on the right is blocked with a phosphopeptide.



Western blot - Anti-Smad2 (phospho S467) antibody (ab53100)

This image is courtesy of an anonymous Abreview

Anti-Smad2 (phospho S467) antibody (ab53100) at 1/750 dilution (for 16 hours at 4° C) + Mouse brain whole tissue lysate at 18 μ g

Secondary

An HRP-conjugated Goat anti-rabbit-lgG polyclonal at 1/7000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 58 kDa **Observed band size:** 58 kDa

Exposure time: 2 minutes

Blocking Step: 5% Milk for 1 hour at 18°C

Anti-Smad2 (phospho S467) antibody (ab53100) at 1/1500 dilution

+ Rat lung whole tissue lysate at 15 µg with Milk at 5 %

Secondary

Goat antirabbit conjugated to HRP at 1/7000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 58 kDa

Additional bands at: 59 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 2 minutes

Western blot - Anti-Smad2 (phospho S467) antibody (ab53100)

This image is courtesy of an anonymous Abreview.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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