abcam

Product datasheet

Anti-Smad2 (phospho S467) antibody ab53100

★★★★★ 14 Abreviews 93 References 画像数 4

製品の概要

製品名 Anti-Smad2 (phospho S467) antibody

製品の詳細 Rabbit polyclonal to Smad2 (phospho S467)

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

種交差性 交差種: Human

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

Database link: Q15796

特記事項

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7

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.

精製度 Immunogen affinity purified

特記事項(精製) 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

ポリ/モノ ポリクローナル

1

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab53100の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	*** * * (9)	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.

ターゲット情報

機能 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.

組織特異性 Expressed at high levels in skeletal muscle, heart and placenta.

配列類似性 Belongs to the dwarfin/SMAD family.

Contains 1 MH1 (MAD homology 1) domain. Contains 1 MH2 (MAD homology 2) domain.

翻訳後修飾 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

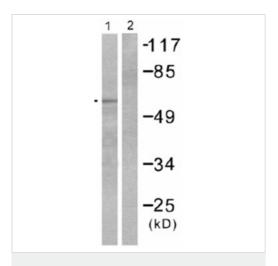
enhanced by TGF-beta.

細胞内局在 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.

画像

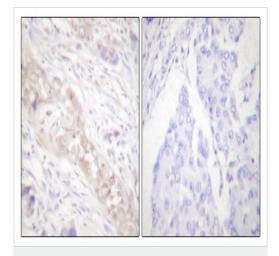


Western blot - Anti-Smad2 (phospho S467) antibody (ab53100)

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

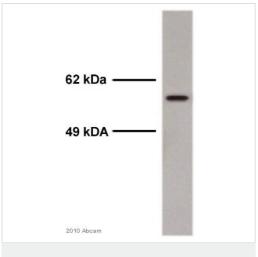
Lane 1: HeLa cell extract treated with PMA (125ng/ml, 15 mins)
Lane 2: HeLa cell extract treated with PMA (125ng/ml, 15 mins)
with phosphopeptide

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"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors