# abcam

## Product datasheet

## Anti-Smad2 antibody ab63576

★★★★★ 8 Abreviews 23 References 3 图像

#### 概述

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:** IHC-P. ICC/IF

种属反应性 与反应: Human

免疫原 Synthetic non-phosphopeptide derived from human Smad2 around the phosphorylation site of

serine 467 (C-S-S-M-S).

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: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

纯**度** Immunogen affinity purified

应用

The Abpromise guarantee Abpromise™承诺保证使用ab63576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。

1

应用	Ab评论	说明
IHC-P	<b>★★★★</b> <u>(2)</u>	1/50 - 1/100.
ICC/IF	<b>★★★★☆ (1)</b>	1/500 - 1/1000.

#### 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

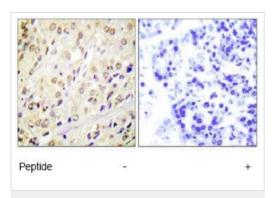
enhanced by TGF-beta.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Smad2 antibody (ab63576)

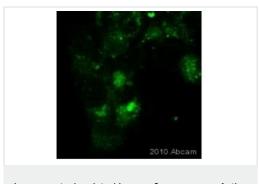
ab63576, at a 1/50 dilution, staining human Smad2 in prostate carcinoma, using Immunohistochemistry, Formalin/PFA fixed Paraffin embedded tissue, minus immunising peptide (left image) and plus immunising peptide (right image).



Immunocytochemistry/ Immunofluorescence - Anti-

Smad2 antibody (ab63576)

Immunofluorescent staining of HepG2 cells, using ab63576 at a 1/500 dilution, minus immunising peptide (left image) and plus immunising peptide (right image).



Immunocytochemistry/ Immunofluorescence - Anti-Smad2 antibody (ab63576)

This image is courtesy of an anonymous Abreview

ab63576 staining Smad2 in Mouse enterocytes by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.5% Triton and blocked with 5% BSA for 1 hour at 20°C. Samples were incubated with primary antibody (1/250) for 2 hours at 20°C. An Alexa Fluor<sup>®</sup>488-conjugated Goat anti-rabbit IgG polyclonal (1/1000) was used as the secondary antibody.

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 <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

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