

Anti-Smad2 antibody [5G7] ab119907

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概述

产品名称	Anti-Smad2抗体[5G7]
描述	小鼠单克隆抗体[5G7] to Smad2
宿主	Mouse
经测试应用	适用于: WB, ELISA, IHC-P, Flow Cyt, ICC/IF
种属反应性	与反应: Mouse, Human
免疫原	Purified recombinant fragment of Human Smad2 expressed in <i>E. Coli</i> .
阳性对照	Recombinant protein; Smad2-hlgGfc transfected HEK293 cell lysate; Human liver cancer and cerebellum tissues; U251 and NIH3T3 cells.
常规说明	<p>This product was changed from ascites to supernatant. Lot no's high than GR163661-5 are from Tissue Culture Supernatant</p> <p>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.</p> <p>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</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term.
存储溶液	Preservative: 0.05% Sodium azide Constituent: PBS
纯度	Protein G purified
纯化说明	Purified from tissue culture supernatant.
克隆	单克隆
克隆编号	5G7
同种型	IgG1

应用

The Abpromise guarantee

Abpromise™ 承诺保证使用 ab119907 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 - 1/2000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
ELISA		1/10000.
IHC-P		1/200 - 1/1000.
Flow Cyt		1/200 - 1/400. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		1/200 - 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.

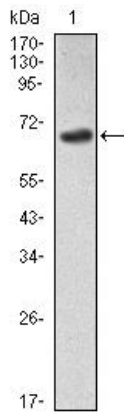
翻译后修饰

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.

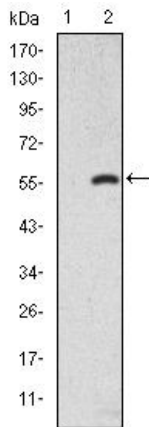
图片



Anti-Smad2 antibody [5G7] (ab119907) at 1/500 dilution +
Recombinant Human Smad2 protein

Predicted band size: 52 kDa

Western blot - Anti-Smad2 antibody [5G7]
(ab119907)



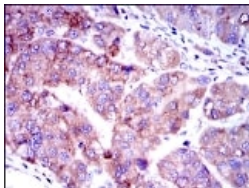
All lanes : Anti-Smad2 antibody [5G7] (ab119907) at 1/500 dilution

Lane 1 : Non-transfected HEK293 cell lysate.

Lane 2 : Smad2-hlgGfC transfected HEK293 cell lysate.

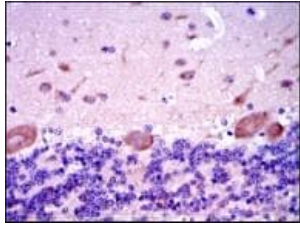
Predicted band size: 52 kDa

Western blot - Anti-Smad2 antibody [5G7]
(ab119907)



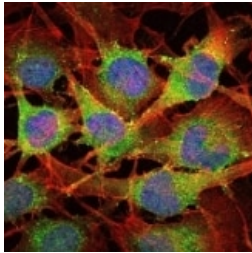
ab119907 at 1/200 dilution staining Smad2 in paraffin-embedded
Human liver cancer tissues by Immunohistochemistry followed by
DAB staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-Smad2 antibody [5G7]
(ab119907)



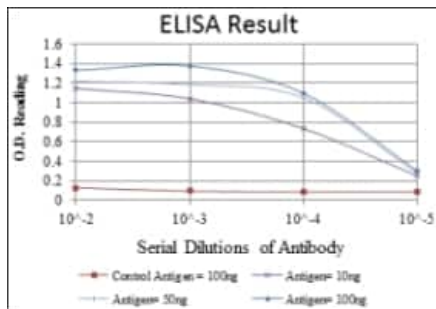
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Smad2 antibody [5G7] (ab119907)

ab119907 at 1/200 dilution staining Smad2 in paraffin-embedded Human cerebellum tissue by Immunohistochemistry followed by DAB staining.



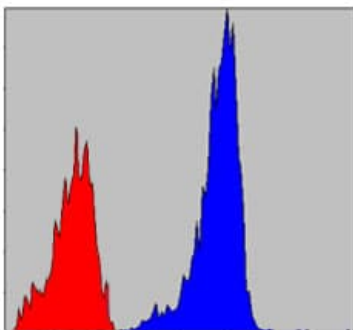
Immunocytochemistry/ Immunofluorescence - Anti-Smad2 antibody [5G7] (ab119907)

ab119907 at 1/200 dilution staining Smad2 in U251 cells by Immunofluorescence (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



ELISA - Anti-Smad2 antibody [5G7] (ab119907)

ELISA showing use of ab119907.



Flow Cytometry - Anti-Smad2 antibody [5G7] (ab119907)

ab119907 at 1/200 dilution staining Smad2 in NIH3T3 cells by Flow Cytometry (blue) and negative control (red).

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