abcam

Product datasheet

Anti-PIAS1 antibody ab32219

6 Abreviews 15 References 5 图像

概述

产品名称	Anti-PIAS1抗体
描述	**兔多克隆抗体**to PIAS1
宿主	Rabbit
经测试应用	**适用于:** ICC/IF, WB
种属反应性	**与反应:** Mouse, Human, Recombinant fragment **预测可用于:** Rat, Chicken, Dog, Xenopus laevis
免疫原	Synthetic peptide corresponding to Human PIAS1 aa 500-600. (Peptide available as **ab32218**)
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 or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
纯度	Immunogen affinity purified
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab32219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
ICC/IF	★★★★☆ (1)	Use a concentration of 1 µg/ml.
WB	★★★★☆ (3)	1/500 - 1/2000. Detects a band of approximately 81 kDa (predicted molecular weight: 72 kDa).

靶标

功能 Functions as an E3-type small ubiquitin-like modifier (SUMO) ligase, stabilizing the interaction between UBE2I and the substrate, and as a SUMO-tethering factor. Plays a crucial role as a transcriptional coregulation in various cellular pathways, including the STAT pathway, the p53 pathway and the steroid hormone signaling pathway. In vitro, binds A/T-rich DNA. The effects of this transcriptional coregulation, transactivation or silencing, may vary depending upon the biological context. Together with PRMT1, may repress STAT1 transcriptional activity, in the late phase of interferon gamma (IFN-gamma) signaling.

组织特异性 Expressed in numerous tissues with highest level in testis.

通路 Protein modification; protein sumoylation.

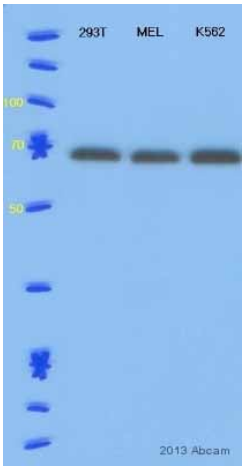
序列相似性 Belongs to the PIAS family.
Contains 1 PINIT domain.
Contains 1 SAP domain.
Contains 1 SP-RING-type zinc finger.

结构域 The LXXLL motif is a transcriptional coregulator signature.
The SP-RING-type domain is required for promoting EKLF sumoylation.

翻译后修饰 Sumoylated.
Dimethylated by PRMT1 at Arg-303 in the late phase of interferon gamma (IFN-gamma) signaling, leading to preferential interaction with STAT1 and thus resulting in release of STAT1 from its target gene.

细胞定位 Nucleus speckle. Interaction with CSRP2 may induce a partial redistribution along the cytoskeleton.

图片



Western blot - Anti-PIAS1 antibody (ab32219)

This image is courtesy of an Abreview submitted by Mn young Kim

All lanes : Anti-PIAS1 antibody (ab32219) at 1/2500 dilution (Incubation for 1 hour at 25°C.)

Lane 1 : 293T cell lysate
Lane 2 : MEL cell lysate
Lane 3 : K562 cell lysate

Lysates/proteins at 25 µg per lane.

Secondary
All lanes : Donkey Anti-Rabbit IgG H&L (HRP) (**ab6802**) at 1/20000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 72 kDa
Observed band size: 71 kDa

Exposure time: 1 minute

Western blot - Anti-PIAS1 antibody (ab32219)

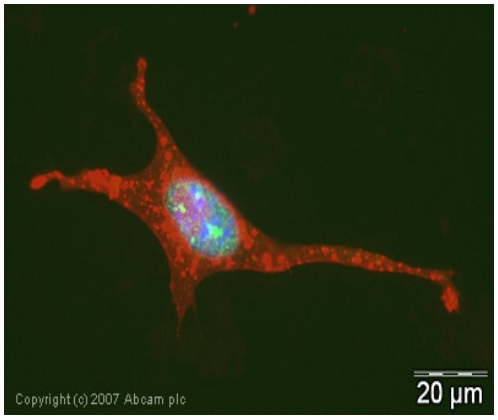
All lanes : Anti-PIAS1 antibody (ab32219) at 1/1000 dilution

Lane 1 : HeLa whole cell lysate at 25 µg
Lane 2 : HeLa whole cell extract with transfected PIAS1 at 25 µg
Lane 3 : HeLa nuclear extract at 25 µg
Lane 4 : T47D nuclear extract at 25 µg
Lane 5 : HeLa whole cell lysate immunoprecipitated with ab32219
Lane 6 : HeLa whole cell extract with transfected PIAS1 immunoprecipitated with ab32219
Lane 7 : HeLa nuclear extract immunoprecipitated with ab32219
Lane 8 : T47D nuclear extract immunoprecipitated with ab32219

Performed under reducing conditions.

Predicted band size: 72 kDa
Observed band size: 81 kDa
Additional bands at: 110 kDa, 79 kDa (possible cleavage fragment), 79 kDa (possible cross reactivity). We are unsure as to the identity of these extra bands.

ab32219 was used in western blot analysis using HeLa whole cell lysate, HeLa nuclear lysate and T47D nuclear lysate. It was unable to detect endogenous PIAS1 in these lysates. It was able to detect PIAS1 in cells that are overexpressing the protein, running at a molecular weight of approximately 81kDa, suggesting that the amount of endogenous PIAS1 in these cells is very low. When ab32219 was used to immunoprecipitate the PIAS1 from these extracts, the protein could then be detected by western blot in the overexpressing HeLa extract as well as the T47D nuclear extract.For immunoprecipitations, 25ug of extract was used in the IP, and 10% of the sample was run on the gel.



Immunocytochemistry/ Immunofluorescence - Anti-PIAS1 antibody (ab32219)

ICC/IF image of ab32219 stained MEF1 cells. The cells were methanol fixed (5 min), permabilised in TBS-T (20 min) and incubated with the antibody (ab32219, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).

Western blot - Anti-PIAS1 antibody (ab32219)

Anti-PIAS1 antibody (ab32219) at 1 µg/ml + PIAS1 - Recombinant Protein at 0.1 µg

Secondary

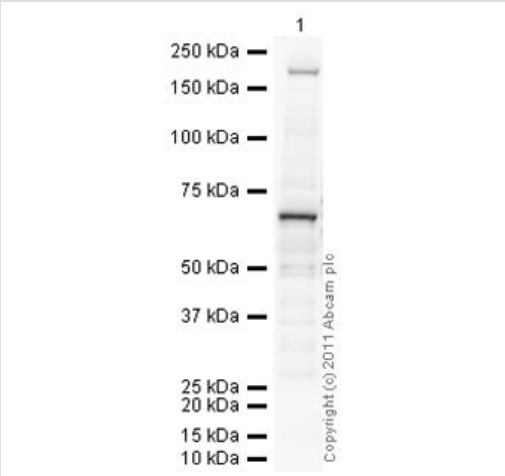
Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

Predicted band size: 72 kDa
Observed band size: 100 kDa

Exposure time: 2 minutes

ab32219 recognizes the full length tagged recombinant protein which has an ex



Western blot - Anti-PIAS1 antibody (ab32219)

Anti-PIAS1 antibody (ab32219) at 1 µg/ml + Human testis tissue lysate - total protein (**ab30257**) at 10 µg

Secondary

Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (HRP), pre-adsorbed at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 72 kDa
Observed band size: 72 kDa
Additional bands at: 180 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 4 minutes

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.cn/abpromise** or contact our technical team.

Terms and conditions

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