# abcam

## Product datasheet

## Anti-PIAS1 antibody [EPR2580(2)] ab109388



重组 RabMAb

★★★★★ 3 Abreviews 16 References 6 图像

#### 概述

产品名称 Anti-PIAS1抗体[EPR2580(2)]

描述 兔单克隆抗体[EPR2580(2)] to PIAS1

宿主 Rabbit

经测试应用 适用于: ICC/IF, WB, IHC-P

不适用干: IP

种属反应性 与反应: Human

预测可用于: Mouse, Rat 🗥

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 Human colon tissue. HepG2, Jurkat, 293T, Daudi cell lysates. ICC/IF: HeLa cells

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

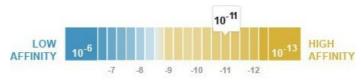
### 性能

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.

Stable for 12 months at -20°C.

 $K_D = 2.10 \times 10^{-11} M$ 解离常数(KD)



Learn more about KD

**存储溶液** pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

纯**度** Protein A purified

**克隆** 单克隆

**克隆编号** EPR2580(2)

**同种型** IgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab109388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)     | 1/500.   |
| WB     | *** <u>*</u> | 1/1000 - 1/10000. Predicted molecular weight: 72 kDa.  |
| IHC-P  |              | 1/100 - 1/250. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. Heat up to 98 degrees C, below boiling, and then let cool for 10-20 min. |

应用说明 Is unsuitable for IP.

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.

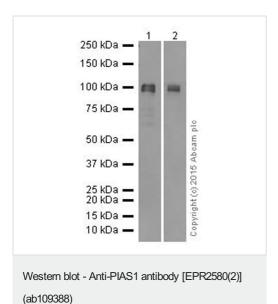
The SP-RING-type domain is required for promoting EKLF sumoylation.

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

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

#### 图片



Lane 1: Anti-PIAS1 antibody [EPR2580(2)] (ab109388) at 1/500 dilution

**Lane 2 :** Anti-GST antibody [EPR4236] (<u>ab111947</u>) at 1/2000 dilution

All lanes: Recombinant Human PIAS1 protein (ab152888)

Lysates/proteins at 0.01 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

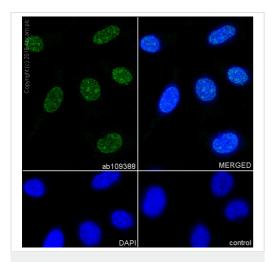
**Predicted band size:** 72 kDa **Observed band size:** 98 kDa

Exposure time:

Lane 1: 10 seconds.

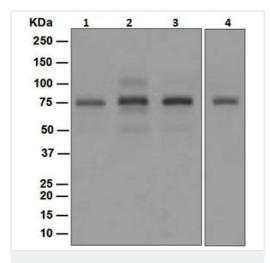
Lane 2: 1 minute.

Blocking and dilution buffer: 5% NFDM /TBST.



Immunocytochemistry/ Immunofluorescence - Anti-PIAS1 antibody [EPR2580(2)] (ab109388)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling PIAS1 with purified ab109388 at 1/500 dilution (4.6  $\mu$ g/mL). Cells were fixed in 100% Methanol. Goat anti rabbit lgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2  $\mu$ g/mL) dilution. DAPI (blue) was used as nuclear counterstain.



Western blot - Anti-PIAS1 antibody [EPR2580(2)] (ab109388)

**All lanes :** Anti-PIAS1 antibody [EPR2580(2)] (ab109388) at 1/1000 dilution

Lane 1 : HepG2 cell lysates

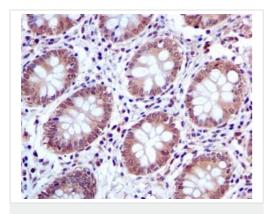
Lane 2 : Jurkat cell lysates

Lane 3 : HEK-293 cell lysates

Lane 4 : Daudi cell lysates

Lysates/proteins at 10 µg per lane.

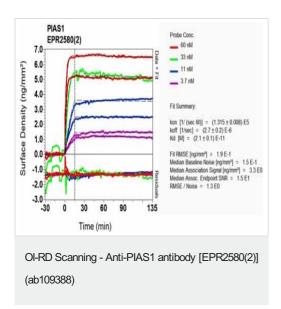
Predicted band size: 72 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PIAS1 antibody
[EPR2580(2)] (ab109388)

Immunohistochemical analysis of paraffin-embedded Human colon tissue using 1/100 ab109388.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

Click here to learn more about K<sub>D</sub>



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