


Product datasheet

Anti-PIAS1 antibody [EPR2580(2)] ab109388

Recombinant RabMAb

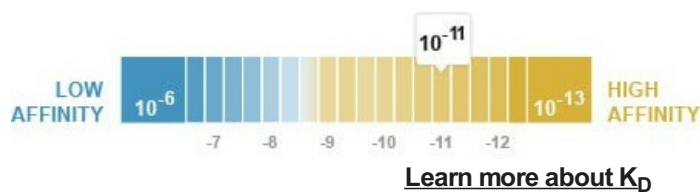
★★★★★ [3 Abreviews](#) [16 References](#) [6 Images](#)

Overview

Product name	Anti-PIAS1 antibody [EPR2580(2)]
Description	Rabbit monoclonal [EPR2580(2)] to PIAS1
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P Unsuitable for: IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human colon tissue. HepG2, Jurkat, 293T, Daudi cell lysates. ICC/IF: HeLa cells
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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 .

Properties

Form	Liquid
Storage instructions	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.
Dissociation constant (K _D)	K _D = 2.10 x 10 ⁻¹¹ M



Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2580(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109388 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (1)	1/500.
WB	★★★★★ (2)	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.

Application notes Is unsuitable for IP.

Target

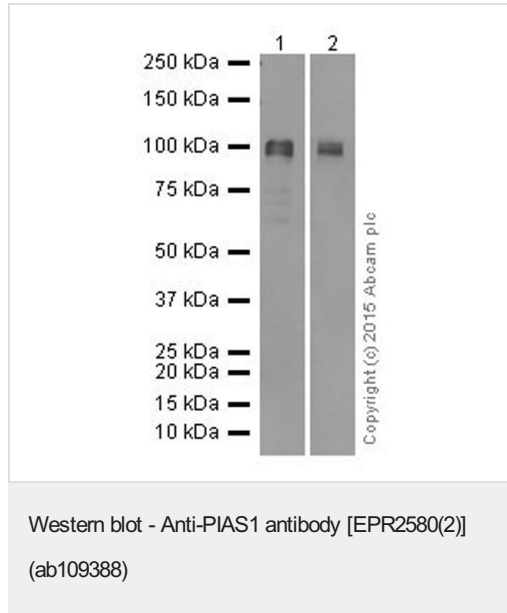
Function	Functions as an E3-type small ubiquitin-like modifier (SUMO) ligase, stabilizing the interaction between UBE2I and the substrate, and as a SUMO-tethering factor. Plays a crucial role as a transcriptional coregulation in various cellular pathways, including the STAT pathway, the p53 pathway and 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.
Tissue specificity	Expressed in numerous tissues with highest level in testis.
Pathway	Protein modification; protein sumoylation.
Sequence similarities	Belongs to the PIAS family. Contains 1 PINIT domain. Contains 1 SAP domain. Contains 1 SP-RING-type zinc finger.
Domain	The LXXLL motif is a transcriptional coregulator signature. The SP-RING-type domain is required for promoting EKLF sumoylation.
Post-translational modifications	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.

Cellular localization

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

Images



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

Lane 2 : Anti-GST antibody [EPR4236] ([ab111947](#)) 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 IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 72 kDa

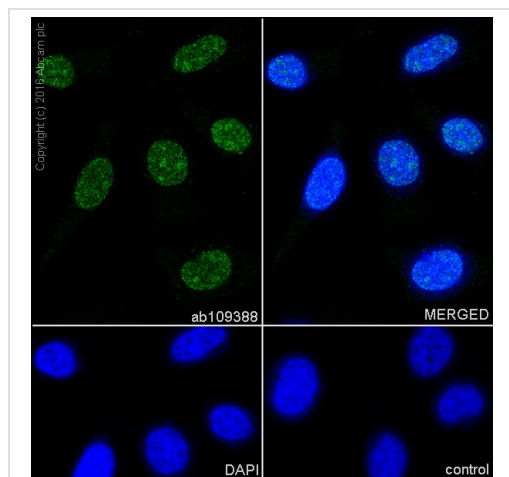
Observed band size: 98 kDa

Exposure time:

Lane 1: 10 seconds.

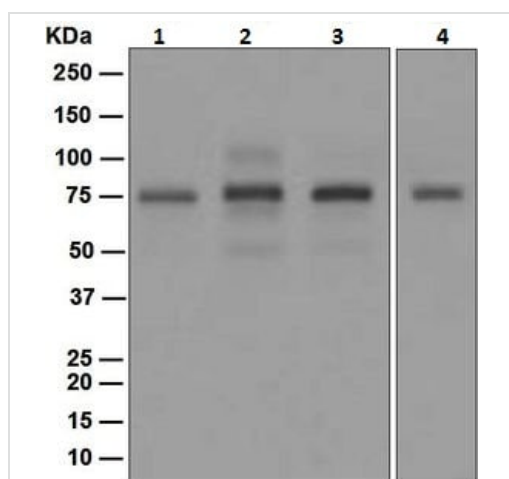
Lane 2: 1 minute.

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 µg/mL). Cells were fixed in 100% Methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/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

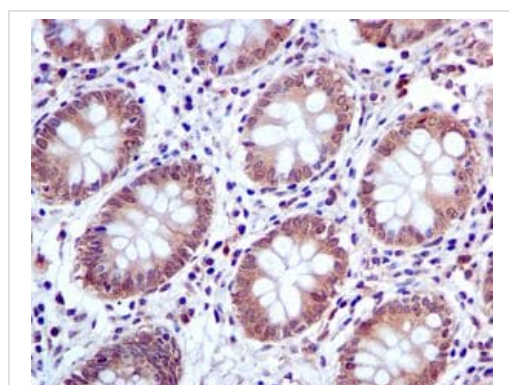
Lane 2 : Jurkat cell lysates

Lane 3 : HEK-293 cell lysates

Lane 4 : Daudi cell lysates

Lysates/proteins at 10 µg per lane.

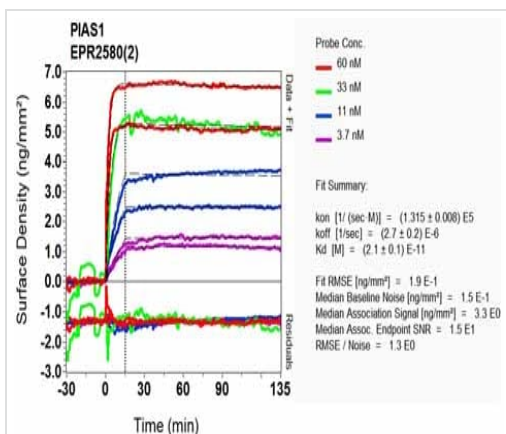
Predicted band size: 72 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded 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.



SPR Scanning - Anti-PIAS1 antibody [EPR2580(2)]
(ab109388)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a
recombinant antibody?



**Research with
confidence**
Consistent and
reproducible results



**Long-term and
scalable supply**
Recombinant
technology



**Success from the
first experiment**
Confirmed
specificity



**Ethical standards
compliant**
Animal-free
production

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

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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