


## Product datasheet

### Anti-PIAS3 antibody ab58406

★★★★★ [1 Abreviews](#) [4 References](#) [2 Images](#)

#### Overview

<b>Product name</b>	Anti-PIAS3 antibody
<b>Description</b>	Rabbit polyclonal to PIAS3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide derived from Internal of human PIAS3.
<b>Positive control</b>	Human lung carcinoma tissue 293 cells treated with UV (5 mins)
<b>General notes</b>	<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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride</p> <p>Without Mg+2 and Ca+2</p>
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	Affinity purified from rabbit antiserum by affinity chromatography using epitope specific immunogen
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab58406 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
WB		1/500 - 1/1000. Detects a band of approximately 67 kDa (predicted molecular weight: 67 kDa).
IHC-P		Use at an assay dependent concentration.

## 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 and the steroid hormone signaling pathway. Involved in regulating STAT3 signaling via inhibiting STAT3 DNA-binding and suppressing cell growth. Enhances the sumoylation of MTA1 and may participate in its paralog-selective sumoylation (PubMed:21965678, PubMed:9388184). Sumoylates CCAR2 which promotes its interaction with SIRT1 (PubMed:25406032). Diminishes the sumoylation of ZFH3 by preventing the colocalization of ZFH3 with SUMO1 in the nucleus (PubMed:24651376).

### Tissue specificity

Widely expressed.

### 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 PINIT domain of PIAS3 is required for STAT3-PIAS3 interaction and for translocation to the nucleus.  
The LXXLL motif is a transcriptional coregulator signature.

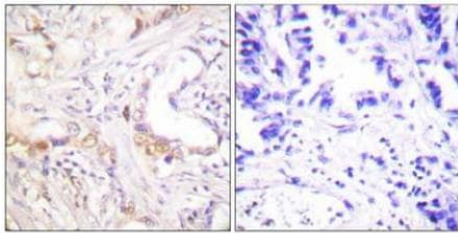
### Post-translational modifications

Sumoylated.

### Cellular localization

Cytoplasm. Nucleus. Nucleus speckle. Colocalizes with MITF in the nucleus. Colocalizes with GF11 in nuclear dots. Colocalizes with SUMO1 in nuclear granules.

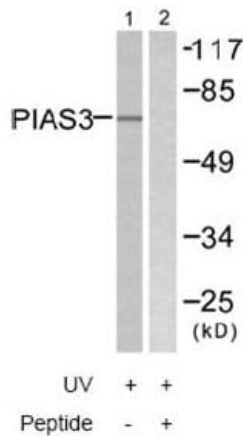
## Images



Peptide - +

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PIAS3 antibody (ab58406)

Immunohistochemical analysis of paraffin embedded human lung carcinoma tissue using ab58406 at 1/50-1/100 dilution. Samples were treated +/- peptide.



Western blot - Anti-PIAS3 antibody (ab58406)

**All lanes :** Anti-PIAS3 antibody (ab58406) at 1/500 dilution

**Lane 1 :** 293 cell extract treated with UV (5 min)

**Lane 2 :** 293 cell extract treated with UV (5 min) with peptide

**Predicted band size:** 67 kDa

**Observed band size:** 67 kDa

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

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