

## PIAS3 Antibody (aa10-59)

Rabbit Polyclonal Antibody Catalog # ALS15080

## **Specification**

### PIAS3 Antibody (aa10-59) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Dilution

WB, IHC-P, E

O9Y6X2

Human, Mouse, Rat
Rabbit
Polyclonal
68kDa KDa
WB~~1:1000
IHC-P~~N/A
E~~N/A

## PIAS3 Antibody (aa10-59) - Additional Information

Gene ID 10401

#### **Other Names**

E3 SUMO-protein ligase PIAS3, 6.3.2.-, Protein inhibitor of activated STAT protein 3, PIAS3

#### Target/Specificity

PIAS3 Antibody detects endogenous levels of total PIAS3 protein.

## **Reconstitution & Storage**

Store at -20°C for up to one year.

#### **Precautions**

PIAS3 Antibody (aa10-59) is for research use only and not for use in diagnostic or therapeutic procedures.

# PIAS3 Antibody (aa10-59) - Protein Information

### Name PIAS3

#### **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:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">21965678</a>, PubMed:<a href="http://www.uniprot.org/citations/9388184" target="\_blank">9388184</a>). Sumoylates CCAR2 which promotes its interaction with SIRT1 (PubMed:<a href="http://www.uniprot.org/citations/25406032" target="\_blank">25406032</a>). Diminishes the sumoylation of ZFHX3 by preventing the colocalization of ZFHX3 with SUMO1 in the





nucleus (PubMed:<a href="http://www.uniprot.org/citations/24651376" target=" blank">24651376</a>).

#### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:O54714}. Nucleus {ECO:0000250|UniProtKB:O54714}. Nucleus speckle {ECO:0000250|UniProtKB:O54714}. Note=Colocalizes with MITF in the nucleus. Colocalizes with GFI1 in nuclear dots. Colocalizes with SUMO1 in nuclear granules. {ECO:0000250|UniProtKB:O54714}

**Tissue Location** Widely expressed..

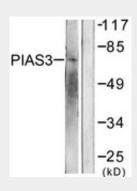
**Volume** 50 μl

# PIAS3 Antibody (aa10-59) - Protocols

Provided below are standard protocols that you may find useful for product applications.

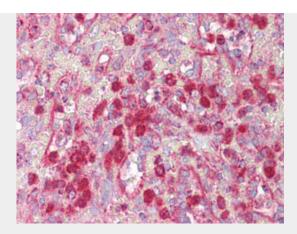
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# PIAS3 Antibody (aa10-59) - Images



Western blot of extracts from 293 cells, treated with UV 5', using PIAS3 Antibody.





Anti-PIAS3 antibody IHC of human spleen.

## PIAS3 Antibody (aa10-59) - Background

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.

## PIAS3 Antibody (aa10-59) - References

Ueki N.,et al.J. Hum. Genet. 44:193-196(1999). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Chung C.D.,et al.Science 278:1803-1805(1997). Junicho A.,et al.Biochem. Biophys. Res. Commun. 278:9-13(2000). Roedel B.,et al.EMBO J. 19:5845-5855(2000).