

## **PIAS 3 Polyclonal Antibody**

**Catalog # AP71901** 

## **Specification**

### **PIAS 3 Polyclonal Antibody - Product Information**

Application WB, IHC-P Primary Accession Q9Y6X2

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **PIAS 3 Polyclonal Antibody - Additional Information**

Gene ID 10401

#### **Other Names**

PIAS3; E3 SUMO-protein ligase PIAS3; Protein inhibitor of activated STAT protein 3

#### Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. IHC-P~ $\sim$ N/A

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

### **Storage Conditions**

-20°C

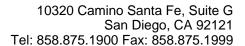
### PIAS 3 Polyclonal Antibody - Protein Information

#### 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>(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}

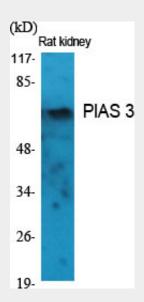
**Tissue Location** Widely expressed...

## **PIAS 3 Polyclonal Antibody - Protocols**

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

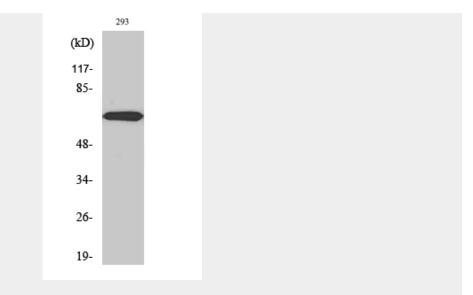
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **PIAS 3 Polyclonal Antibody - Images**



Western Blot analysis of various cells using PIAS 3 Polyclonal Antibody diluted at 1□2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).





Western Blot analysis of 293 cells using PIAS 3 Polyclonal Antibody diluted at  $1\square 2000$  cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

# **PIAS 3 Polyclonal Antibody - 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 (PubMed:21965678, PubMed:9388184). Sumoylates CCAR2 which promotes its interaction with SIRT1 (PubMed:25406032). Diminishes the sumoylation of ZFHX3 by preventing the colocalization of ZFHX3 with SUMO1 in the nucleus (PubMed:24651376).