

PIAS3 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1245a**Specification**

PIAS3 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9Y6X2](#)**PIAS3 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 10401

Other Names

E3 SUMO-protein ligase PIAS3, 632-, Protein inhibitor of activated STAT protein 3, PIAS3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1245a was selected from the N-term region of human PIAS3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PIAS3 Antibody (N-term) Blocking Peptide - 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: [21965678](http://www.uniprot.org/citations/21965678), PubMed: [9388184](http://www.uniprot.org/citations/9388184)). Sumoylates CCAR2 which promotes its interaction with SIRT1 (PubMed: [25406032](http://www.uniprot.org/citations/25406032)). Diminishes the sumoylation of ZFH3 by preventing the colocalization of ZFH3 with SUMO1 in the nucleus (PubMed: [24651376](http://www.uniprot.org/citations/24651376)).

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..

PIAS3 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PIAS3 Antibody (N-term) Blocking Peptide - Images**PIAS3 Antibody (N-term) Blocking Peptide - Background**

PIAS3 is a member of the PIAS [protein inhibitor of activated STAT (signal transducer and activator of transcription)] family of transcriptional modulators. The protein functions as a SUMO (small ubiquitin-like modifier)-E3 ligase stabilizing the interaction between UBE2I and the substrate, and as a SUMO-tethering factor, catalyzing the covalent attachment of a SUMO protein to specific target substrates. PIAS3 plays a crucial role as a transcriptional coregulator in various cellular pathways, including the STAT pathway and the steroid hormone signaling pathway. The effects of this transcriptional coregulation, transactivation or silencing, may vary depending upon the biological context.

PIAS3 Antibody (N-term) Blocking Peptide - References

Nojiri, S., et al., Biochem. Biophys. Res. Commun. 314(1):97-103 (2004). Long, J., et al., Proc. Natl. Acad. Sci. U.S.A. 101(1):99-104 (2004). Cheng, J., et al., Leuk. Res. 28(1):71-82 (2004). Yamamoto, T., et al., Biochem. Biophys. Res. Commun. 306(2):610-615 (2003). Ueki, N., et al., J. Hum. Genet. 44(3):193-196 (1999).