

PIAS1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1242a**Specification****PIAS1 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [O75925](#)**PIAS1 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 8554

Other Names

E3 SUMO-protein ligase PIAS1, 632-, DEAD/H box-binding protein 1, Gu-binding protein, GBP, Protein inhibitor of activated STAT protein 1, RNA helicase II-binding protein, PIAS1, DDXBP1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1242a](#) was selected from the N-term region of human PIAS1. 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.

PIAS1 Antibody (N-term) Blocking Peptide - Protein Information**PIAS1 Antibody (N-term) Blocking Peptide - Background**

PIAS1 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. This protein plays a crucial role in transcriptional coregulation of various cellular pathways, including the STAT pathway, the p53 pathway and the steroid hormone signaling pathway. It functions in testis as a nuclear receptor transcriptional coregulator and may have a role in androgen receptor initiation and maintenance of spermatogenesis. The effects of transcriptional coregulation, transactivation or silencing, may vary depending upon the biological context.

PIAS1 Antibody (N-term) Blocking Peptide - References

Miyauchi, Y., et al., J. Biol. Chem. 277(51):50131-50136 (2002). Nishida, T., et al., J. Biol. Chem. 277(44):41311-41317 (2002). Tan, J.A., et al., J. Biol. Chem. 277(19):16993-17001 (2002). Megidish, T., et al., J. Biol. Chem. 277(10):8255-8259 (2002). Liu, B., et al., J. Biol. Chem. 276(39):36624-36631 (2001).

Name PIAS1

Synonyms DDXBP1

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. Sumoylates PML (at 'Lys-65' and 'Lys-160') and PML-RAR and promotes their ubiquitin-mediated degradation. PIAS1-mediated sumoylation of PML promotes its interaction with CSNK2A1/CK2 which in turn promotes PML phosphorylation and degradation (By similarity). Enhances the sumoylation of MTA1 and may participate in its paralog-selective sumoylation. Plays a dynamic role in adipogenesis by promoting the SUMOylation and degradation of CEBPB (By similarity).

Cellular Location

Nucleus speckle. Nucleus, PML body
Note=Interaction with CSRP2 may induce a partial redistribution along the cytoskeleton

Tissue Location

Expressed in numerous tissues with highest level in testis.

**PIAS1 Antibody (N-term) Blocking Peptide
- Protocols**

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

- [Blocking Peptides](#)