

PIAS2 Antibody

Rabbit mAb Catalog # AP92458

Specification

PIAS2 Antibody - Product Information

ApplicationWB, ICCPrimary Accession075928ReactivityRatClonalityMonoclonalOther NamesDIP; MIZ1; SIZ2; ARIP3; PIASX; ZMIZ4; PIASX-BETA; PIASX-ALPHA;

IsotypeRabbit IgGHostRabbitCalculated MW68240 Da

PIAS2 Antibody - Additional Information

Dilution	WB~~1:1000 ICC~~N/A
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human PIAS2
Description	Functions as an E3-type small ubiquitin-like modifier (SUMO) ligase, stabilizing the interaction between UBE21 and the substrate, and as a SUMO-tethering factor. Plays a crucial role as a transcriptional coregulator in various cellular pathways, including the STAT pathway, the p53 pathway and the steroid hormone signaling pathway.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

PIAS2 Antibody - Protein Information

Name PIAS2

Synonyms PIASX

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 coregulator in various cellular pathways, including the STAT pathway, the p53



pathway and the steroid hormone signaling pathway. The effects of this transcriptional coregulation, transactivation or silencing may vary depending upon the biological context and the PIAS2 isoform studied. However, it seems to be mostly involved in gene silencing. Binds to sumoylated ELK1 and enhances its transcriptional activity by preventing recruitment of HDAC2 by ELK1, thus reversing SUMO-mediated repression of ELK1 transactivation activity. Isoform PIAS2-beta, but not isoform PIAS2-alpha, promotes MDM2 sumoylation. Isoform PIAS2-alpha promotes PARK7 sumoylation. Isoform PIAS2-beta promotes NCOA2 sumoylation more efficiently than isoform PIAS2-alpha. Isoform PIAS2-alpha sumoylates PML at'Lys-65' and 'Lys-160'.

Cellular Location

Nucleus speckle {ECO:0000250|UniProtKB:Q8C5D8}. Nucleus, PML body. Nucleus. Note=Colocalizes at least partially with promyelocytic leukemia nuclear bodies (PML NBs) (PubMed:22406621) Colocalizes with SUMO1 in nuclear granules (By similarity) {ECO:0000250|UniProtKB:Q8C5D8, ECO:0000269|PubMed:22406621}

Tissue Location

Mainly expressed in testis. Isoform 3 is expressed predominantly in adult testis, weakly in pancreas, embryonic testis and sperm, and at very low levels in other organs

PIAS2 Antibody - Protocols

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

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

PIAS2 Antibody - Images



Western blot analysis of PIAS2 expression in HepG2 cell lysate.