

Anti-PIAS2 Antibody

Rabbit polyclonal antibody to PIAS2 Catalog # AP59765

Specification

Anti-PIAS2 Antibody - Product Information

Application WB
Primary Accession O75928
Other Accession O8C5D8

Reactivity Human, Mouse, Rat, Chicken, Bovine, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 68240

Anti-PIAS2 Antibody - Additional Information

Gene ID 9063

Other Names

PIASX; E3 SUMO-protein ligase PIAS2; Androgen receptor-interacting protein 3; ARIP3; DAB2-interacting protein; DIP; Msx-interacting zinc finger protein; Miz1; PIAS-NY protein; Protein inhibitor of activated STAT x; Protein inhibitor of activated STAT2

Target/Specificity

Recognizes endogenous levels of PIAS2 protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-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



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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

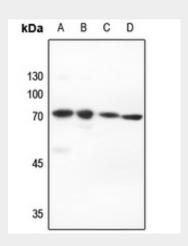
Mainly expressed in testis. Isoform 3 is expressed predominantly in adult testis, weakly in pancreas, embryonic testis and sperm, and at very low levels in other organs

Anti-PIAS2 Antibody - 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

Anti-PIAS2 Antibody - Images



Western blot analysis of PIAS2 expression in Hela (A), H446 (B), mouse testis (C), rat lung (D) whole cell lysates.

Anti-PIAS2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human PIAS2. The exact sequence is proprietary.