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PIAS4 / PIASY Antibody (aa451-500)

Rabbit Polyclonal Antibody
Catalog # ALS15081

Specification

PIAS4 / PIASY Antibody (aa451-500) - Product Information

Application	**WB**
Primary Accession	Q8N2W9
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**57kDa KDa**

PIAS4 / PIASY Antibody (aa451-500) - Additional Information

Gene ID 51588

Other Names
E3 SUMO-protein ligase PIAS4, 6.3.2.-, PIASy, Protein inhibitor of activated STAT protein 4, Protein inhibitor of activated STAT protein gamma, PIAS-gamma, PIAS4, PIASG

Target/Specificity
PIAS4 Antibody detects endogenous levels of total PIAS4 protein.

Reconstitution & Storage
Store at -20°C for up to one year.

Precautions
PIAS4 / PIASY Antibody (aa451-500) is for research use only and not for use in diagnostic or therapeutic procedures.

PIAS4 / PIASY Antibody (aa451-500) - Protein Information

Name PIAS4 {ECO:0000303|PubMed:32832608, ECO:0000312|HGNC:HGNC:17002}

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 (PubMed:12511558, PubMed:12631292, PubMed:12727872, PubMed:15831457, PubMed:15976810, PubMed:22508508, PubMed:32832608). Mediates sumoylation of CEBPA, PARK7, HERC2, MYB, TCF4 and RNF168 (PubMed:12511558, PubMed:12631292, PubMed:<a

href="http://www.uniprot.org/citations/12727872" target="_blank">12727872, PubMed:15831457, PubMed:15976810, PubMed:22508508). Plays a crucial role as a transcriptional coregulation in various cellular pathways, including the STAT pathway, the p53/TP53 pathway, the Wnt pathway and the steroid hormone signaling pathway (PubMed:11388671). Involved in gene silencing (PubMed:11248056). In Wnt signaling, represses LEF1 and enhances TCF4 transcriptional activities through promoting their sumoylations (PubMed:12727872, PubMed:15831457). Enhances the sumoylation of MTA1 and may participate in its paralog-selective sumoylation (PubMed:21965678). Binds to AT-rich DNA sequences, known as matrix or scaffold attachment regions (MARs/SARs) (By similarity). Catalyzes conjugation of SUMO2 to KAT5 in response to DNA damage, facilitating repair of DNA double-strand breaks (DSBs) via homologous recombination (HR) (PubMed:32832608). Mediates sumoylation of PARP1 in response to PARP1 trapping to chromatin (PubMed:35013556).

Cellular Location
Nucleus, PML body Note=Colocalizes with SUMO1 and TCF7L2/TCF4 and LEF1 in a subset of PML (promyelocytic leukemia) nuclear bodies.

Tissue Location
Highly expressed in testis and, at lower levels, in spleen, prostate, ovary, colon and peripheral blood leukocytes

Volume
50 µl

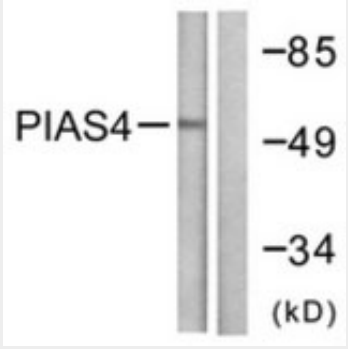
PIAS4 / PIASY Antibody (aa451-500) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PIAS4 / PIASY Antibody (aa451-500) - Images

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Western blot of extracts from Jurkat cells, using PIAS4 Antibody.

PIAS4 / PIASY Antibody (aa451-500) - 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, the p53/TP53 pathway, the Wnt pathway and the steroid hormone signaling pathway. Involved in gene silencing. Mediates sumoylation of CEBPA, PARK7, HERC2, MYB, TCF4 and RNF168. In Wnt signaling, represses LEF1 and enhances TCF4 transcriptional activities through promoting their sumoylations. Enhances the sumoylation of MTA1 and may participate in its paralog-selective sumoylation.

PIAS4 / PIASY Antibody (aa451-500) - References

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