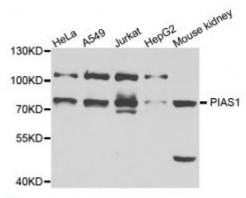


## **Anti-PIAS1 Antibody**





**Description** This gene encodes a member of the protein inhibitor of activated STAT

(PIAS) family. PIAS proteins function as SUMO E3 ligases and play important roles in many cellular processes by mediating the sumoylation of target proteins. This protein plays a central role as a transcriptional coregulator of numerous cellular pathways includign the STAT1 and nuclear factor kappaB pathways. Alternate splicing results in multiple transcript variants.

Model STJ114913

**Host** Rabbit

**Reactivity** Human, Mouse

**Applications** WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 422-651 of human PIAS1 (NP\_057250.1).

**Gene ID** <u>8554</u>

Gene Symbol PIAS1

**Dilution range** WB 1:500 - 1:2000

**Tissue Specificity** Expressed in numerous tissues with highest level in testis

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

**Protein Name** E3 SUMO-protein ligase PIAS1

Molecular Weight 71.836 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage Instruction** Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:2752OMIM:603566Reactome:R-HSA-3108214

Alternative Names E3 SUMO-protein ligase PIAS1

**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, Together with PRMT1, may repress STAT1 transcriptional activity, in the late phase of interferon gamma (IFN-gamma) signaling, 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, 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,

Cellular Localization Nucleus speckle,

Post-translational Modifications

Sumoylated,

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