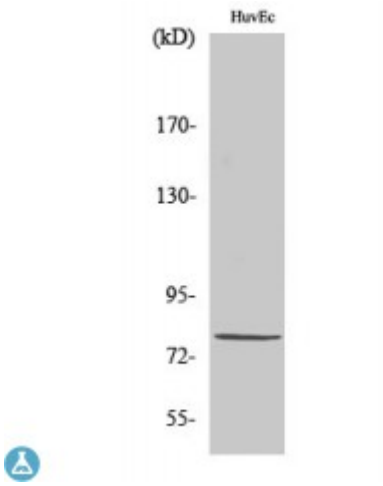
Anti-PIAS 1 antibody



Description	Rabbit polyclonal to PIAS 1.

Model	STJ95082
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human PIAS 1
Immunogen Region	10-90 aa, N-terminal
Gene ID	8554
Gene Symbol	PIAS1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:10000
Specificity	PIAS 1 Polyclonal Antibody detects endogenous levels of PIAS 1 protein.
Tissue Specificity	Expressed in numerous tissues with highest level in testis.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	E3 SUMO-protein ligase PIAS1 DEAD/H box-binding protein 1 Gu-binding protein GBP Protein inhibitor of activated STAT protein 1 RNA helicase II-binding protein
Molecular Weight	72 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:2752OMIM:603566
Alternative Names	E3 SUMO-protein ligase PIAS1 DEAD/H box-binding protein 1 Gu-binding protein GBP Protein inhibitor of activated STAT protein 1 RNA helicase II-binding protein
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 .
Sequence and Domain Family	The LXXLL motif is a transcriptional coregulator signature.; The SP-RING-type domain is required for promoting EKLF sumoylation.
Cellular Localization	Nucleus speckle Nucleus, PML body. Interaction with CSRP2 may induce a partial redistribution along the cytoskeleton.
Post-translational Modifications	Sumoylated. Dimethylated by PRMT1 at Arg-303 in the late phase of interferon gamma (IFN-gamma) signaling, leading to preferential interaction with STAT1 and thus resulting in release of STAT1 from its target gene.