SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

**[ Primary Antibody ]**

# Rabbit Anti-PIAS4/PIASy antibody

**Catalog Number: SL14480R**

**FOR RESEARCH USE ONLY**

**[ DATASHEET ]**

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| **Host:** | Rabbit |
| **Isotype:** | IgG |
| **Clonality:** | Polyclonal |
| **Target:** | PIAS4/PIASy |
| **Immunogen:** | KLH conjugated synthetic peptide derived from human PIASy: 21-120/510 |
| **Purification:** | affinity purified by Protein A |
| **Concentration:** | 1mg/ml |
| **Storage:** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. |
| **Applications:** | IHC-P=1:100-500<br>IHC-F=1:100-500<br>IF=1:100-500 （Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Reactivity:** | Rat(predicted:Human,Mouse,Dog,Pig,Cow,Horse,Sheep) |
| **Predicted MW.:** | 55kDa |
| **Subcellular Location:** | The nucleus |
| **Background:** | The IL-6-type family of cytokines, which includes IL-6 and a number of similar cytokines and growth factors, plays a significant role in regulating gene activation, proliferation and differentiation. Transcription factors of the STAT family are involved in IL-6 family-mediated signal transduction pathways, and upon activation undergo phosphorylation, dimerization and translocation to the nucleus. The duration and intensity of a cell's response to cytokines can be adjusted by the effect of several regulatory mechanisms.<br>One example involves the protein inhibitor of activated signal transducer and activator of transcription (STAT) family (PIAS family) of proteins, which act as negative regulators of STATs in cytokine signaling. PIAS proteins are able to coactivate steroid receptor-dependent transcription as well. Human PIASy is a 510 amino acid transcriptional corepressor of the androgen receptor (AR). In addition, PIASy may regulate p53-mediated events and may direct p53 into |

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| | a transactivation-independent mode of apoptosis.<br>**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, the Wnt pathway and the steroid hormone signaling pathway. Involved in gene silencing. Promotes PARK7 sumoylation. In Wnt signaling, represses LEF1 and enhances TCF4 transcriptional activities through promoting their sumoylations.<br>**Subcellular Location:** Nucleus > PML body. Colocalizes with SUMO1 and TCF7L2/TCF4 and LEF1 in a subset of PML (promyelocytic leukemia) nuclear bodies.<br>**Tissue Specificity:** Highly expressed in testis and, at lower levels, in spleen, prostate, ovary, colon and peripheral blood leukocytes.<br>**Post-translational modifications:** Sumoylated. Lys-35 is the main site of sumoylation. Sumoylation is required for TCF4 sumoylation and transcriptional activitation. Represses LEF1 transcriptional activity. SUMO1 is the preferred conjugate.<br>**Similarity:** Belongs to the PIAS family.<br>Contains 1 PINIT domain.<br>Contains 1 SAP domain.<br>Contains 1 SP-RING-type zinc finger.<br>**Database links:**<br>**Entrez Gene:** 51588 Human<br>**Entrez Gene:** 59004 Mouse<br>**Entrez Gene:** 362827 Rat<br>Omim: 605989 Human<br>**SwissProt:** Q8N2W9 Human<br>**SwissProt:** Q3UGQ2 Mouse<br>**SwissProt:** Q9JM05 Mouse<br>**Unigene:** 105779 Human<br>**Unigene:** 34428 Mouse<br>**Unigene:** 12810 Rat |

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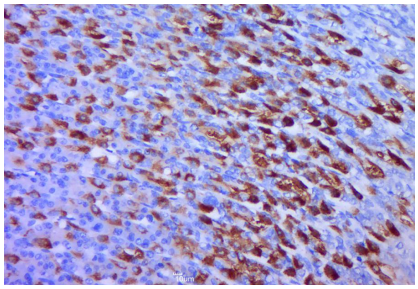
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## [ VALIDATION IMAGES ]



Paraformaldehyde-fixed, paraffin embedded (rat stomach tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PIAS4) Polyclonal Antibody, Unconjugated (SL14480R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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