

Datasheet for 600-401-DM6**PIAS1 Antibody****Overview**

Description:	Anti-PIAS1 (RABBIT) Antibody - 600-401-DM6
Item No.:	600-401-DM6
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The PIAS proteins (protein inhibitor of activated STAT) play a crucial role as transcriptional coregulators in various cellular pathways, including the STAT, p53 and the steroid hormone signaling pathway. The PIAS protein family includes at least five evolutionarily conserved genes, including PIAS1. The major function of the PIAS proteins is the control of gene transcription and can also act as small ubiquitin-like-modifier (SUMO) E3 ligases. PIAS1 binds specifically to STAT1, inhibiting STAT1-mediated gene activation and also binds to the Gu/RNA helicase II enzyme, leading to the proteolytic cleavage of Gu/RH-II. PIAS1 is a potent co-activator for CP2c-mediated alpha-globin expression in erythroid cells.
Synonyms:	PIAS1 Antibody, GBP, ZMIZ3, DDXBP1, GU/RH-II, E3 SUMO-protein ligase PIAS1, Gu-binding protein, GBP
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PIAS1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-PIAS1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the C-terminus of human PIAS1.

Purity/Specificity: Anti-PIAS1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with PIAS1 from other sources has not been determined.

Relevant Links:

- [UniProtKB - O75925](#)
- [GeneID - 8554](#)
- [NCBI - NP_057250](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-PIAS1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 72 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000

IF: 20 µg/mL

IHC: 5 µg/mL

WB: 1 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

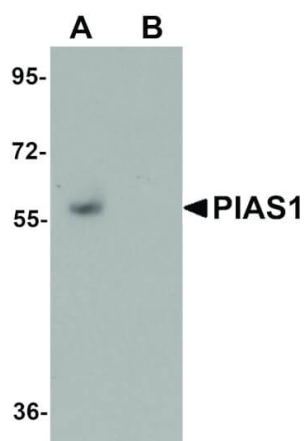
Shipping & Handling

Shipping Condition: Dry Ice

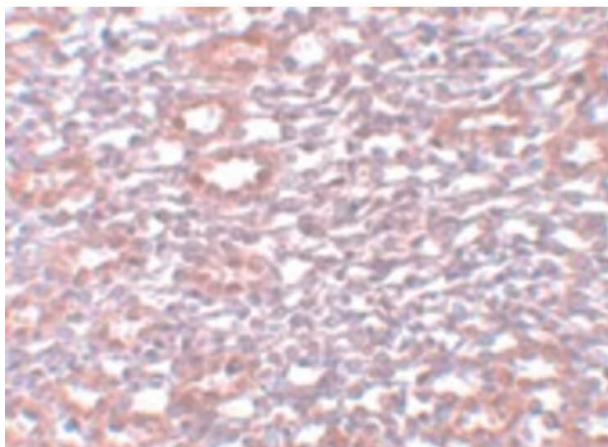
Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration:

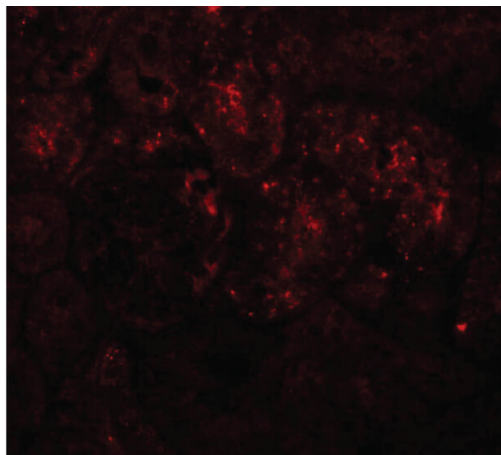
Expiration date is one (1) year from date of receipt.

Images**Western Blot**

Western Blot of PIAS1 antibody. Lane 1: Human kidney tissue lysate in the absence of blocking peptide. Lane 2: Human kidney tissue lysate in the presence of blocking peptide. Primary Antibody: Anti-PIAS1 antibody at 1 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 72 kDa, 60 kDa for PIAS1. Other band(s): PIAS1 splice variants and isoforms.

**Immunohistochemistry**

Immunohistochemistry of PIAS1 antibody. Tissue: Rat kidney tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: PIAS1 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: PIAS1 is nuclear. Staining: PIAS1 as precipitated pink signal with blue nuclear counterstain.

**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of PIAS1 antibody. Tissue: Rat kidney tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: PIAS1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: PIAS1 is nuclear. Staining: PIAS1 as red fluorescent signal.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.