

**Datasheet for 600-401-GZ8S****PIAS1 Antibody****Overview**

|                      |                                             |
|----------------------|---------------------------------------------|
| <b>Description:</b>  | Anti-PIAS1 (RABBIT) Antibody - 600-401-GZ8S |
| <b>Item No.:</b>     | 600-401-GZ8S                                |
| <b>Size:</b>         | 25 µL                                       |
| <b>Applications:</b> | Dot Blot, ELISA, WB                         |
| <b>Reactivity:</b>   | Human                                       |
| <b>Host Species:</b> | Rabbit                                      |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| <b>Background:</b>   | 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. Anti-PIAS1 Antibody is useful for researchers interested in epigenetics and cancer research. |
| <b>Synonyms:</b>     | Rabbit anti-PIAS1 Antibody, Protein Inhibitor Of Activated STAT 1, GBP, ZMIZ3, DDXBP1, DEAD/H (Asp-Glu-Ala-Asp/His) Box Binding Protein 1, GU/RH-II, E3 SUMO-protein ligase PIAS1, Gu-binding protein, GBP, AR Interacting Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

**Target Details**

|                        |                    |
|------------------------|--------------------|
| <b>Gene Name:</b>      | PIAS1              |
| <b>Reactivity:</b>     | Human              |
| <b>Immunogen Type:</b> | Conjugated Peptide |

|                            |                                                                                                                                                                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Anti-PIAS1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide from the internal region of human PIAS1.                                                                                                                             |
| <b>Purity/Specificity:</b> | Anti-PIAS1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest reactivity to mouse 92.9% homology for the immunogen sequence. Cross-reactivity from PIAS1 family and other sources has not been determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">GeneID - 8554</a></li><li>• <a href="#">NCBI - NP_057250</a></li><li>• <a href="#">UniProtKB - O75925</a></li></ul>                                                                                                                   |

## Application Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| <b>Tested Applications:</b> | Dot Blot, ELISA, WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Application Note:</b>    | Anti-PIAS1 Antibody has been tested for use in ELISA, Western Blotting, and Dot Blotting. HEK293 WCL p/n (W09-000-365) and K-562 WCL p/n (W09-001-GJ7) were used as positive control lysates in western blot. Expect a band at approximately 72 kDa in Western Blots of specific cell lysates and tissues. Specific conditions for reactivity should be optimized by the end user. While not tested, it is likely Anti-PIAS1 antibody will work for immunofluorescence, IHC, and CHIP assays. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>ELISA:</b>               | 5 µg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>IF:</b>                  | User Optimized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>WB:</b>                  | 1:1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Formulation

|                        |                                                         |
|------------------------|---------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                               |
| <b>Concentration:</b>  | 1.0 mg/ml by UV absorbance at 280 nm                    |
| <b>Buffer:</b>         | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                |
| <b>Stabilizer:</b>     | None                                                    |

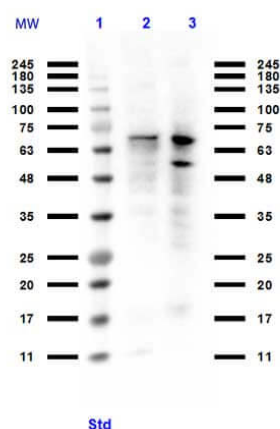
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

**Storage Condition:** Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

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

## Images



### Western Blot

Western Blot of PIAS1 antibody. Lane 1: MW ladder Opal pre-stained (p/n MB-210-0500). Lane 2: HEK293 whole cell lysate (p/n W09-000-365). Lane 3: K-562 whole cell lysate (p/n W09-001-GJ7). Primary Antibody: Anti-PIAS1 antibody at 1.0 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:70,000 for 45 min at RT. Block: MB-070 overnight at 4°C. Predicted/Observed size: 72 kDa, 60 kDa for PIAS1. Other band(s): PIAS1 splice variants and isoforms.

## Disclaimer

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