

**Datasheet for 600-401-200****GST Antibody****Overview**

|                      |                                          |
|----------------------|------------------------------------------|
| <b>Description:</b>  | Anti-GST (RABBIT) Antibody - 600-401-200 |
| <b>Item No.:</b>     | 600-401-200                              |
| <b>Size:</b>         | 100 µg                                   |
| <b>Applications:</b> | ELISA, WB, IP                            |
| <b>Reactivity:</b>   | GST-Tag                                  |
| <b>Host Species:</b> | Rabbit                                   |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Rockland produces a wide range of GST antibodies in our laboratories. Select GST antibodies from several monoclonal and/or polyclonal GST antibodies listed below. Select appropriate GST antibodies for your research by isotype, epitope, applications and species reactivity. GST (Glutathione-S-Transferase) is a protein expression tag commonly used in molecular biology. Anti-GST will react with synthetic construct present in most known GST containing cloning or expression vectors. GST is responsible for the conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. The amino acid sequence GST is highly conserved in most organisms including mammals. GST exists as a 26 kDa homodimer. |
| <b>Synonyms:</b>     | rabbit anti-GST antibody, Glutathione-S-Transferase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Target Details**

|                        |                                                                               |
|------------------------|-------------------------------------------------------------------------------|
| <b>Reactivity:</b>     | GST-Tag                                                                       |
| <b>Immunogen Type:</b> | Native Protein                                                                |
| <b>Immunogen:</b>      | The immunogen is full length GST isolated from <i>Schistosoma japonicum</i> . |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity/Specificity:</b> | This product was prepared from monospecific antiserum by immunoaffinity chromatography using GST coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum as well as purified and partially purified Glutathione-S-Transferase [ <i>Schistosoma japonicum</i> ]. Cross reactivity against Glutathione-S-Transferase from other sources may occur but has not been specifically determined. |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Application Details

|                                |                                                                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | ELISA, WB                                                                                                                                                            |
| <b>Suggested Applications:</b> | IP (Based on references)                                                                                                                                             |
| <b>Application Note:</b>       | Anti-GST has been tested by ELISA and western blot and is suitable for immunohistochemistry as well as other antibody based assays requiring lot-to-lot consistency. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                      |
| <b>ELISA:</b>                  | 1:60,000                                                                                                                                                             |
| <b>IHC:</b>                    | 1:100                                                                                                                                                                |
| <b>IP:</b>                     | User Optimized                                                                                                                                                       |
| <b>WB:</b>                     | 1:1,000                                                                                                                                                              |
| <b>Other:</b>                  | lot SH611g                                                                                                                                                           |

## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 1.0 mg/mL by UV absorbance at 280 nm                       |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

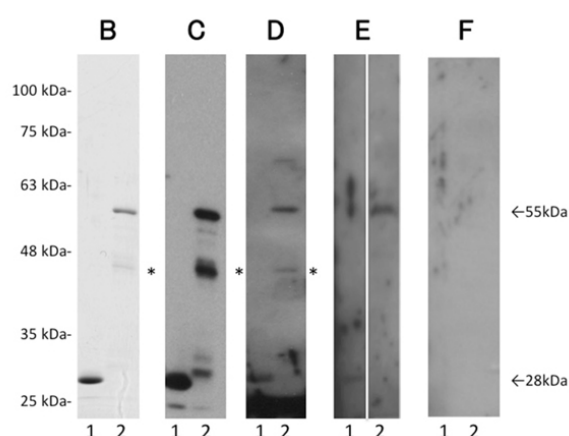
## Shipping & Handling

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

**Storage Condition:** Store vial at 4° C prior to opening. 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. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.

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

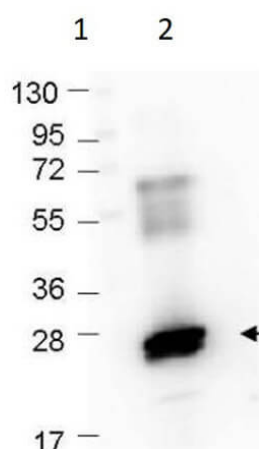
## Images



### Western Blot

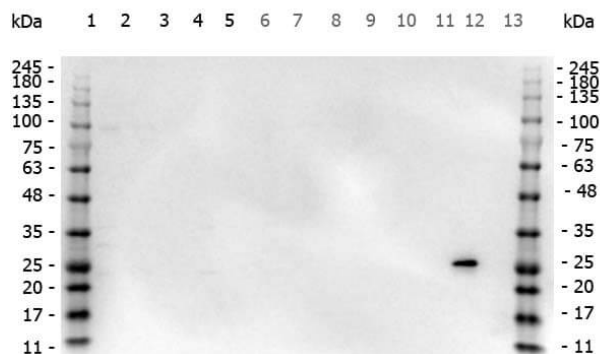
GST protein (lane 1) and affinity-purified GST-tagged PDCD11 (lane 2) were separated on 11% SDS-polyacrylamide gels and stained with Coomassie Blue B., or western blotted using anti-GST antibody C., or the autologous sera of patients with aCI D., TIA E., and HD F. Asterisks indicate partially degraded proteins. Molecular weights are shown in the left.

GST-PDCD11 as well as GST proteins were recognized by the anti-GST antibody as 55-kDa and 28-kDa proteins, respectively (Figure 1B and 1C). The molecular weight of the largest product was similar to that predicted by sequencing analysis. Moreover, GST-PDCD11 reacted with serum antibodies of patients with aCI and TIA, but not with HD (Figure 1D-1F). Fig 1. PMID: 29507658



### Western Blot

Western Blot of Rabbit Anti-GST Antibody. Lane 1: MW markers. Lane 2: recombinant GST protein (p/n 000-001-200). Load: 0.25 µg. Primary Antibody: Anti-GST at 1:1000 at room temperature for 30 min. Secondary Antibody: HRP-conjugated Goat-Anti-Rabbit (p/n 611-103-122) secondary antibody was used at 1:40,000 in blocking buffer (p/n MB-070). Blocking: 1% BSA-TTBS (p/n MB-013, diluted to 1X) overnight at 4°C.



### Western Blot

Western Blot of Rabbit anti-GST antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-364). Lane 3: CHO/K1 Lysate (p/n W07-000-357). Lane 4: MDA-MB-231 (p/n W09-001-GK6). Lane 5: A431 Lysate (p/n W09-000-361). Lane 6: Jurkat Lysate (p/n W09-001-370). Lane 7: NIH/3T3 Lysate (p/n W10-000-358). Lane 8: E-coli HCP Control (p/n 000-001-J08). Lane 9: FLAG Positive Control Lysate (p/n W00-001-383). Lane 10: Red Fluorescent Protein (p/n 000-001-379). Lane 11: Green Fluorescent Protein (p/n 000-001-215). Lane 12: Glutathione-S-Transferase Protein (p/n 000-001-200). Lane 13: Maltose Binding Protein (p/n 000-001-385). Load: 10 µg of lysate or 50ng of purified protein per lane. Primary antibody: GST antibody at 1ug/mL overnight at 4C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS (p/n MB-082) for 30 min at RT. Predicted/Observed size: 26 kDa for GST.

## References

- Hu J et al. Effects of Rotavirus NSP4 on the Immune Response and Protection of Rotavirus-Norovirus Recombinant Subunit Vaccines in Different Immune Pathways. *Vaccines (Basel)*. (2024)
- Sokhi S et al. Myt1 overexpression mediates resistance to cell cycle and DNA damage checkpoint kinase inhibitors. *Front Cell Dev Biol*. (2023)
- Lewis CW et al. Upregulation of Myt1 Promotes Acquired Resistance of Cancer Cells to Wee1 Inhibition. *Cancer Res*. (2019)
- Yoshida, Y et al. Elevation of autoantibody level against PDCD11 in patients with transient ischemic attack. *Oncotarget* (2018)
- Bolch, SN et al. A Splice Variant of Bardet-Biedl Syndrome 5 (BBS5) Protein that Is Selectively Expressed in Retina. *PLoS One* (2016)
- Smith, TS et al. Light-dependent phosphorylation of Bardet-Biedl syndrome 5 in photoreceptor cells modulates its interaction with arrestin1. *Cellular and Molecular Life Sciences : Cmls* (2013)

## Disclaimer

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