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www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-101-200

GST Antibody

Overview

Description:	Anti-GST (GOAT) Antibody - 600-101-200
Item No.:	600-101-200
Size:	1 mg
Applications:	ELISA, WB, IP, Other
Reactivity:	GST-Tag
Host Species:	Goat

Product Details

Background:	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.
Synonyms:	goat anti-GST antibody, Glutathione-S-Transferase
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	GST-Tag
Immunogen Type:	Native Protein
Immunogen:	Glutathione-S-Transferase [Schistosoma japonicum]

Purity/Specificity:	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-Goat Serum as well as purified and partially purified Glutathione-S-Transferase [Schistosoma japonicum]. Cross reactivity against Glutathione-S-Transferase from other sources may occur but has not been specifically determined.
Relevant Links:	• 600-101-200 SDS • UniProtKB - P08515

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	IP, Other (Based on references)
Application Note:	Anti-GST has been tested by ELISA and western blot and is suitable for immunoblotting (western or dot blot), ELISA, immunoprecipitation and most immunological methods requiring high titer and specificity. This antibody has also been reported to be suitable for immobilization in Label-free Interaction Analysis (Biocore).
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:50,000
IHC:	1:1,000 - 1:10,000
IP:	User Optimized
WB:	1:1,000 - 1:10,000

Formulation

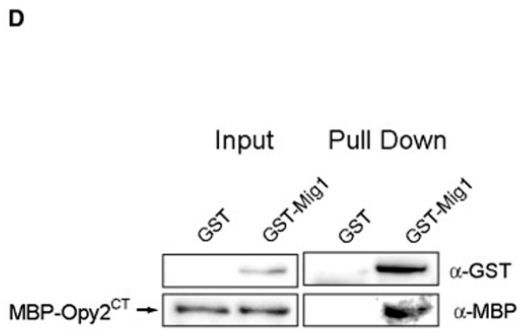
Physical State:	Liquid (sterile filtered)
Concentration:	1.20 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

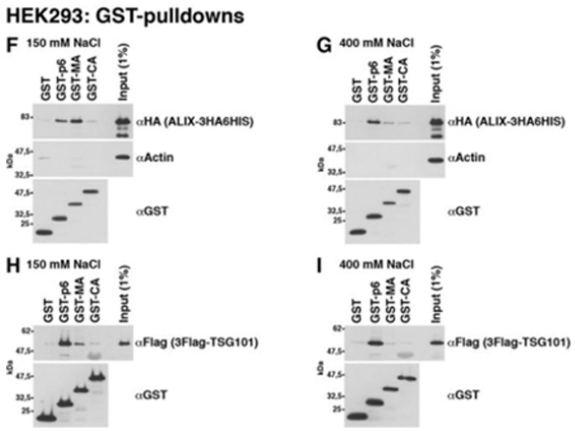
Shipping Condition:	Wet Ice

Storage Condition:	Store GST antibody 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.

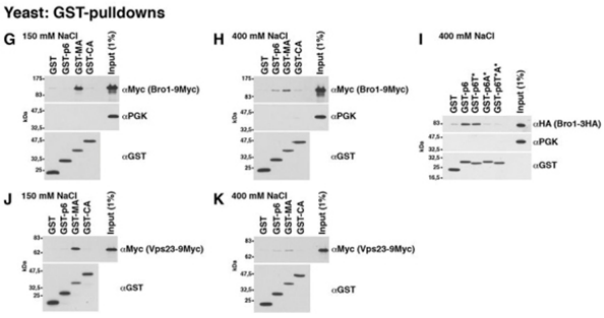
Images



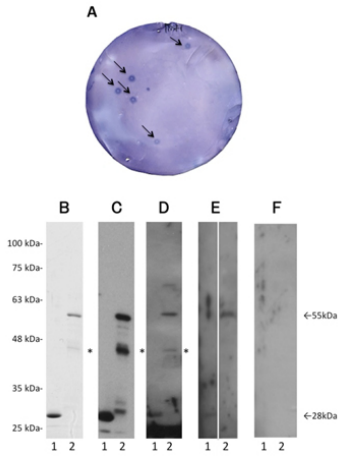
Western Blot
(D) Pull-down assay. GST (~26 kDa) or GST-Mig1 (~81.5 kDa) were purified (Input, anti-GST) and bound to glutathione-sepharose beads (Pull Down, anti-GST). Beads were incubated with purified MBP-Opy2CT (Input, anti-MBP, ~69.4 kDa). Coprecipitated MBP-Opy2CT is shown (Pull Down, anti-MBP). Fig 3.
PMID: 22904036



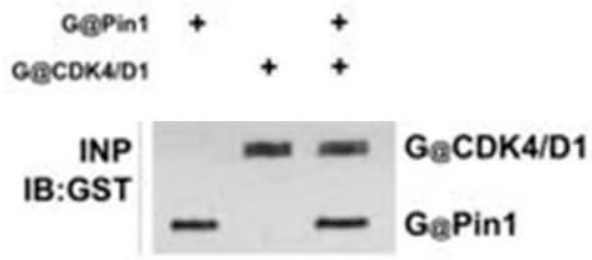
Western Blot
F–I, pulldown experiments showing that ALIX and TSG101 bind to GST-MA expressed in E. coli. The relative affinity for MA compared with p6 is higher for ALIX. GST-tagged Gag fragments (MA (aa 1–132), CA (aa 133–363), and p6 (aa 448–500)) were bound to GSH-Sepharose and incubated with extract of HEK293 cells expressing epitope-tagged ALIX or TSG101 from a CMV promoter vector. Bead-bound proteins were analyzed by immunoblotting with the indicated antibodies. α-Actin served as control, showing specific ESCRT protein binding. Fig 4. PMID: 32994219



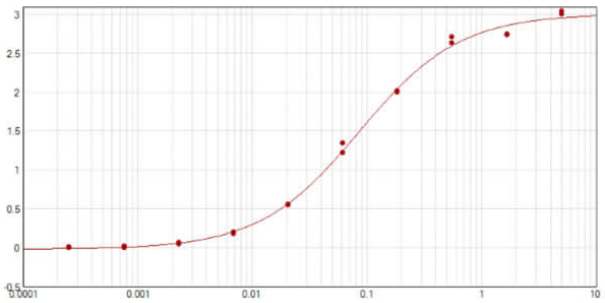
Western Blot
G–K, pulldown experiments showing that genomically epitope-tagged Bro1 and Vps23 bind to GST-MA expressed in E. coli and that Bro1 additionally binds to GST-p6 dependent on the ALIX-binding motif. GST-tagged Gag fragments (MA (aa 1–132), CA (aa 133–363), and p6 (aa 448–500)) were bound to GSH-Sepharose and incubated with yeast extract. Bead-bound proteins were analyzed by immunoblotting with the indicated antibodies. PGK served as control, showing specific ESCRT protein binding. G and J, binding buffer contained 150 mm NaCl. H, I, and K, binding buffer contained 400 mm NaCl. Fig 3. PMID: 32994219



Western Blot
Recombinant proteins were blotted onto nitrocellulose membranes and reacted with patient serum. Arrows indicate positive phage clones. Positive clones were re-cloned for 2 additional times to obtain monoclonality A. 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. Fig 1. PMID: 29507658

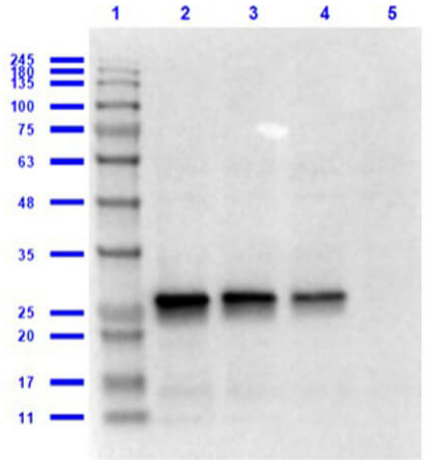


Western Blot
Immunoprecipitation of anti-GST antibody. Lane 1: T98G cells incubated with GST-Pin1. Lane 2: T98G cells incubated with GST-CDK4/cyclinD1. Lane 3: T98G cells incubated with GST-Pin1 and GST-CDK4/cyclinD1. Immunoprecipitated with pRb antibody. Load: 25 µg per lane. Primary antibody: anti-GST 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.



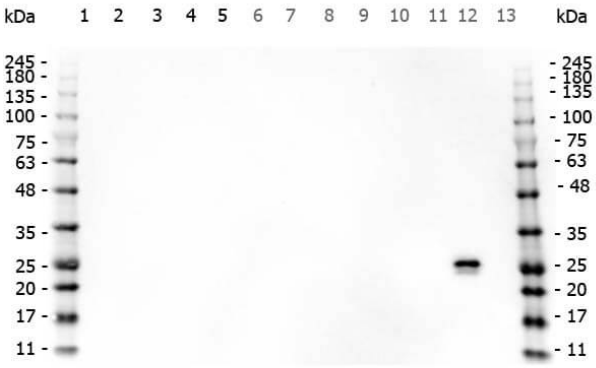
ELISA

ELISA results of purified Goat Anti-GST Antibody tested against GST. Each well was coated in 1.0 µg of antigen. The starting dilution of antibody was 5 µg/mL and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using Buffer (p/n MB-060-1000), Substrate (p/n TMB-8000), and Donkey Anti-Goat IgG Antibody HRP (p/n 605-703-125) at 1:15,000.



Western Blot

Western Blot of Goat Anti-GST Antibody. Lane 1: Opal Pre-stained Molecular Weight Marker (p/n MB-210-0500). Lane 2: rec GST [0.1µg]/ HeLa Whole Cell Lysate [10µg]. Lane 3: rec GST [0.05µg]/ HeLa Whole Cell Lysate [10µg]. Lane 4: rec GST [0.02µg]/ HeLa Whole Cell Lysate [10µg]. Lane 3: HeLa Whole Cell Lysate (p/n W09-000-364) [10µg]. Primary Antibody: Goat anti-GST antibody (p/n 600-101-200) at 1.0µg/mL for overnight at 2-8°C. Secondary Antibody: Rabbit Anti-Goat IgG (H&L) Antibody Peroxidase Conjugated (p/n 605-4302) at 1:40,000 for 30 min at RT. Block: (p/n MB-070) at RT for 30 min. Predicted/Observed size: ~26kDa.



Western Blot

Western Blot of Goat 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 goat secondary antibody (p/n 605-4302) 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.

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