Anti-GST (GOAT) Antibody - 600-101-200

Code: 600-101-200 **Size:** 1 mg

Product Description: Anti-GST (GOAT) Antibody - 600-101-200

Concentration: 1.0 mg/ml by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Goat
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
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.
Synonyms	goat anti-GST antibody, Glutathione-S-Transferase
Application Note	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).
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.
Purity And 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.
Assay Dilutions	User Optimized
ELISA	1:20,000 - 1:50,000
Western Blot	1:1,000 - 1:10,000
Immunohistochemistry	1:1,000 - 1:10,000
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	Glutathione-S-Transferase [Schistosoma japonicum]
General Reference	Sagermann M., Chapleau R.R., DeLorimier E., Lei M. (2009) Using affinity chromatography to engineer and characterize pH-dependent protein switches. Protein Sci. 18:217-228 [PubMed: 19177365]Rizzolio F, Lucchetti C, Caligiuri I, Marchesi I, Caputo M, Klein-Szanto AJ, Bagella L, Castronovo M, Giordano A. (2012) Retinoblastoma tumor-suppressor protein phosphorylation and inactivation depend on direct interaction with Pin1. Cell Death and Differentiation 1-10. Nature
Specific Reference	Karunanithi S, Cullen PJ. (2012) The filamentous growth MAPK Pathway Responds to Glucose Starvation Through the Mig1/2 transcriptional repressors in Saccharomyces cerevisiae. Genetics. 2012 Nov;192(3):869-87. doi: 10.1534/genetics.112.142661. Epub 2012 Aug 17.

Related Products

200-301-268	Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302

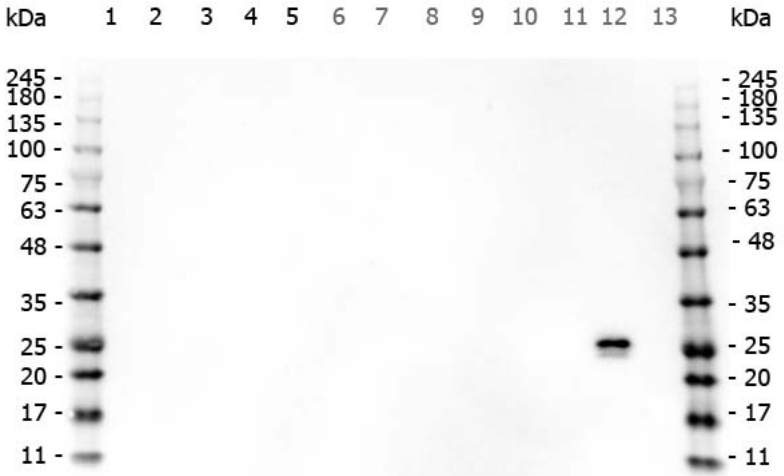
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
B304	NORMAL GOAT SERUM (NGS) - B304

Related Links

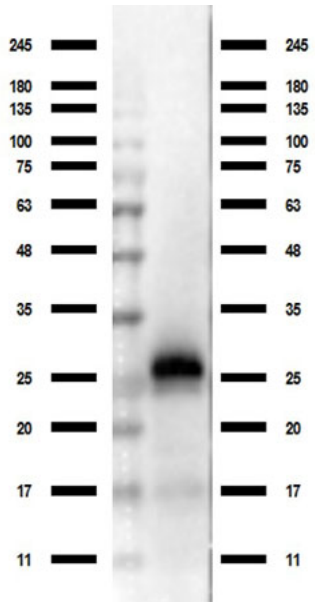
UniProtKB - P08515

Images

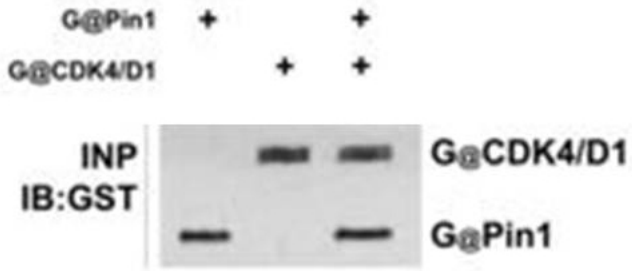
1 Western Blot of Goat anti-GST antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-363).Lane 3: CHO/K1 Lysate (p/n W07-000-357).Lane 4: MDA-MB-231 (p/n W09-001-GK6).Lane 5: A431 Lysate (p/n W09-000-361).Lane 6: Jurkat 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 W00-001-383Lane 10: Red Fluorescent Protein (p/n 000-001-379).Lane 11: Green Fluorescent Protein (p/n 000-001-215).Lane 12: Glutathinoe-S-Transferase ProteinLane 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 at 1:30,000 for 60 min at RT.Blocking Buffer: 1% Casein-TTBS for 30 min at RT.Predicted/Observed size: 26 kDa for GST.



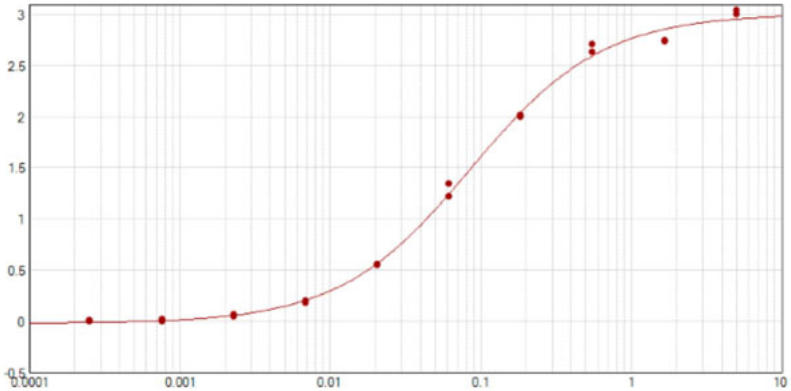
2 Western Blot of Anti-GST (Goat) Antibody. Lane 1: Protein Standard Opal Pre-stained (p/n MB-210-0500). Lane 2: GST. Primary Antibody: Goat anti-GST antibody (600-101-200) at 1 ug/mL for overnight at 4°C. Secondary Antibody: Donkey Anti-Goat IgG (H&L) Antibody Peroxidase Conjugated (p/n 605-703-125) at 1:40,000 for 30 min at RT. Block: MB-070 at RT for 30 min. Predicted/Observed size: 26 kDa.



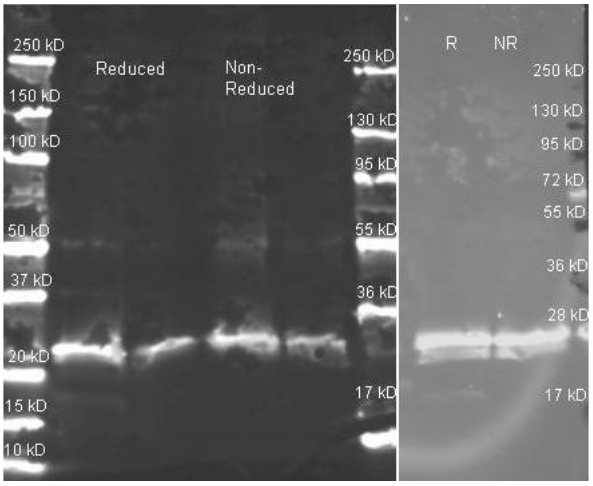
3 Immunoprecipitation of anti-GST antibody. Lane 1: T98G cells incubated with GST-Pin1. Lane 2: T98G cells incubated with GST-CDK4/cyclinD1. Lane 3: T98G cells incubated with GST-Pin1 and GST-CDK4/cyclinD1.Immunoprecipitated with pRb antibody.Load: 25 µg per lane.Primary antibody: anti-GST 1:400 for 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.



4 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 Conjugate (Donkey Anti-Goat IgG Antibody HRP at 1:15,000).



5 Rockland's anti-GST polyclonal antibody in western blot shows detection of recombinant GST (indicated by band at ~ 28 kDa). The SDS-PAGE contained approximately 0.2 µg of rGST loaded on to a 4-20% gradient gel for separation. After electrophoresis, the gel was transferred to nitrocellulose and blocked with “Blocking Buffer for Fluorescent Western Blotting” p/n MB-070 in TBS for 1h at RT. The membrane was probed with anti-GST antibody at a 1:2,000 dilution in blocking reagent, overnight at 4° C. For detection DyLight™800 conjugated Donkey-a-Goat IgG (p/n 605-745-002) was used at a 1:20,000 dilution (in blocking reagent) for 30 min at 25° C. Fluorescent data was collected on a LICOR Odyssey instrument.



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