

Datasheet for 200-101-C45S**GST Antibody****Overview**

Description:	Anti-GST (GOAT) Antibody - 200-101-C45S
Item No.:	200-101-C45S
Size:	25 µL
Applications:	ELISA, WB, Biochemical Assay, IP, Other
Reactivity:	GST-Tag
Host Species:	Goat

Product Details

Background:	GST antibody recognizes the GST tag. The glutathione S-transferase (GST, previously known as ligandins) family of enzymes are composed of many cytosolic, mitochondrial, and microsomal (now designated as MAPEG) proteins. GSTs are present in eukaryotes and in prokaryotes, where they catalyze a variety of reactions and accept endogenous and xenobiotic substrates. Members of the GST superfamily are extremely diverse in amino acid sequence, and a large fraction of the sequences deposited in public databases are of unknown function.] The Enzyme Function Initiative (EFI) is using GSTs as a model superfamily to identify new GST functions. Anti-GST antibody is ideal for investigators involved in epitope research.
Synonyms:	goat anti-GST antibody, GST, 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:	Anti-GST is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by 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 [<i>Schistosoma japonicum</i>]. Cross reactivity against Glutathione-S-Transferase from other sources may occur but has not been specifically determined.
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Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	Biochemical Assay, IP, Other (Based on references)
Application Note:	Anti-GST antibody has been tested by ELISA and western blot. This product is assayed against 1.0 ug of Glutathione-S-Transferase [<i>Schistosoma japonicum</i>] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Goat IgG [H&L] (Rabbit) and (ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid])) as a substrate for 30 minutes at room temperature. A working dilution of 1:3,000 to 1:15,000 of the reconstitution concentration is suggested for this product. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:200 - 1:1000
IHC:	User Optimized
IP:	User Optimized
WB:	1:1000 - 1:5000

Formulation

Physical State:	Liquid (sterile filtered)
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

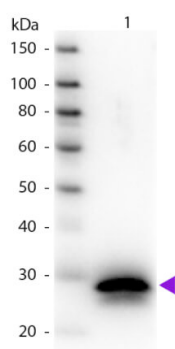
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store Anti-GST 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.

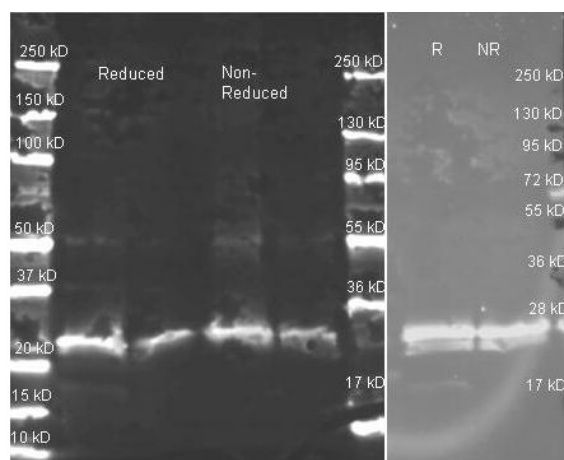
Expiration: Expiration date is three (3) months from date of receipt.

Images



Western Blot

Western Blot of Goat Anti-GST Antibody. Lane 1: GST. Lane 2: None. Load: 50 ng per lane. Primary antibody: GST antibody at 1:1000 in MB-070 overnight at 4°C. Secondary antibody: Peroxidase goat secondary antibody at 1:40,000 in MB-070 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 28 kDa, 28 kDa for GST. Other band (s): None.



Western Blot

Rockland Goat anti GST antibody was used to detect GST under reducing and non-reducing conditions. Reduced samples of purified GST contained 4% BME and were boiled for 5 minutes. For blot on the left, samples of ~1 and 0.25 µg of protein per lane were run by SDS-PAGE. Protein was transferred to nitrocellulose and probed with Rockland Goat anti GST (200-101-200 lot 13891 1:5K in MB-070, ON 4 C). Primary antibody was detected with Rockland Dylight 649 conjugated Donkey anti Goat (605-743-125 lot 20834 1:10K 1.5 hr RT in MB-070) and imaged on the BioRad VersaDoc imaging system. Blot on right shows a repeat western blot with the same samples (~1 µg per lane, reduced (R) and non-reduced (NR) probed 1:1000 dilution of primary antibody and detection using Dylight 549 conjugated Donkey anti goat (605-742-125 lot 21096 1:10K 1.5 hr RT in MB-070).

References

- Koivunen, J et al. Integrin $\alpha 11\beta 1$ is a receptor for collagen XIII. *Cell and Tissue Research* (2021)
- Kubota, M et al. Serum anti-SERPINE1 antibody as a potential biomarker of acute cerebral infarction. *Scientific Reports* (2021)
- Bolch, SN et al. A Splice Variant of Bardet-Biedl Syndrome 5 (BBS5) Protein that Is Selectively Expressed in Retina. *PloS One* (2016)
- Machida et al. Identification of stroke-associated-antigens via screening of recombinant proteins from the human expression cDNA library (SEREX). *Journal of Translational Medicine* (2015)
- 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)

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