

Datasheet for 400-001-MR7**Recombinant GST Antibody****Overview**

Description:	Anti-GST (VHH) Single Domain Antibody - 400-001-MR7
Item No.:	400-001-MR7
Size:	50 µg
Applications:	Dot Blot, WB
Reactivity:	GST-Tag
Origin:	Llama
Expressed in:	E. coli

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.

A single-domain antibody (sdAb) is a small antibody fragment consisting of the monomeric variable domain derived from camelid heavy chain-only immunoglobulins naturally found in llamas, alpacas and camels. Also known as VHH antibodies, these are the smallest functional antigen-binding fragment that occurs in nature (12 - 14 kDa) and are now being used in biotechnology as a novel antibody scaffold. The small size of the VHH single domain antibody makes it very attractive for use in diagnostic imaging and potentially therapeutic applications.

Synonyms:	recombinant anti-GST antibody, Glutathione-S-Transferase antibody
Species of Origin:	Llama
Expressed in:	E. coli
Clonality:	Recombinant Monoclonal
Clone ID:	GST13

Target Details

Reactivity:	GST-Tag
Purity/Specificity:	Anti-GST (VHH) Antibody is a recombinant antibody. The clone was isolated from a library prepared from a hyper-immunized llama host and purified by affinity chromatography from bacterial culture. Expect reactivity against GST-labeled probes and proteins.

Application Details

Tested Applications:	Dot Blot, WB
Application Note:	Anti-GST is a his-tagged monoclonal recombinant antibody designed to detect Glutathione-S-Transferase and its conjugates. This antibody has been tested by western blot and dot blot and is intended for use in immunological assays including western blotting, immunofluorescence and fluorescence activated cell sorting (FACS). Fluorochrome conjugated anti-GST can be used for detection of sensitive non-radioactive in situ hybridization probes. The antibody can be labeled with dyes, enzymes or fluorescence, directly or secondarily, for visualization and detection of GST-conjugated molecules by immunoblotting or immunofluorescence. Secondary detection can be achieved using conjugated anti-His tag or anti-VHH antibodies. Optimal titers for applications should be confirmed by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	1:200

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.5 mg/ml by BCA assay
Buffer:	1X PBS, pH 7.4
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	20% (v/v) Glycerol

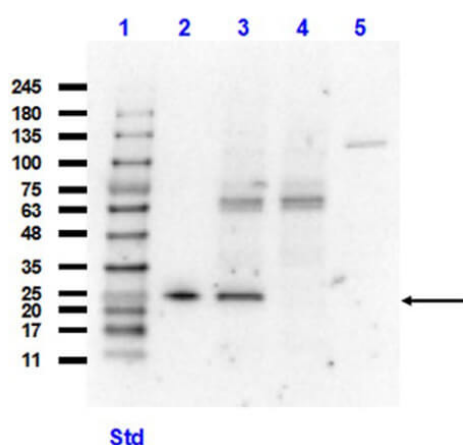
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. 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.

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

Images

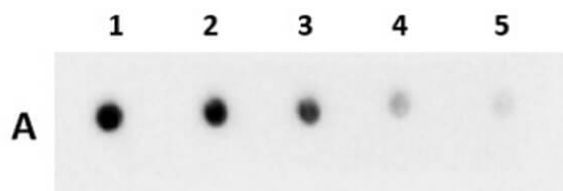


Western Blot

Western Blot of Anti-GST Single Domain Antibody. Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 2: Recombinant GST (p/n 000-001-200) (0.2 μg) [+]. Lane 3: HEK293T WCL (p/n W09-001-GX5) / rec. GST (p/n 000-001-200) (10 μg/0.2 μg) [+]. Lane 4: HEK293T Whole Cell Lysate (p/n W09-001-GX5) (10 μg) [-]. Lane 5: E.coli Host Cell Protein (HCP) Control Protein (p/n 000-001-J08) (10 μg) [-]. Primary Antibody: Anti-GST (VhH) at 5.0 μg/mL overnight at 2-8°C. Secondary Antibody: Mouse Anti-6X His Tag Peroxidase (p/n 200-303-382) at 1:3,000 for 30 mins at RT. Block: BlockOut Buffer (p/n MB-073). Exposure: 60 sec. Predicted MW: ~25.5 kDa. Observed MW: ~25.5 kDa. Unspecific Bands: ~70 kDa minor background due to unspecific cross-reactivity of anti-6X His ab with unknown proteins of HEK293T lysate.

Dot Blot

Dot Blot of Anti-GST (VHH) Single Domain Antibody. Row A: Recombinant GST protein (p/n 000-001-200). Amount Dotted: (1) 200, (2) 100, (3) 50, (4) 25, (5) 12.5 ng. Primary Antibody: Anti-GST (VhH) 1.0 μg/mL for 1.5 hr at RT. Secondary Antibody: Mouse Anti-6X His Tag Peroxidase (p/n 200-303-382) at 1:500 for 30 mins at RT. Block: BlockOut Buffer (p/n MB-073).



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.