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

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

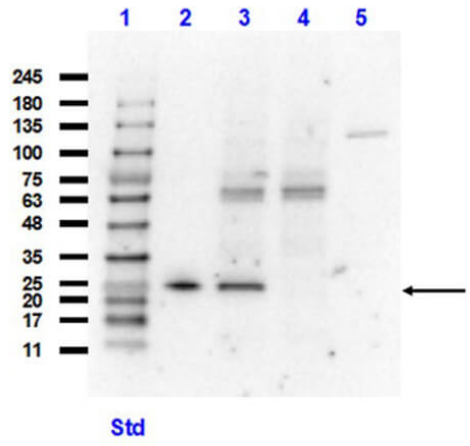
Physical State:	Liquid (sterile filtered)
Concentration:	0.5 mg/ml by BCA assay
Buffer:	1X PBS, pH 7.4
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	20% (v/v) Glycerol

Shipping & Handling

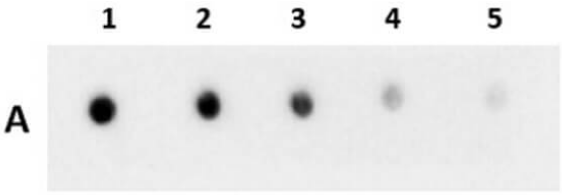
Shipping Condition:	Dry Ice

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) (0.2µg) [+]. Lane 3: HEK293T WCL (p/n W09-001-GX5) / rec. GST (p/n 000-001-200) (10µg/0.2µg) [+]. Lane 4: HEK293T Whole Cell Lysate (p/n W09-001-GX5) (10µg) [-]. Lane 5: E.coli Host Cell Protein (HCP) Control Protein (p/n 000-001-J08) (10µg) [-]. Primary Antibody: Anti-GST (VhH) at 5.0µg/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: ~25.5kDa. Observed MW: ~25.5kDa. Unspecific Bands: ~70kDa 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) 12.5ng. Primary Antibody: Anti-GST (VhH) 1.0µg/mL for 1.5hr 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

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