

**Datasheet for 600-442-200****GST Antibody DyLight™ 549 Conjugated****Overview**

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| <b>Description:</b>  | Anti-GST (RABBIT) Antibody DyLight™ 549 Conjugated - 600-442-200 |
| <b>Item No.:</b>     | 600-442-200                                                      |
| <b>Size:</b>         | 100 µg                                                           |
| <b>Applications:</b> | WB                                                               |
| <b>Reactivity:</b>   | GST-Tag                                                          |
| <b>Host Species:</b> | Rabbit                                                           |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | 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. |
| <b>Synonyms:</b>     | rabbit anti-GST antibody DyLight™549 conjugation, DyLight™549 conjugated rabbit anti-GST antibody, Glutathione-S-Transferase                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Conjugate:</b>    | DyLight™ 549                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>F/P Ratio:</b>    | 2.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Target Details**

|                        |                                                                       |
|------------------------|-----------------------------------------------------------------------|
| <b>Reactivity:</b>     | GST-Tag                                                               |
| <b>Immunogen Type:</b> | Native Protein                                                        |
| <b>Immunogen:</b>      | The immunogen is full length GST isolated from Schistosoma japonicum. |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Purity/Specificity:</b> | 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-Rabbit 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. |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Application Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Tested Applications:</b> | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Application Note:</b>    | Anti-GST DyLight549 Conjugated antibody has been tested by western blot. This product is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>FLISA:</b>               | >1:20,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>IF:</b>                  | >1:5,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>WB:</b>                  | 1:10,000 - 1:25,000                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Formulation

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                            |
| <b>Concentration:</b>         | 1.0 mg/mL by UV absorbance at 280 nm                                   |
| <b>Buffer:</b>                | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2             |
| <b>Preservative:</b>          | 0.01% (w/v) Sodium Azide                                               |
| <b>Stabilizer:</b>            | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| <b>Reconstitution Volume:</b> | 100 µL                                                                 |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

## Shipping & Handling

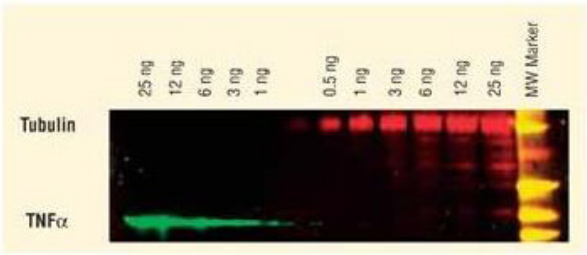
|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Ambient |
|----------------------------|---------|

|                           |                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Condition:</b> | Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. 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. |
| <b>Expiration:</b>        | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

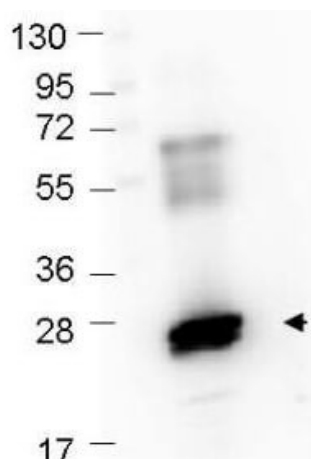
## Images

| Emission      | Color                                                                              | DyLight™ Dye | Ex/Em (nm) | $\epsilon$ (M <sup>-1</sup> cm <sup>-1</sup> ) | Similar Dyes                       |
|---------------|------------------------------------------------------------------------------------|--------------|------------|------------------------------------------------|------------------------------------|
| Blue          |   | 405          | 400/420    | 30,000                                         | Alexa™ 405, Cascade Blue           |
| Green         |   | 488          | 493/518    | 70,000                                         | Alexa™ 488, Cy2®, FITC             |
| Yellow        |   | 549          | 560/568    | 150,000                                        | Alexa™ 546, Alexa 555, Cy3®, TRITC |
| Red           |   | 649          | 646/674    | 250,000                                        | Alexa™ 647, Cy5®                   |
| Near Infrared |   | 680          | 682/715    | 140,000                                        | Alexa™ 680, Cy5.5®, IRDye™ 700     |
| Infrared      |  | 800          | 770/794    | 270,000                                        | IRDye™ 800                         |

**Diagram**  
Properties of DyLight™ Fluorescent Dyes.



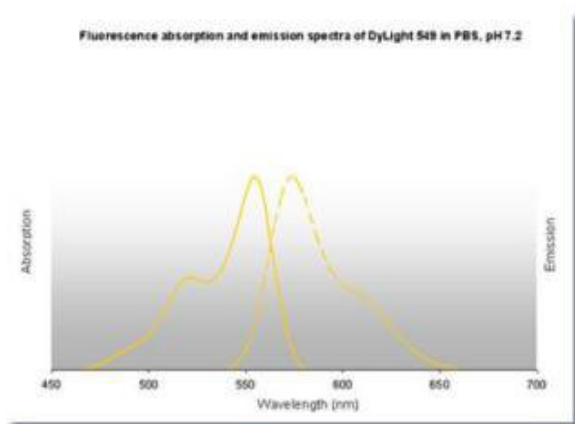
**Western Blot**  
DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 549 conjugate. Anti-TNFα was detected using a DyLight™ 649 conjugate. The image was captured using the Typhoon™ 9410 Imaging System.



#### Western Blot

Western Blot showing detection of recombinant GST protein (0.25  $\mu$ g) in lane 2. MW markers are in lane 1. Protein was run on a 4-20% gel, then transferred to 0.45  $\mu$ m nitrocellulose. After blocking with 1% BSA-TTBS (p/n MB-013, diluted to 1X) overnight at 4°C, primary antibody was used at 1:1000 at room temperature for 30 min. HRP-conjugated Goat-Anti-Rabbit (p/n 611-103-122) secondary antibody was used at 1:40,000 in MB-070 blocking buffer and imaged on the VersaDoc™ MP 4000 imaging system (Bio-Rad).

#### Diagram



## 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.