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Datasheet for 200-345-200

# GST Antibody Dylight™ 800 Conjugated

## Overview

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|---|---|
| **Description:** | Anti-GST (MOUSE) Monoclonal Antibody DyLight™ 800 Conjugated - 200-345-200 |
| **Item No.:** | 200-345-200 |
| **Size:** | 100 µg |
| **Applications:** | Dot Blot, ELISA, WB |
| **Reactivity:** | GST-Tag |
| **Host Species:** | Mouse |

## Product Details

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| **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. |
| **Synonyms:** | mouse anti-GST antibody DyLight™ 800 conjugation, DyLight™800 conjugated mouse anti-GST antibody, Glutathione-S-Transferase, Anti-GST monoclonal antibody |
| **Host Species:** | Mouse |
| **Conjugate:** | DyLight™ 800 |
| **Clonality:** | Monoclonal |
| **Clone ID:** | 3D4 |
| **Format:** | IgG1 |
| **F/P Ratio:** | 2.6 |

## Target Details

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| **Reactivity:** | GST-Tag |

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| **Immunogen Type:** | Native Protein |
| **Immunogen:** | BALB/c mice were immunized with GST from full length Schistosoma japonicum protein. A hybridoma was produced by the fusion of BALB/c mouse splenocytes and myeloma cells using conventional hybridoma technology. |
| **Purity/Specificity:** | This product was prepared from tissue culture supernatant by Protein A affinity chromatography. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Mouse Serum and purified and partially purified Glutathione-S-Transferase (GST). |

## Application Details

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| **Tested Applications:** | Dot Blot, ELISA |
| **Suggested Applications:** | WB (Based on references) |
| **Application Note:** | Anti-GST DyLight™800 has been tested by ELISA and dot 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. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **FLISA:** | >1:20,000 |
| **IF:** | >1:5,000 |
| **WB:** | 1:10,000-1:25,000 |

## Formulation

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

## Shipping & Handling

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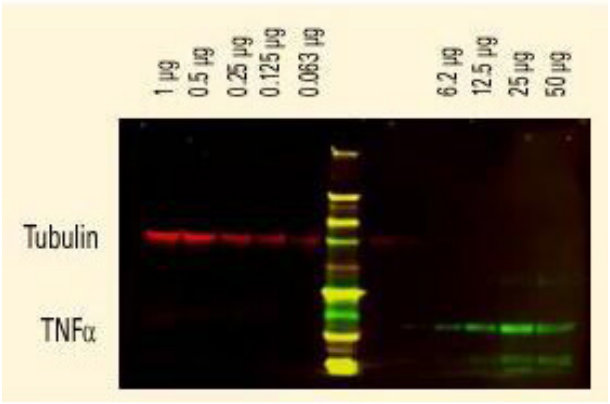
| **Shipping Condition:** | Ambient |
| **Storage Condition:** | Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

## Images


**Western Blot**
Rockland Mouse-a-GST (200-301-200 lot 24882, blue), Rabbit anti-Transferrin (109-4134 lot 3033), and Goat-anti-Alpha-1-Anti-Trypsin (100-101-147 lot 5842) were used in a multiplex system to detect target proteins under reducing (R) conditions (+4% BME) in albumin depleted human serum with 320 ng of added GST. Sample was run by SDS-PAGE, transferred to 0.2 um PVDF using the BioRad Trans-Blot Turbo and blocked in 2.5% Blotto, 2.5% BSA, 0.02% Tween over night at 4°C. Membrane was probed with three primary antibodies at 1:1000 dilution (in MB-070 over night at 4°C). Detection shown was using DyLight549 Donkey anti-Rabbit IgG (611-742-127 lot 21100, shown as green) DyLight 488 Donkey anti-Mouse IgG (610-741-124 lot 21095, shown as blue), and DyLight 649 Donkey anti-Goat IgG (605-743-125 lot 20834, shown as red) at 1:10000 (in MB-070 30 min RT). Blots were washed, rinsed in methanol, dried and Images were collected using the BioRad VersaDoc System.

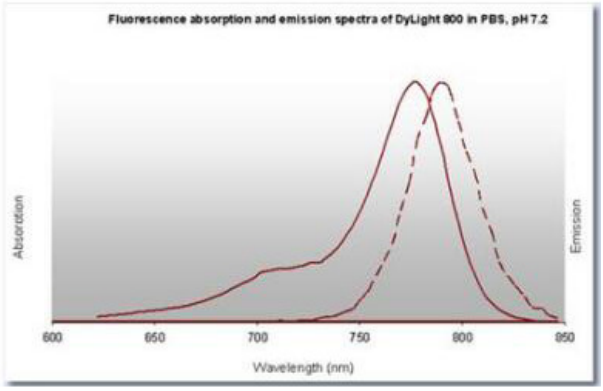



**Western Blot**
DyLight™ dyes can be used for two-color western blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNFa was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

**Western Blot**
Properties of DyLight™ Conjugates.

| Emission | Color | DyLight™ Dye | Ex/Em (nm) | ε ($M^{-1}$ $cm^{-1}$) | Similar Dyes |
|---|---|---|---|---|---|
| **Blue** | | **405** | **400/420** | **30,000** | **Alexa™ 405, Cascade Blue** |
| Green | | 488 | 493/518 | 70,000 | Alexa™ 488, Cy2®, FITC |
| Yellow | | 549 | 550/568 | 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**




## References


- Miller, MB et al. Brain Region and Isoform-Specific Phosphorylation Alters Kalirin SH2 Domain Interaction Sites and Calpain Sensitivity. *Acs Chemical Neuroscience* (2017)


## Disclaimer