

## Datasheet for 200-341-200

**GST Antibody DyLight™ 488 Conjugated****Overview**

<b>Description:</b>	Anti-GST (MOUSE) Monoclonal Antibody DyLight™ 488 Conjugated - 200-341-200
<b>Item No.:</b>	200-341-200
<b>Size:</b>	100 µg
<b>Reactivity:</b>	GST-Tag
<b>Host Species:</b>	Mouse

**Product Details**

<b>Background:</b>	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.
<b>Synonyms:</b>	mouse anti-GST antibody DyLight™ 488 conjugation, DyLight™488 conjugated mouse anti-GST antibody, Glutathione-S-Transferase, Anti-GST monoclonal antibody
<b>Host Species:</b>	Mouse
<b>Conjugate:</b>	DyLight™ 488
<b>Clonality:</b>	Monoclonal
<b>Clone ID:</b>	3D4
<b>Format:</b>	IgG1
<b>F/P Ratio:</b>	4.0

**Target Details**

<b>Reactivity:</b>	GST-Tag
<b>Immunogen Type:</b>	Recombinant Protein

<b>Immunogen:</b>	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.
<b>Purity/Specificity:</b>	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

<b>Application Note:</b>	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>	1:500 - 1:2,500
<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)

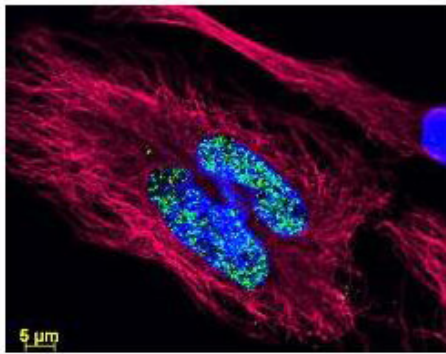
## Shipping & Handling

<b>Shipping Condition:</b>	Ambient
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**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.

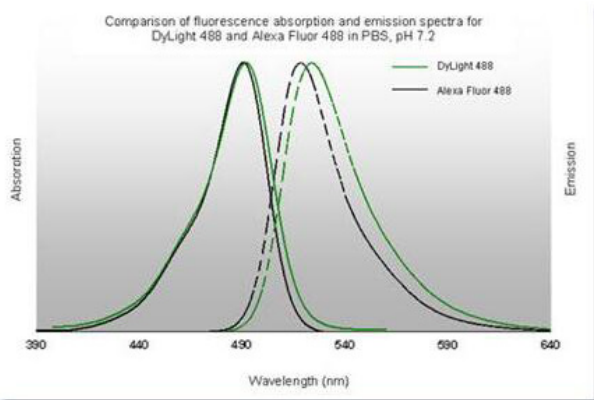
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### Immunofluorescence Microscopy

Immunofluorescence Microscopy of Anti-Tubulin antibody. Tissue: human breast carcinoma. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: tubulin antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Anti-Histone detection using a DyLight™ 488 conjugate (green); Anti-Tubulin detection using a DyLight™ 549 conjugate (red) secondary antibody at 1:10,000 for 45 min at RT. Staining: Nuclei were counter-stained using DAPI (blue).









### Diagram

The emission spectra for this DyLight™488 conjugate match the principle output wavelengths of most common fluorescence instrumentation.

### Diagram

Properties of DyLight™ Fluorescent Dyes.

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	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



### Western Blot

Western Blot of Mouse-anti-GST antibody. Lane 1: molecular weight. Lane 2: Mouse-anti-GST monoclonal antibody (blue), Rabbit anti-Transferrin, and Goat-anti-Alpha-1-Anti-Trypsin were used in a multiplex system to detect target proteins under reducing conditions in albumin depleted human serum with 320 ng of added GST. Load: 1 µg per lane. Primary antibody: Each primary antibody at 1:1000 for overnight at 4°C. Secondary antibody: DyLight549 Donkey anti-Rabbit IgG (green) DyLight 488 Donkey anti-Mouse IgG (blue), and DyLight 649 Donkey anti-Goat IgG (red) secondary antibody at 1:10,000 for 30 min at RT. Block: 2.5% Blotto, 2.5% BSA, 0.02% Tween over night at 4°C.

### 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.