

Datasheet for 600-143-200**GST Antibody DyLight™ 649 Conjugated****Overview**

Description:	Anti-GST (GOAT) Antibody DyLight™ 649 Conjugated - 600-143-200
Item No.:	600-143-200
Size:	100 µg
Applications:	IF
Reactivity:	GST-Tag
Host Species:	Goat

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.
Synonyms:	goat anti-GST antibody DyLight™ 649 conjugation, DyLight™ 649 conjugated goat anti-GST antibody, Glutathione-S-Transferase, GST antibody, anti-GST antibody, anti-Glutathione-S-Transferase antibody
Host Species:	Goat
Conjugate:	DyLight™ 649
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	1.8

Target Details

Reactivity:	GST-Tag
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Immunogen Type:	Native Protein
Immunogen:	The immunogen is full length GST isolated from <i>Schistosoma japonicum</i> .
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using GST (<i>Schistosoma japonicum</i>) coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum and purified and partially purified Glutathione-S-Transferase (GST).

Application Details

Suggested Applications:	IF (Based on references)
Application Note:	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

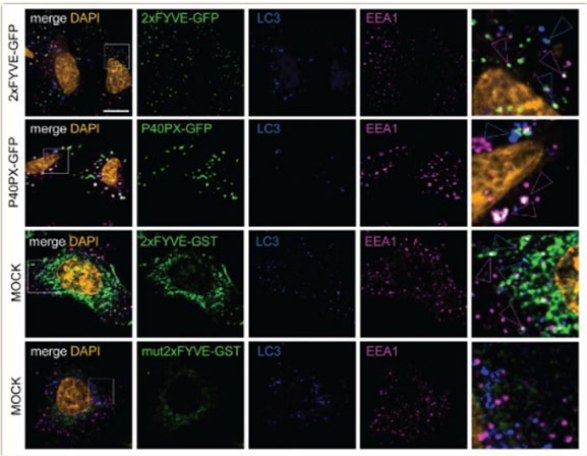
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution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

Shipping & Handling

Shipping Condition:	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



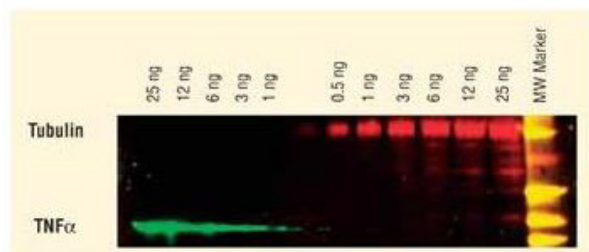
Immunofluorescence Microscopy
Immunofluorescence using Anti-GST DyLight™649 Conjugated Antibody.
FYVE and PX PtdIns3P-binding domains detect both endosomal and autophagosomal pools of PtdIns3P. HeLa cells were transiently transfected with GFP-2xFYVE or GFP-P40PX expression vectors or were mock transfected. Mock-transfected cells were incubated after fixation with primary antibodies or GST-2xFYVE or GST-mut2xFYVE and then with appropriate secondary antibodies. Representative confocal microscopy images of tagged PtdIns3P-binding domain (green), LC3 (blue), EEA1 (magenta), and DAPI (orange) fluorescence. Blue and magenta arrowheads indicate codistribution/colocalization of tagged PtdIns3P-binding domains with LC3 or EEA1, respectively. Scale bar: 10 μm. Fig 1. PMID: 28813193.

Diagram
Properties of DyLight™ Conjugates.

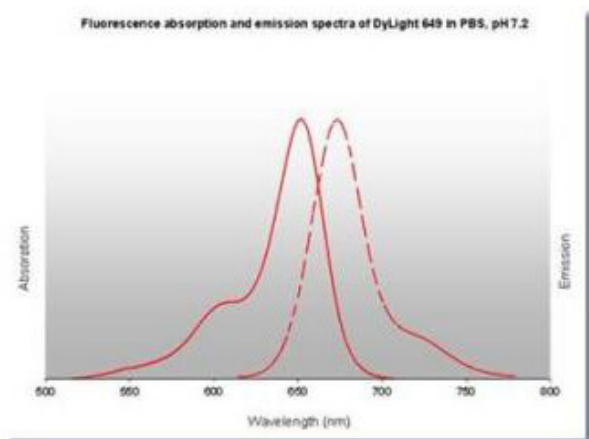
Emission	Color	DyLight™ Dye	Ex/Em (nm)	ϵ (M ⁻¹ cm ⁻¹)	Similar Dyes
Blue		405	400/420	30,000	Alexa™ 405, Cascade Blue
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®, TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	140,000	Alexa™ 680, Cy5.5®, IRDye™ 700
Infrared		800	770/794	270,000	IRDye™ 800

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-TNF α was detected using a DyLight™ 649 conjugate. The image was captured using the Typhoon™ 9410 Imaging System.



Diagram



References

- Nascimbeni et al. Local detection of PtdIns3P at autophagosome biogenesis membrane platforms. *Autophagy* (2017)
- Winssinger N et al. Assembly of PNA-Tagged Small Molecules, Peptides, and Carbohydrates onto DNA Templates: Programming the Combinatorial Pairing and Inter-ligand Distance. *Methods Mol Biol.* (2014)

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.