

Datasheet for 600-145-200**GST Antibody DyLight™ 800 Conjugated****Overview**

Description:	Anti-GST (GOAT) Antibody DyLight™ 800 Conjugated - 600-145-200
Item No.:	600-145-200
Size:	100 µg
Applications:	ELISA, WB
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™ 800 conjugation, DyLight™ 800 conjugated goat anti-GST antibody, Glutathione-S-Transferase, GST antibody, anti-GST antibody, anti-Glutathione-S-Transferase antibody
Host Species:	Goat
Conjugate:	DyLight™ 800
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.0

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:	ELISA, WB (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)

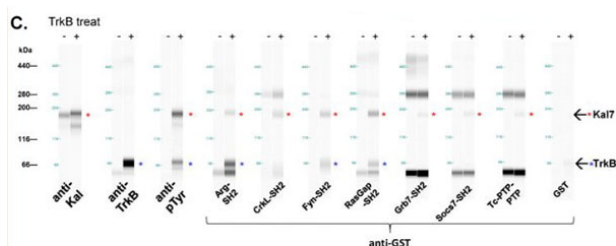
Shipping & Handling

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

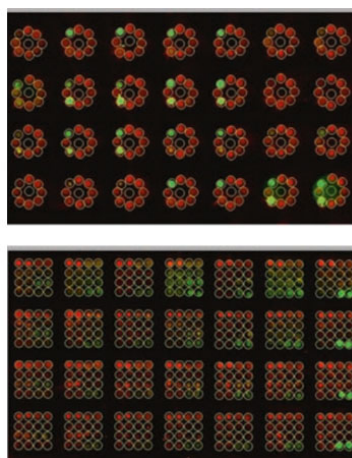


Western Blot

Far-Western analysis of selected interactors using Anti-GST DyLight™800.

C. Validation of SH2 screen. Capillary far-Western assay was performed to confirm direct interactions between the probe and purified, phosphorylated bKal7. Red asterisks in blot view indicate the presence of phospho-Kal7 (2190 KDa) with TrkB treatment; blue asterisks indicate TrkB (270 KDa). The higher molecular weight bands detected by several probes are non-specific.

Fig 6. PMID: 28418645.



Dot Blot

Quantification of SH2 binding with ImageStudio using Anti-GST DyLight™800. (Top) Analysis is set to 3x3 arrays and spots are rearranged for alignment with the circular MBA plate array. (Bottom) Analysis is set to 4x4 arrays and spots are aligned with the square MWA plate array. Both SH2 binding (800 nm channel) and peptide loading (700 nm channel) are quantified at the same time. Each set of samples is incubated with different GST-SH2 probes in separate wells of a 96-well chamber plate. SH2 binding is detected via 800 nm infrared dye-conjugated anti-GST antibody and IR imager. The loaded amount of biotin-tagged peptides can be monitored using 680 nm infrared dye-conjugated avidin. PMID: 28092049.

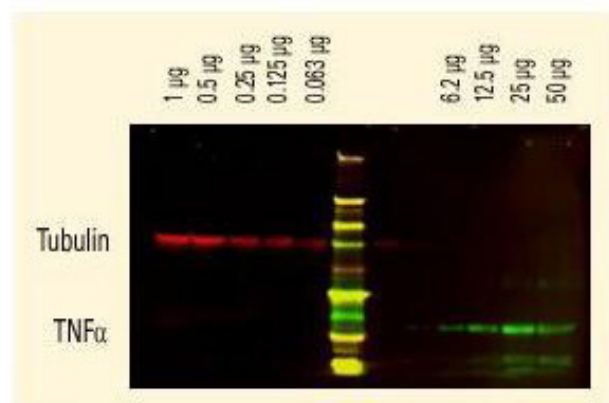
Diagram

Properties of DyLight™ Conjugates.

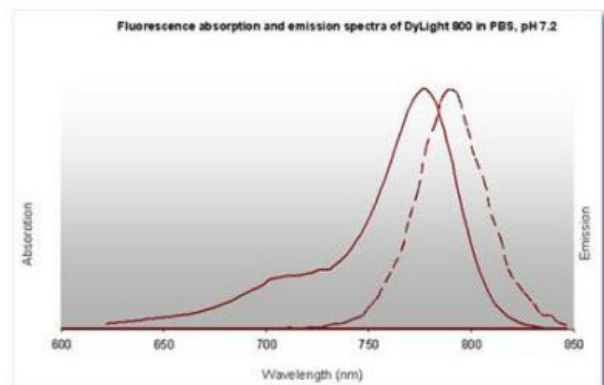
Emission	Color	DyLight™ Dye	Ex/Em (nm)	ϵ ($M^{-1} cm^{-1}$)	Similar Dyes
Blue		405	400/420	30,000	Alexa™ 405, Cascade Blue
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®, TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	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™ 680 conjugate. Anti-TNF α was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.



Diagram



References

- Ng KY et al. Rosette Assay: Highly Customizable Dot-Blot for SH2 Domain Screening. *Methods Mol Biol.* (2017)
- Miller, MB et al. Brain Region and Isoform-Specific Phosphorylation Alters Kalirin SH2 Domain Interaction Sites and Calpain Sensitivity. *Acs Chemical Neuroscience* (2017)

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.