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Datasheet for 600-145-215

GFP Antibody Dylight™ 800 Conjugated

Overview

Description:	Anti-GFP (GOAT) Antibody DyLight™ 800 Conjugated (Min X Hu Ms & Rt Serum Proteins) - 600-145-215
Item No.:	600-145-215
Size:	100 µg
Applications:	Dot Blot, WB
Reactivity:	GFP, eGFP, rGFP
Host Species:	Goat

Product Details

Background:	GFP Dylight™ 800 Conjugated Antibody 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 such as the LICOR Odyssey Imaging system.
Synonyms:	goat anti-GFP Antibody DyLight™ 800 Conjugation, DyLight™ 800 conjugated goat anti-GFP antibody, Green Fluorescent Protein, GFP antibody, Green Fluorescent Protein antibody, EGFP, enhanced Green Fluorescent Protein, Aequorea victoria, Jellyfish
Host Species:	Goat
Conjugate:	DyLight™ 800
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.3

Target Details

Reactivity:	GFP, eGFP, rGFP
Immunogen Type:	Recombinant Protein
Immunogen:	The immunogen is a Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish Aequorea victoria.

Purity/Specificity:	GFP Dylight™ 800 Conjugated Antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Green Fluorescent Protein (Aequorea victoria) 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 Green Fluorescent Protein (Aequorea victoria). No reaction was observed against Human, Mouse or Rat serum proteins.
Relevant Links:	• UniProtKB - P42212

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	WB (Based on references)
Application Note:	Anti-GFP Dylight™ 800 Conjugated Antibody has been tested by dot blot. 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.
ELISA:	1:20,000 - 1:40,000
FLISA:	>1:20,000
IF:	>1:5,000
WB:	1:10,000-1:25,000

Formulation

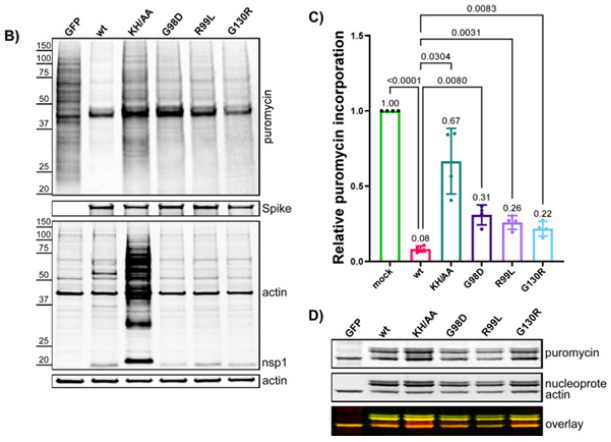
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution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

Shipping & Handling

Shipping Condition:	Ambient

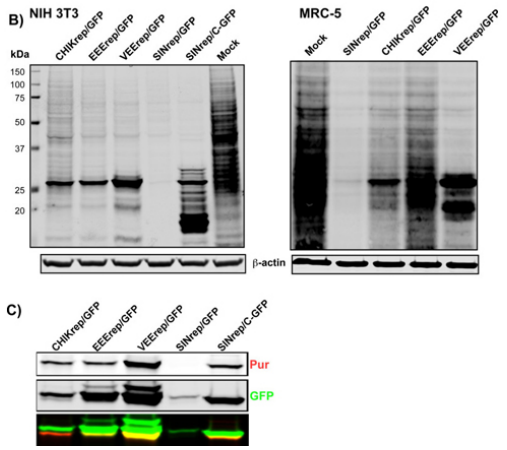
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an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

Images



Western Blot

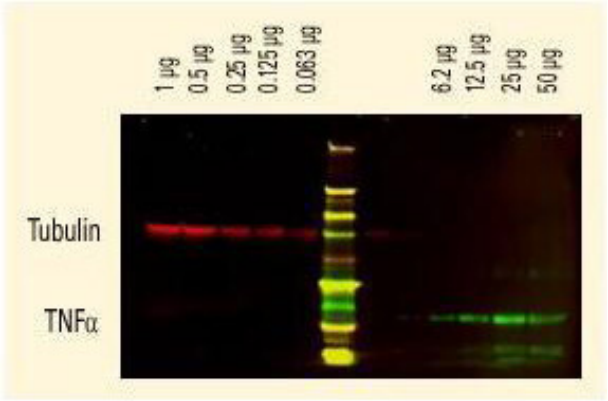
The nsp1-specific mutations have a negative effect on the abilities of SARS-CoV-2 to inhibit cellular translation, but they do not affect infectious viral titers. (B) Vero/ACE2 cell were infected at an MOI of 2 PFU/cell. At 6 h p.i., media were replaced with that supplemented with 10 µg/mL of Pur. Cells were incubated for 15 min at 37°C, and harvested for Western blots. The membranes were processed with Pur-specific MAb and secondary Ab that were labeled with an infrared dye. The lower panels represent analysis of the samples with other indicated Abs. Images were acquired on LI-COR imager and processed using the manufacturer's software. (C) Quantitation of the Pur-specific signals. The means and SDs are presented. The statistical significance of differences was determined by one-way ANOVA with a post hoc Dunnett's multiple-comparison test (n = 3). (D) Western blot was processed using anti-Pur MAbs and antibodies specific to SARS-CoV-2 nucleoprotein and actin, followed by secondary antibodies with different fluorescent labels. Images were acquired using LI-COR imager. Fig 6.
PMID: 36847528



Western Blot
Alphavirus replicons inhibit translation of cellular mRNA templates. (B) 5 × 105 NIH 3T3 and MRC-5 cells were infected with the indicated replicons at an MOI of 20 inf.u/cell. At 8 h p.i., the translated proteins were labeled with Pur (see Materials and Methods for details) and analyzed by WB using Pur-specific MAb and secondary Abs labeled with infrared dye. The experiment was repeated three times with similar results. One of the representative WBs is presented. (C) The membrane presented in panel B was additionally incubated with GFP-specific Ab conjugated with DyLight 800. Membranes were scanned and analyzed on Odyssey CLx imager (LI-COR Biosciences). Fig 3. PMID: 37877718

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
Two-color Western Blot using a DyLight™ 680 and DyLight™ 800 conjugates. Lane 1-5: 1µg, 0.5µg, 0.25µg, 0.125µg, and 0.063µg of Tubulin. Lane 6: Molecular weight. Lane 7-10: 6.2µg, 12.5µg, 2µg, 50µg of TNFα. Primary antibody: none. Secondary antibody: DyLight™ 680 and DyLight™ 800 mouse secondary antibody at 1:10,000. Block: MB-070 for 2 hrs at RT. Predicted size: 17kDa TNFα and 55kDa Tubulin. Other band(s): none.

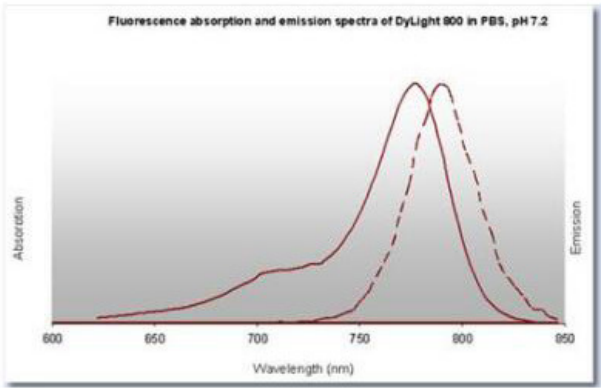


Diagram
Properties of DyLight™ Fluorescent Dyes. Fluorescence absorption and emission spectra of DyLight™ 800 in PBS, pH7.2. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation.

References

- Frolov I et al. All Domains of SARS-CoV-2 nsp1 Determine Translational Shutoff and Cytotoxicity of the Protein. *J Virol.* (2023)
- Frolova EI et al. Alphavirus-induced transcriptional and translational shutoffs play major roles in blocking the formation of stress granules. *J Virol.* (2023)
- Dominguez F et al. Alphavirus-based replicons demonstrate different interactions with host cells and can be optimized to increase protein expression. *J Virol.* (2023)
- Czarna A et al. Novel Scaffolds for Dual Specificity Tyrosine-Phosphorylation-Regulated Kinase (DYRK1A) Inhibitors. *J Med Chem.* (2018)

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