

Datasheet for 600-144-215**GFP Antibody DyLight™ 680 Conjugated****Overview**

Description:	Anti-GFP (GOAT) Antibody DyLight™ 680 Conjugated (Min X Hu Ms & Rt Serum Proteins) - 600-144-215
Item No.:	600-144-215
Size:	100 µg
Applications:	IF
Reactivity:	GFP, eGFP, rGFP
Host Species:	Goat

Product Details

Background:	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 such as the LICOR Odyssey Imaging system. DyLight conjugated antibodies are effective alternatives to Alexa 680 and IR Dye 680 conjugates.
Synonyms:	goat anti-GFP Antibody DyLight™ 680 Conjugation, DyLight™ 680 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™ 680
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.8

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 <i>Aequorea victoria</i> .
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Green Fluorescent Protein (<i>Aequorea victoria</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 Green Fluorescent Protein (<i>Aequorea victoria</i>). No reaction was observed against Human, Mouse or Rat serum proteins.
Relevant Links:	• UniProtKB - P42212

Application Details

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

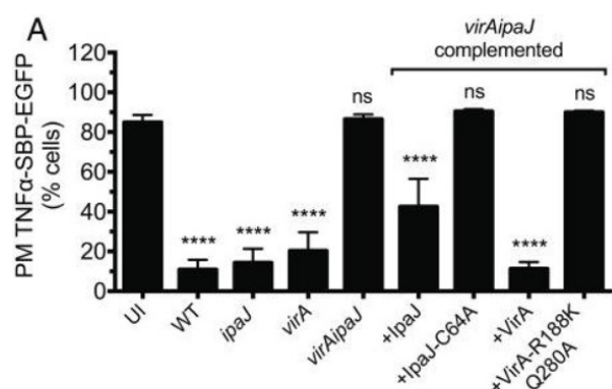
Shipping & Handling

Shipping Condition:	Ambient
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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



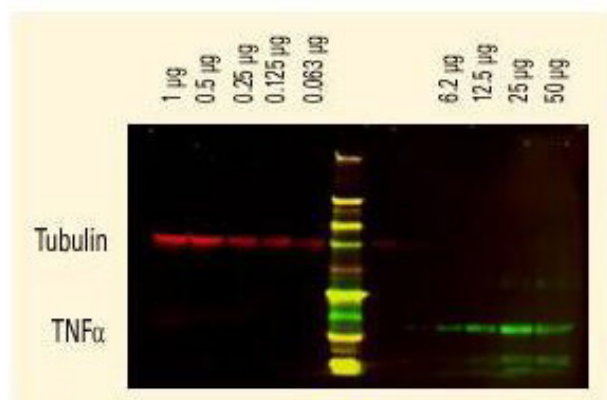
Figure

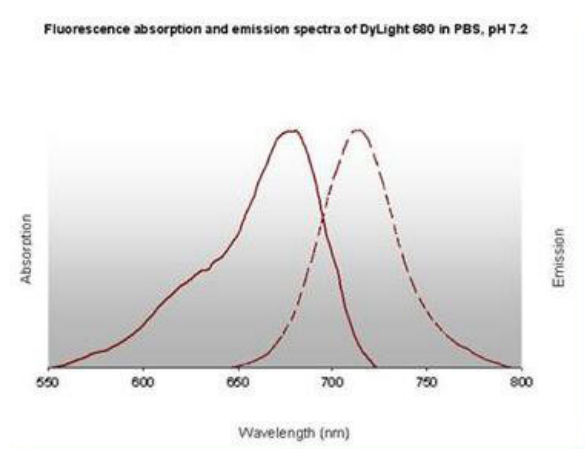
RUSH Assay using Anti-GFP Antibody DyLight™680 Conjugated.

S. flexneri effectors IpaJ and VirA have a global effect on conventional secretion. (A) IpaJ and VirA effectors block the anterograde transport of the cytokine TNFα. HeLa cells stably expressing the RUSH cargo TNFα-SBP-GFP and the molecular hook streptavidin-KDEL were uninfected (UI) or infected for 1 h with WT-dsRed or the dsRed-expressing mutants ipaJ, virA, virAipaJ, or with virAipaJ complemented with plpaJ-myc, plpaJ-C64-myc, pVirA-myc, or pVirA-R188K/Q280A-myc. Cells were then incubated with biotin for 1 h, fixed, and surface-stained for TNFα-SBP-GFP with anti-GFP DyLight 680-conjugated antibody. The arrival of TNFα-SBP-GFP to the plasma membrane (PM) was monitored by FC. Mean ± SD. n = 3. ****P < 0.0001; ns, nonsignificant (one-way ANOVA, Dunnett's post hoc test, compared with UI). Fig 1. PMID: 31209035.

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™ 680 in PBS, pH 7.2. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation.

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

References

- Ferrari M et al. Shigella promotes major alteration of gut epithelial physiology and tissue invasion by shutting off host intracellular transport. *Proc Natl Acad Sci USA* (2019)

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.