Datasheet for 606-141-129

Guinea Pig IgG (H&L) Antibody DyLight™ 488 Conjugated Pre-Adsorbed

Overview

Description:	Goat Anti-Guinea Pig IgG (H&L) Antibody DyLight™ 488 Conjugated (Min X Bv Ch Gt Ham Hs Hu Ms Rb Rt & Sh Serum Proteins) - 606-141-129
Item No.:	606-141-129
Size:	100 µg
Applications:	IF, IHC
Reactivity:	Guinea Pig
Host Species:	Goat

Product Details

Background:	Anti-Guinea Pig IgG DyLight Antibody generated in goat detects guinea pig IgG. Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the compliment cascade, and opsonization for phagocytosis. The whole IgG molecule possesses both the F(c) region, recognized by high-affinity Fc receptor proteins, as well as the F(ab) region possessing the epitope-recognition site. Both heavy and light chains of the antibody molecule are present. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition.
Synonyms:	Goat Anti-Guinea Pig IgG DyLight 488™ Conjugation, Goat Anti Guinea Pig IgG DyLight 488™ conjugated
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 488
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	3.1

Target Details

Reactivity:	Guinea Pig
Immunogen:	Guinea Pig IgG whole molecule
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Guinea Pig IgG 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, Guinea Pig IgG and Guinea Pig Serum. No reaction was observed against Bovine, Chicken, Goat, Hamster, Horse, Human, Mouse, Rabbit, Rat or Sheep Serum Proteins. This antibody will react with heavy chains of Guinea Pig IgG and with light chains of most Guinea Pig immunoglobulins.

Application Details

Suggested Applications:	IF, IHC (Based on references)
Application Note:	The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation. 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.
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

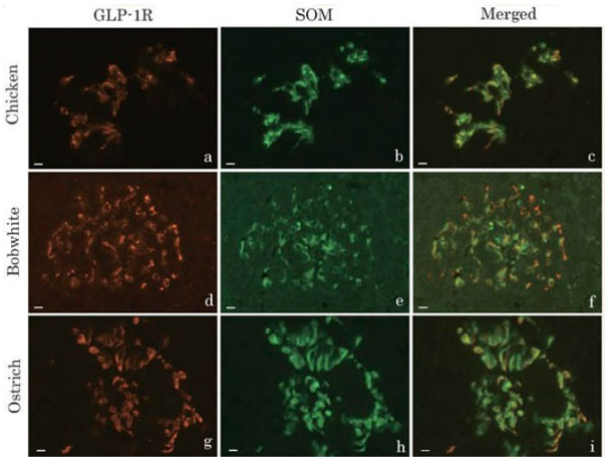
Formulation

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)

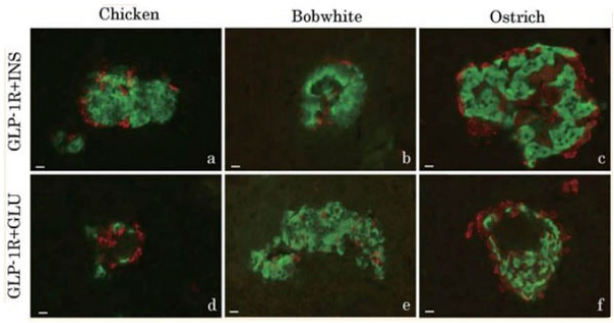
Shipping & Handling

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



Immunofluorescence Microscopy
Double immunofluorescence images of glucagon-like peptide-1 receptor (GLP-1R, a, d, g) and somatostatin (SOM, b, e, h) in the pancreatic islets of chickens (a–c), northern bobwhites (d–f), and ostriches (g–i). Figures c, f, and i show merged images of a and b, d and e, and g and h, respectively. Almost every SOM-immunoreactive cell in the pancreatic islets of three avian species also demonstrated GLP-1R immunoreactivity. Bars indicate 10 µm. Fig. 1. PMID: 32055175.



Immunofluorescence Microscopy
Merged images of double immunofluorescence pictures of glucagon-like peptide-1 receptor (red) and insulin (green) (GLP-1R + INS, a–c), and glucagon-like peptide-1 receptor (red) and glucagon (green) (GLP-1R + GLU, d–f) in the pancreatic islets of chickens (a and d), northern bobwhites (b and e), and ostriches (c and f). Islet cells showing either insulin or glucagon immunoreactivity were immunonegative to glucagon-like peptide-1 receptor. Bars indicate 10 µm. Fig. 2. PMID: 32055175.

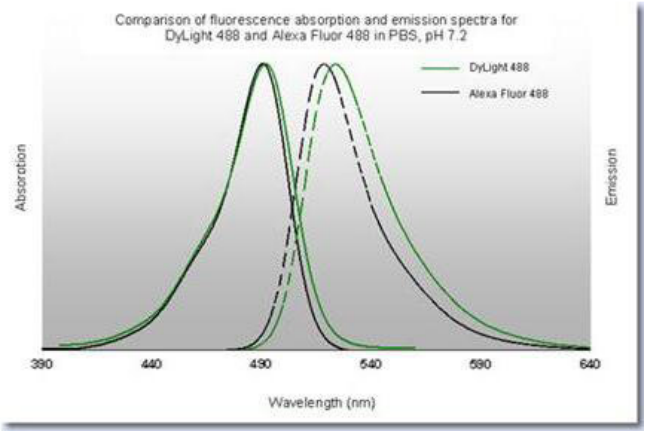
Diagram
Properties of Dylight™ Conjugates.

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



Immunofluorescence Microscopy
DyLight™ dyes can be used for multi-color immunofluorescence microscopy with uniform fluorescence intensity throughout the image. DyLight™ dyes are exceptionally bright and photostable and are optimized for microscopy and microarray detection methods. This image shows anti-histone detection using a DyLight™ 488 conjugate (green). Anti-Tubulin was detected using a DyLight™ 549 conjugate (red). Nuclei were counter-stained using DAPI (blue). The image was captured using an Axio Imager.Z1 (Zeiss Micro Imaging Inc).

Diagram



References

- Kaur G et al. Overcoming host restrictions to enable continuous passaging of GII.3 human norovirus in human intestinal enteroids. *Sci Adv.* (2026)
- Ayyar BV et al. CLIC and membrane wound repair pathways enable pandemic norovirus entry and infection. *Nat Commun.* (2023)
- Watanabe T et al. Glucagon-like Peptide-1 Receptor Expression in the Pancreatic D Cells of Three Avian Species; White Leghorn Chickens, Northern Bobwhites, and Common Ostriches. *J Poult Sci.* (2018)

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.