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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

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| **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

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|---|---|
| **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

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| **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

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|---|---|
| **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

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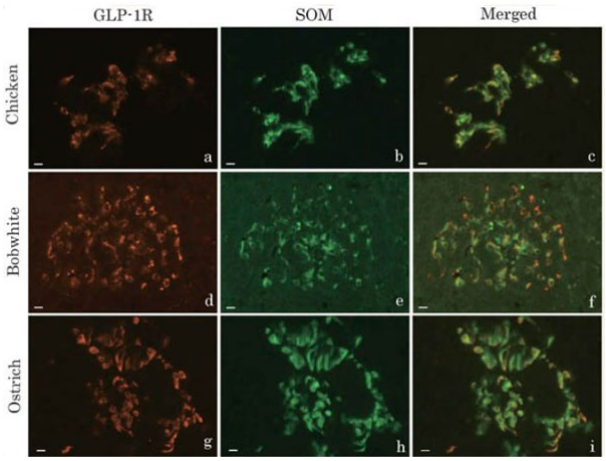
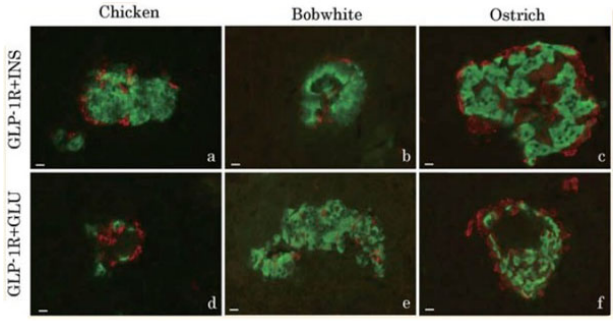
| **Shipping Condition:** | Ambient |
| **Storage Condition:** | Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product 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.



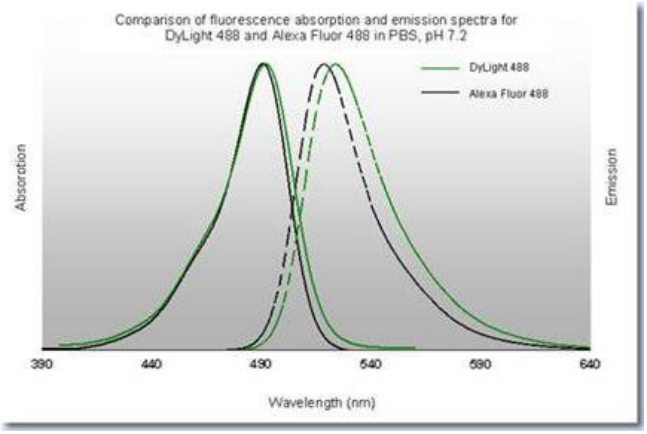

**Immunofluorescence Microscopy**
Merged images of double immunofluorescence pictures of glucagon-like peptide-1 receptor (red) and insulin (green) (GLP-1R + INS, a–c), and glucagon-like peptide-1 receptor (red) and glucagon (green) (GLP-1R + GLU, d–f) in the pancreatic islets of chickens (a and d), 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

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