

## Datasheet for 603-144-126

**Chicken IgG (H&L) Antibody DyLight™ 680 Conjugated Pre-Adsorbed****Overview**

|                      |  |
|----------------------|--|
| <b>Description:</b>  | Goat Anti-Chicken IgG (H&L) Antibody DyLight™ 680 Conjugated (Min X Bv Gt GP Ham Hs Hu Ms Rb Rt & Sh Serum Proteins) - 603-144-126 |
| <b>Item No.:</b>     | 603-144-126  |
| <b>Size:</b>         | 100 µg   |
| <b>Applications:</b> | IF   |
| <b>Reactivity:</b>   | Chicken  |
| <b>Host Species:</b> | Goat   |

**Product Details**

|                      |   |
|----------------------|---|
| <b>Background:</b>   | Anti-Chicken IgG DyLight Antibody generated in goat detects chicken IgY. 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. |
| <b>Synonyms:</b>     | goat anti-Chicken IgG DyLight™680 Conjugated Antibody, goat anti-Chicken IgG Antibody DyLight™ 680 Conjugation, Chicken Secondary Antibody, goat anti-Chicken IgY DyLight™680   |
| <b>Host Species:</b> | Goat  |
| <b>Specificity:</b>  | IgG (H&L)   |
| <b>Conjugate:</b>    | DyLight™ 680  |
| <b>Clonality:</b>    | Polyclonal  |
| <b>Format:</b>       | IgG   |
| <b>F/P Ratio:</b>    | 2.1   |

**Target Details**

|                    |         |
|--------------------|---------|
| <b>Reactivity:</b> | Chicken |
|--------------------|---------|

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

## Application Details

|                                |  |
|--------------------------------|--|
| <b>Suggested Applications:</b> | IF (Based on references)   |
| <b>Application Note:</b>       | 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. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.  |
| <b>FLISA:</b>                  | >1:20,000  |
| <b>IF:</b>                     | >1:5,000   |
| <b>WB:</b>                     | >1:10,000  |

## Formulation

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

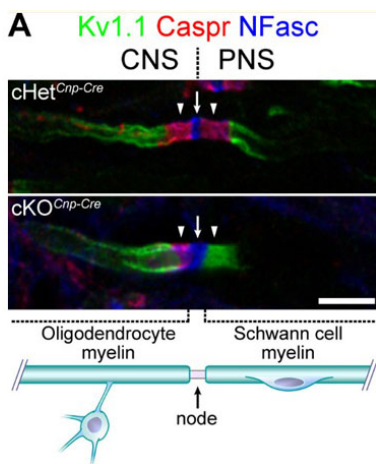
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | 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









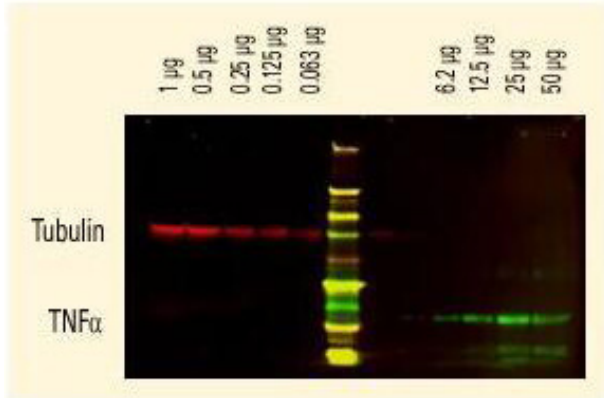
### Immunofluorescence Microscopy

Knockout of TDP-43 in oligodendrocytes displays normal paranodal axoglial junctions in the central nervous system (CNS). (A) Immunostaining of the dorsal root entry zone from P60 conditional heterozygote (cHet) and conditional knockout (cKO) (by Cnp-Cre) spinal cords for Kv1.1 channels (green), contactin-associated protein (Caspr) (red), and neurofascin (NFasc) (blue). The node at the transition zone is indicated by an arrow and is shared by an oligodendrocyte at the left and a Schwann cell at the right, as illustrated below. The flanking CNS and peripheral nervous system (PNS) paranodes are indicated by arrowheads. Illustration adapted from Figure 1a of Chang et al., 2016, with permission. Figure 3. PMID: 33689679.

### Diagram

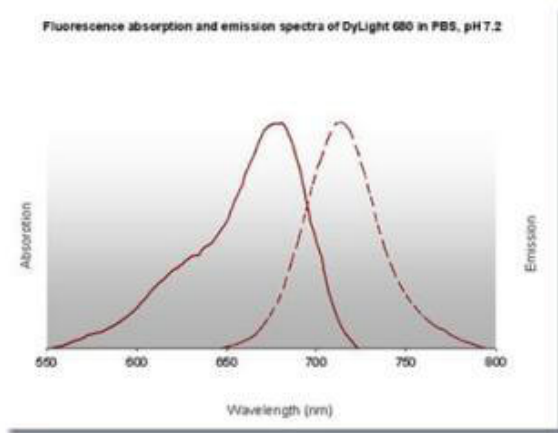
Properties of DyLight™ Conjugates.

| Emission      | Color   | DyLight™ Dye | Ex/Em (nm) | $\epsilon$ (M <sup>-1</sup> cm <sup>-1</sup> ) | 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-TNFα was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.



### Diagram

## References

- Chang KJ et al. TDP-43 maximizes nerve conduction velocity by repressing a cryptic exon for paranodal junction assembly in Schwann cells. *Elife*. (2021)

## 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.