

**Datasheet for 611-743-127****Rabbit IgG (H&L) Antibody DyLight™ 649 Conjugated Pre-Adsorbed****Overview**

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|----------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description:</b>  | Donkey Anti-Rabbit IgG (H&L) Antibody DyLight™ 649 Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) - 611-743-127 |
| <b>Item No.:</b>     | 611-743-127                                                                                                                         |
| <b>Size:</b>         | 100 µg                                                                                                                              |
| <b>Applications:</b> | Dot Blot, IF, IHC, Multiplex                                                                                                        |
| <b>Reactivity:</b>   | Rabbit                                                                                                                              |
| <b>Host Species:</b> | Donkey                                                                                                                              |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| <b>Background:</b>   | Anti-Rabbit IgG (H&L) DyLight 649 Antibody generated in donkey detects reactivity to Rabbit 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 complement 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 the 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. |
| <b>Synonyms:</b>     | Donkey Anti-Rabbit IgG Antibody DyLight 649™ Conjugated, Donkey Anti Rabbit IgG DyLight 649™ Conjugated Antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host Species:</b> | Donkey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Specificity:</b>  | IgG (H&L)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Conjugate:</b>    | DyLight™ 649                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>F/P Ratio:</b>    | 3.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Target Details

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

## Application Details

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | Dot Blot                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Suggested Applications:</b> | IF, IHC, Multiplex (Based on references)                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Application Note:</b>       | Anti-Rabbit IgG (H&L) DyLight 649 Antibody has been tested by dot blot and 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. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation. |
| <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 $\mu$ L                                  |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent) |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Condition:</b>  | 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. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                           |

## Images

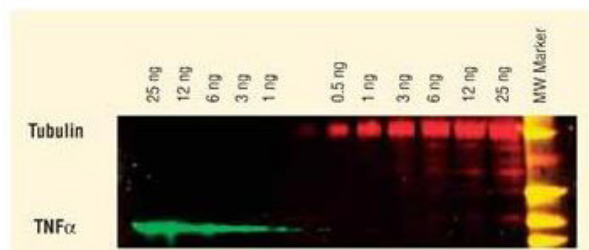
### Diagram

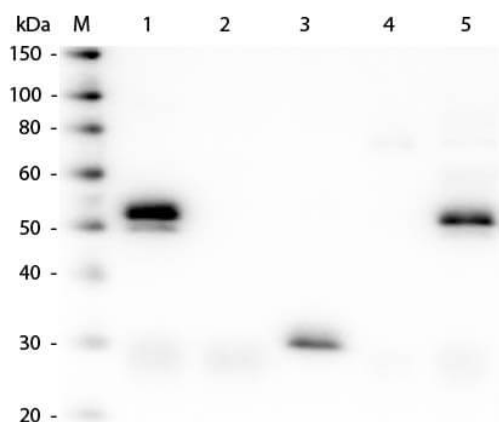
Properties of DyLight™ Conjugates.

| 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™ 549 conjugate. Anti-TNF $\alpha$  was detected using a DyLight™ 649 conjugate. The image was captured using the Typhoon™ 9410 Imaging System.

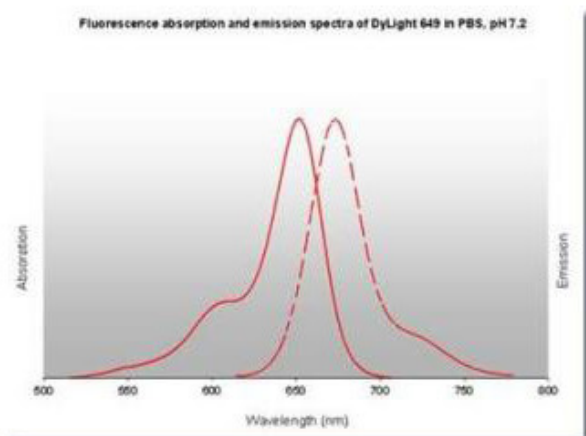




### Western Blot

Western Blot of Anti-Rabbit IgG (H&L) (DONKEY) Antibody (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) (p/n 611-701-127). Lane M: 3  $\mu$ l Molecular Ladder. Lane 1: Rabbit IgG whole molecule (p/n 011-0102). Lane 2: Rabbit IgG F(ab) Fragment (p/n 011-0105). Lane 3: Rabbit IgG F(c) Fragment (p/n 010-0103). Lane 4: Rabbit IgM Whole Molecule (p/n 011-0107). Lane 5: Normal Rabbit Serum (p/n B309). All samples were reduced. Load: 50 ng of IgG, F(ab), F(c) and Serum, 25 ng of IgM. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Rabbit IgG (H&L) (DONKEY) Antibody (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) (p/n 611-701-127) 1:7,500 for 60 min at RT. Secondary antibody: Anti-Donkey IgG (GOAT) Peroxidase Conjugated Antibody (p/n 616-1302) 1:40,000 in MB-070 for 30 min at RT. Predicted/Observed Size: 25 and 50 kDa for Rabbit IgG and Serum, 25 kDa for F(c) and F(ab), 70 and 23 kDa for IgM. Rabbit F(c) migrates slightly higher.

### 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)
- Onoda A et al. A Novel Staining Method for Detection of Brain Perivascular Injuries Induced by Nanoparticle: Periodic Acid-Schiff and Immunohistochemical Double-Staining. *Front Toxicol.* (2022)
- Onoda A, Kawasaki T, Tsukiyama K, Takeda K, Umezawa M. Carbon nanoparticles induce endoplasmic reticulum stress around blood vessels with accumulation of misfolded proteins in the developing brain of offspring. *Sci Rep.* (2020)
- Onoda et al. Dose-dependent induction of astrocyte activation and reactive astrogliosis in mouse brain following maternal exposure to carbon black nanoparticle. *Particle and Fibre Toxicology* (2017)
- Onoda et al. Perivascular Accumulation of  $\beta$ -Sheet-Rich Proteins in Offspring Brain following Maternal Exposure to Carbon Black Nanoparticles. *Frontiers in Cellular Neuroscience* (2017)
- Krzisch M, Fülling C, Jabinet L, et al. Synaptic Adhesion Molecules Regulate the Integration of New Granule Neurons in the Postnatal Mouse Hippocampus and their Impact on Spatial Memory. *Cereb Cortex.* (2017)
- Lee DK et al. Microvascular endothelial cells from preeclamptic women exhibit altered expression of angiogenic and vasopressor factors. *Am J Physiol Heart Circ Physiol.* (2016)
- Tanase JI et al. Magnesium chloride and polyamine can differentiate mouse embryonic stem cells into trophectoderm or endoderm. *Biochem Biophys Res Commun.* (2016)

## 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.