

Datasheet for 610-644-002

## Mouse IgG (H&L) Antibody DyLight™ 680 Conjugated

### Overview

|                      |                                                                           |
|----------------------|---------------------------------------------------------------------------|
| <b>Description:</b>  | Sheep Anti-Mouse IgG (H&L) Antibody DyLight™ 680 Conjugated - 610-644-002 |
| <b>Item No.:</b>     | 610-644-002                                                               |
| <b>Size:</b>         | 100 µg                                                                    |
| <b>Applications:</b> | WB                                                                        |
| <b>Reactivity:</b>   | Mouse                                                                     |
| <b>Host Species:</b> | Sheep                                                                     |

### Product Details

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Anti-Mouse IgG DyLight 680 Antibody generated in sheep detects reactivity to Mouse 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>     | Sheep Anti-Mouse IgG Antibody DyLight™ 680 Conjugated, Sheep Anti Mouse IgG (H&L) Antibody DyLight™ 680 Conjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Host Species:</b> | Sheep                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Specificity:</b>  | IgG (H&L)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Conjugate:</b>    | DyLight™ 680                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>F/P Ratio:</b>    | 2.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Target Details

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity:</b>         | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Immunogen:</b>          | Mouse IgG whole molecule                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity/Specificity:</b> | This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse 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-Sheep Serum, Mouse IgG and Mouse Serum. This antibody will react with heavy chains of Mouse IgG and with light chains of most Mouse immunoglobulins. |

## Application Details

|                                |                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suggested Applications:</b> | WB (Based on references)                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Application Note:</b>       | 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. 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                                                                                                                                                                                                                                                                                                                                                                                              |

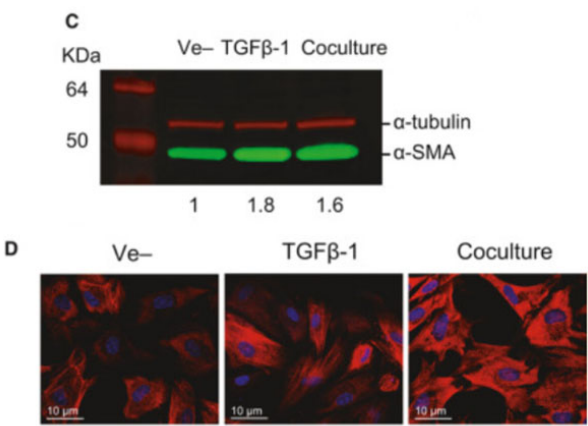
## Formulation

|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <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 µL                                                                 |
| <b>Reconstitution Buffer:</b> | 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



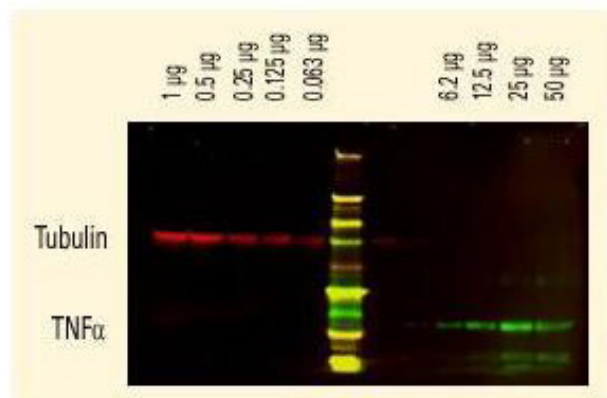
Immunofluorescence Microscopy

TGF-β-mediated crosstalk between pericytes and CRC cells modulates pericyte secretome. (C) Western blot showing increased expression of αSMA in PC cocultured with HCT116 cells or stimulated with 10 ng·mL<sup>-1</sup> TGF-β1 for 48 h (n = 3). α-tubulin was used as loading control. Numbers indicate the expression fold change relative to the loading control. (D) Representative confocal microscopy images of αSMA immunostaining of PC treated as in C. Nuclei were stained with TOPRO-3 (blue). Scale bar = 10 μm. Fig 5. PMID: 32767843.

Diagram

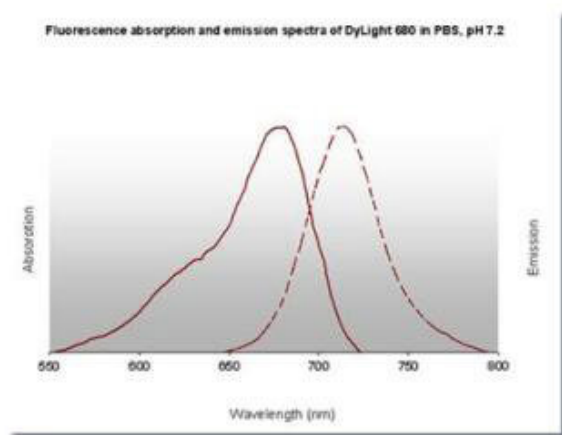
Properties of DyLight™ Conjugates.

| Emission      | Color                                                                               | DyLight™ Dye | Ex/Em (nm) | ε (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

- Navarro R et al. TGF-β-induced IGFBP-3 is a key paracrine factor from activated pericytes that promotes colorectal cancer cell migration and invasion. *Mol Oncol.* (2020)

## 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.