

**Datasheet for 610-141-003****Mouse IgG Fc Antibody DyLight™ 488 Conjugated****Overview**

|                      |                                                                       |
|----------------------|-----------------------------------------------------------------------|
| <b>Description:</b>  | Goat Anti-Mouse IgG Fc Antibody DyLight™ 488 Conjugated - 610-141-003 |
| <b>Item No.:</b>     | 610-141-003                                                           |
| <b>Size:</b>         | 100 µg                                                                |
| <b>Applications:</b> | Dot Blot, WB                                                          |
| <b>Reactivity:</b>   | Mouse                                                                 |
| <b>Host Species:</b> | Goat                                                                  |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Anti-Mouse IgG F(c) generated in goat is a proteolytic fragment of immunoglobulin G (IgG) obtained by limited digestion with the enzyme papain under controlled conditions of temperature, time and pH. Receptors bind the Fc portion of mouse IgG and often this fragment is removed from immunoglobulins to minimize receptor binding and lower background reactivity. |
| <b>Synonyms:</b>     | Goat Anti Mouse IgG F(c) Antibody DyLight™ 488 Conjugated, Goat Anti-Mouse IgG Fc Antibody DyLight™ 488 Conjugated, Goat Anti Mouse IgG Fc Fragment Antibody DyLight™ 488 Conjugated                                                                                                                                                                                     |
| <b>Host Species:</b> | Goat                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Specificity:</b>  | IgG Fc                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Conjugate:</b>    | DyLight™ 488                                                                                                                                                                                                                                                                                                                                                             |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                               |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                      |
| <b>F/P Ratio:</b>    | 3.1                                                                                                                                                                                                                                                                                                                                                                      |

**Target Details**

|                    |                         |
|--------------------|-------------------------|
| <b>Reactivity:</b> | Mouse                   |
| <b>Immunogen:</b>  | Mouse IgG F(c) fragment |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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-Goat Serum, Mouse IgG, Mouse IgG F(c) and Mouse Serum. No reaction was observed against Mouse IgG F(ab) This antibody will react with heavy chains of Mouse IgG. Minimal reactivity is expected against other Mouse immunoglobulins. |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Application Details

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | Dot Blot                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Suggested Applications:</b> | WB (Based on references)                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Application Note:</b>       | Anti-Mouse IgG F(c) DyLight 488 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

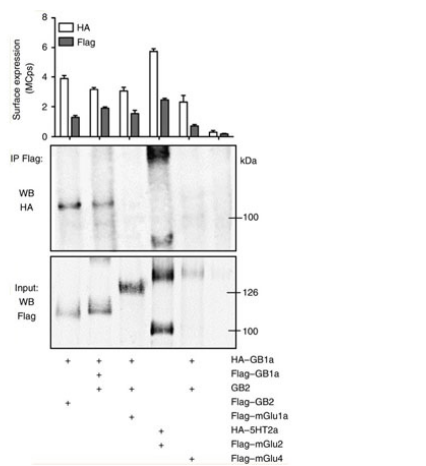
|                               |                                                                        |
|-------------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                            |
| <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 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



Western Blot

No cell-surface co-immunoprecipitation between mGlu1a and GABAB in HEK293 cells. Upper panel: Cell-surface expression of the tagged receptors, determined by an ELISA assay. Lower panel: Cell-surface co-immunoprecipitation of the Flag-tagged receptors and western Blot carried out using anti-HA and anti-Flag antibodies from cells transfected with indicated plasmids. Data are representative of several experiments.

The primary rabbit anti-HA antibody was used at 0.6 mg/l and the mouse anti-Flag antibody at 2 mg/l. The secondary antibodies conjugated to the DyLight 488 fluorophore (p/n 610-141-003 and 611-141-003). Fig 5. PMID: 19590495.

Diagram

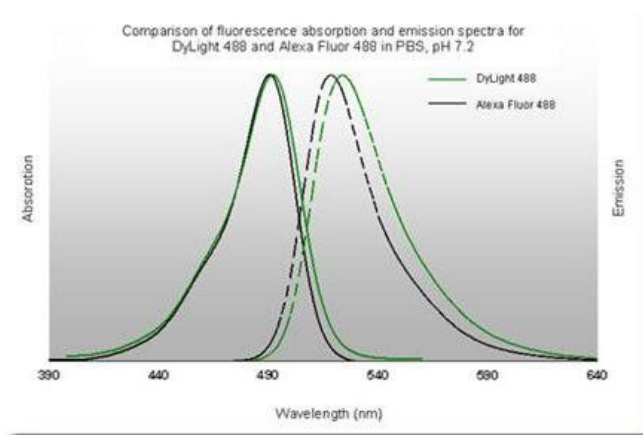
Properties of DyLight™ Fluorescent Dyes.

| 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                         |



### 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

- Rives ML et al. Crosstalk between GABAB and mGlu1a receptors reveals new insight into GPCR signal integration. *EMBO J.* (2009)

## 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.