

### Certificate of Analysis

**Product:** DyLight™ 488 Conjugated Affinity Purified anti-Mouse IgG (H&L) [Goat] Minimum Cross Reactivity to Bovine, Chicken, Goat, Guinea Pig, Hamster, Horse, Human, Rabbit, Rat and Sheep Serum Proteins

**Code:** 610-141-121

**Lot #** 20308

**Size:** 100 µg

**Physical State:** Lyophilized

**Antibody Concentration:** 1.0 mg/ml (by UV absorbance at 280 nm)

**Label:** DyLight™ 488 (MW 1,011.20)

**Fluorochrome/Protein Ratio:** 4.0 DyLight™ 488 per mole of Goat IgG

**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Excitation Wavelength:	Emission Wavelength:
493 nm (in PBS)	518 nm (in PBS)

**Stabilizer:** 10 mg/ml BSA, IgG and Protease free

**Preservative:** 0.01% (w/v) Sodium Azide

**Application Note(s):** This antibody is designed for immunofluorescence microscopy, fluorescence based plate assays (FLISA) and fluorescent western blotting. This antibody is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms.

**Instrument compatibility:** The emission spectra for this DyLight™ conjugate match the principal output wavelengths of most common fluorescence instrumentation.

#### Recommended Dilution(s):

FLUORESCENT WESTERN BLOT	>1:20,000
FLISA	>1:10,000
IMMUNOFLUORESCENT MICROSCOPY	>1:5,000
OTHER APPLICATIONS	User Optimized

**Storage Conditions:** Store vial at 4° C prior to reconstitution. Rehydrate with 0.1 ml of deionized water (or equivalent). This product is stable for several weeks at 4° C as an undiluted liquid. 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. Dilute only prior to immediate use. Expiration date is one (1) year from date of receipt if properly stored.

**Purity and Specificity:** 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 and Mouse Serum. No reaction was observed against Bovine, Chicken, Goat, Guinea Pig, Hamster, Horse, Human, Rabbit, Rat and Sheep Serum Proteins. This antibody will react with heavy chains of mouse IgG and with light chains of most mouse immunoglobulins.






**Immunogen:** Mouse IgG, whole molecule

**Conjugation Chemistry:** *N*-hydroxysuccinimide (NHS) ester



**Figure 1.** 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).

## Properties of DyLight™ Fluorescent Dyes:

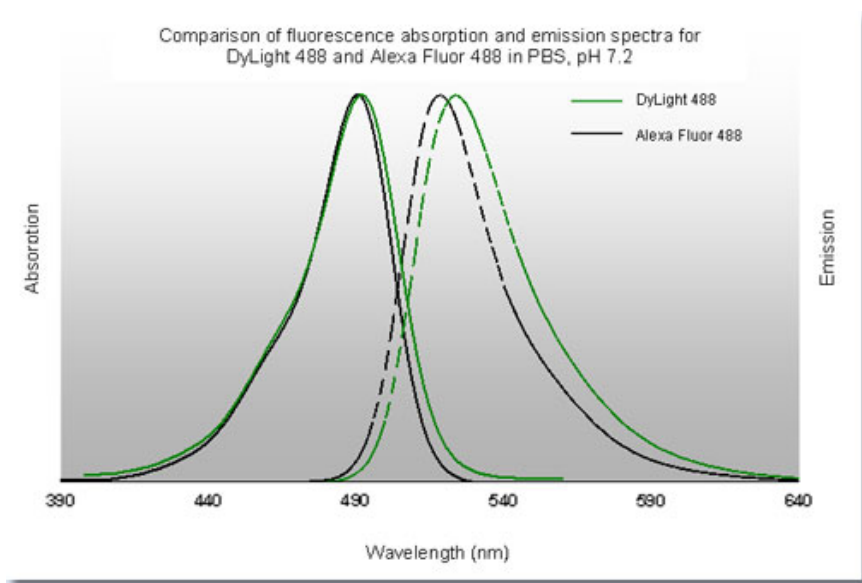
Emission	Color	DyLight™ Dye	Ex/Em (nm)	$\epsilon$ ( $M^{-1} cm^{-1}$ )	Similar Dyes
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®, TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	140,000	Alexa™ 680, Cy5.5®, IRDye™ 700
Infrared		800	770/794	270,000	IRDye™ 800

**Relevant Links:** See [www.rockland-inc.com/DyLight](http://www.rockland-inc.com/DyLight) for additional information. Assortments of DyLight™ conjugates can be ordered as 3 and 10 vial value packs.

## Related Products:

- #610-141-121 DyLight™ 488 Conjugated Affinity Purified anti-MOUSE IgG (H&L) [GOAT] MX10
- #610-142-121 DyLight™ 549 Conjugated Affinity Purified anti-MOUSE IgG (H&L) [GOAT] MX10
- #610-143-121 DyLight™ 649 Conjugated Affinity Purified anti-MOUSE IgG (H&L) [GOAT] MX10
- #610-144-121 DyLight™ 680 Conjugated Affinity Purified anti-MOUSE IgG (H&L) [GOAT] MX10
- #610-145-121 DyLight™ 800 Conjugated Affinity Purified anti-MOUSE IgG (H&L) [GOAT] MX10
- #MB-070 Blocking Buffer for Fluorescent Western Blotting

## DyLight™ 488 Fluorescence Spectra:



**Note:** 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. There is no implied license hereunder for any commercial use. 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 326, Gilbertsville, Pennsylvania, USA.

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