

Datasheet for 610-445-002

## Mouse IgG (H&L) Antibody DyLight™ 800 Conjugated

### Overview

<b>Description:</b>	Rabbit Anti-Mouse IgG (H&L) Antibody DyLight™ 800 Conjugated - 610-445-002
<b>Item No.:</b>	610-445-002
<b>Size:</b>	100 µg
<b>Applications:</b>	WB
<b>Reactivity:</b>	Mouse
<b>Host Species:</b>	Rabbit

### Product Details

<b>Background:</b>	Anti-Mouse IgG DyLight 800 Antibody generated in rabbit 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 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 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>	rabbit anti-Mouse IgG Antibody DyLight™ 800 conjugation, rabbit anti-Mouse IgG DyLight™800 conjugated Antibody
<b>Host Species:</b>	Rabbit
<b>Specificity:</b>	IgG (H&L)
<b>Conjugate:</b>	DyLight™ 800
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG
<b>F/P Ratio:</b>	2.5

## Target Details

<b>Reactivity:</b>	Mouse
<b>Immunogen:</b>	Mouse IgG, whole molecule
<b>Purity/Specificity:</b>	This Dye Conjugated Second Antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse IgG coupled to agarose beads followed by conjugation to fluorochrome and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit 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>Tested Applications:</b>	WB
<b>Application Note:</b>	Anti-Mouse IgG DyLight 800 Antibody has been tested by western 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. Conjugated Anti-Mouse IgG is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. DyLight conjugated antibodies are effective alternatives to Alexa 800 and IR Dye 800 conjugates. 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

**Reconstitution Buffer:** Restore with deionized water (or equivalent)

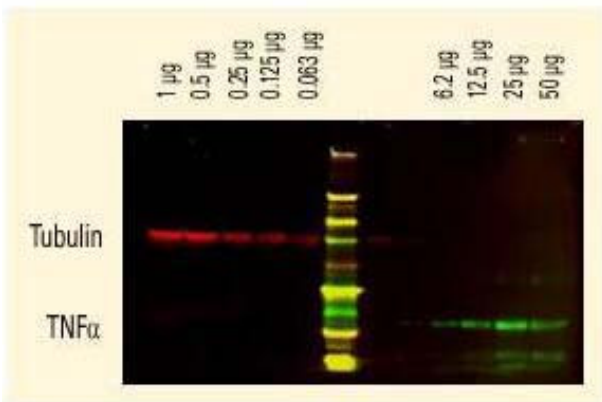
## Shipping & Handling

**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

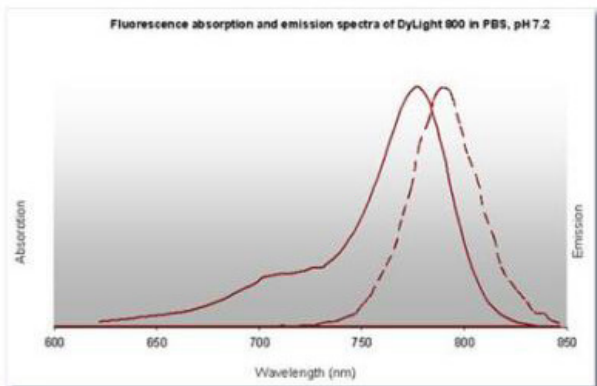


### Western Blot

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

DyLight™ 800 Fluorescence Spectra.



### 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

## References

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- Mitra S, Bodor DL, David AF, et al. Genetic screening identifies a SUMO protease dynamically maintaining centromeric chromatin. *Nat Commun.* (2020)
- Navarro R et al. TGF- $\beta$ -induced IGFBP-3 is a key paracrine factor from activated pericytes that promotes colorectal cancer cell migration and invasion. *Mol Oncol.* (2020)
- Balic JJ et al. STAT3 serine phosphorylation is required for TLR4 metabolic reprogramming and IL-1 $\beta$  expression. *Nat Commun.* (2020)
- Wang H et al. A simple and highly purified method for isolation of glomeruli from the mouse kidney. *Am J Physiol Renal Physiol.* (2019)
- Zhang Y et al. Non-genomic mechanisms mediate androgen-induced PSD95 expression. *Aging (Albany NY).* (2019)
- Zhang et al. Amelioratory Effects of Testosterone Propionate on Age-related Renal Fibrosis via Suppression of TGF- $\beta$ 1/Smad Signaling and Activation of Nrf2-ARE Signaling. *Scientific Reports* (2018)

## Disclaimer

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