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Datasheet for 610-145-002-0.5

Mouse IgG (H&L) Antibody Dylight™ 800 Conjugated

Overview

Description:	Goat Anti-Mouse IgG (H&L) Antibody DyLight™ 800 Conjugated (5 X 100 µg) - 610-145-002-0.5
Item No.:	610-145-002-0.5
Size:	5 x 100 µg
Applications:	Dot Blot, WB, IF, IHC
Reactivity:	Mouse
Host Species:	Goat

Product Details

Background:	Anti-Mouse IgG DyLight 800 Antibody generated in goat 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.
Synonyms:	Goat Anti-Mouse IgG Secondary Antibody DyLight™800 Conjugated, Goat Anti-Mouse IgG Antibody DyLight™800 Conjugated, Anti-mouse IgG secondary antibody, anti-mouse IgG DyLight™800 conjugated secondary antibody
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 800
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.7

Specific Activity:	1.6

Target Details

Reactivity:	Mouse
Immunogen:	Mouse IgG, whole molecule
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse IgG coupled to agarose followed by conjugation to fluorochrome and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat 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

Tested Applications:	Dot Blot, WB
Suggested Applications:	IF, IHC (Based on references)
Application Note:	Anti-Mouse IgG DyLight 800 Antibody has been tested by dot blot and 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. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FLISA:	>1:20,000
IF:	>1:5,000
WB:	>1:10,000

Formulation

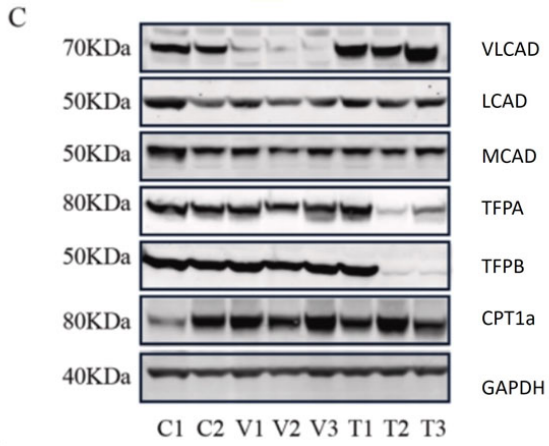
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

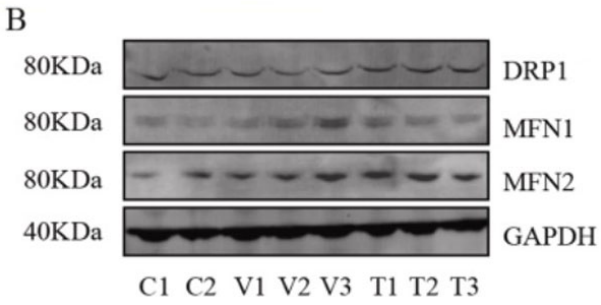
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 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

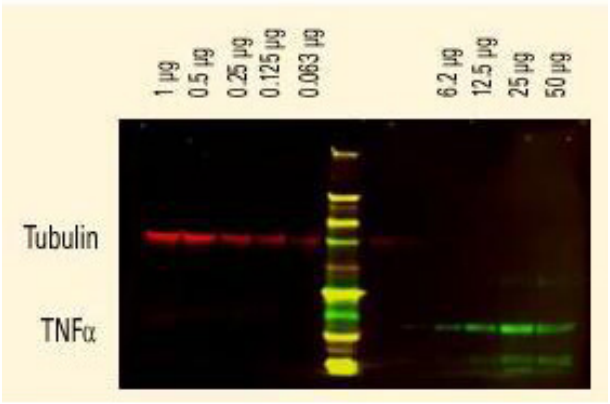


Western Blot

C. Representative western blots, original blots are shown in (supplementary Fig S8-9). And densitometric quantification of relative protein levels from western blots. Data are depicted as mean ± SD, n = 3, **P < 0.01, ***P < 0.001 and ****P < 0.0001 by one-way ANOVA. Intracellular transport, activation, mitochondrial transport, β-oxidation, carnitine shuttle, and auxiliary proteins. The primary antibodies used as follows: VLCAD 1:1000, MCAD 1:1000, LCAD 1:1000, TFPa 1:500, TFPb 1:3000, CPT1α 1:1000, and GAPDH 1:30,000 dilutions overnight at 4 °C. The membranes were then incubated with fluorescent conjugated secondary antibodies for 1 h; DyLight 800 conjugated goat Anti-Rabbit IgG (611-145-002), DyLight 680 conjugated goat Anti-Rabbit IgG (611-144-003), DyLight 800 conjugated goat Anti-Mouse IgG (610-145-002), and DyLight 680 conjugated donkey Anti-Mouse IgG (610-744-124). Fig 1. PMID: 33725513.



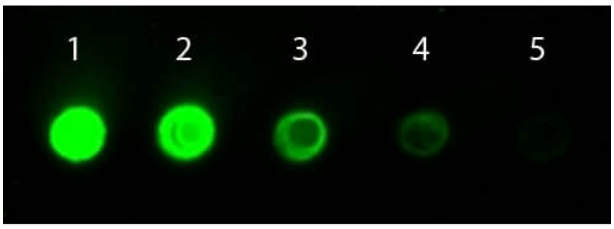
Western Blot
Assessment of mitochondrial fusion and fission. B. Representative western blots (original blots are shown in supplementary Fig. S10) and quantification of MFN1/2 and DRP1. No significant changes in the relative levels of proteins that facilitate mitochondrial fusion (MFN1/2) and fission (DRP1) between non-disease (control) and mutant primary fibroblasts. Data are depicted as mean ± SD, n = 3. The primary antibodies used as follows: MFN1 1:400, MFN2 (1:400, DRP1 1:100 and GAPDH 1:30,000 dilutions overnight at 4 °C. The membranes were then incubated with fluorescent conjugated secondary antibodies for 1 h; DyLight 800 conjugated goat Anti-Rabbit IgG (611-145-002), Antibody DyLight 680 conjugated Anti-Rabbit IgG made in goat (611-144-003), DyLight 800 conjugated goat Anti-Mouse IgG (610-145-002), and DyLight 680 conjugated donkey Anti-Mouse IgG (610-744-124). Fig 3. PMID: 33725513.



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-TNFa was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

Emission	Color	DyLight™ Dye	Ex/Em (nm)	ε (M^{-1} cm^{-1})	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

Diagram
Properties of DyLight™ Fluorescent Dyes.



Dot Blot
Dot Blot of Goat anti-Mouse IgG Antibody DyLight 800 Conjugated. Antigen: Mouse IgG. Load: Lane 1 - 100 ng Lane 2 - 33.3 ng Lane 3 - 11.1 ng Lane 4 - 3.70 ng Lane 5 - 1.23 ng. Primary antibody: none. Secondary antibody: Goat anti-Mouse IgG Antibody DyLight 800 Conjugated at 1:1,000 for 60 min at RT. Block: MB-070 for 60 min at RT.

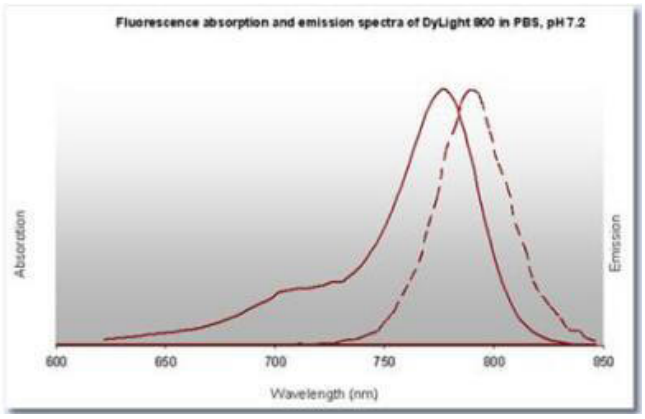


Diagram
DyLight™ 800 Fluorescence Spectra

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