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Datasheet for 610-741-124

Mouse IgG (H&L) Antibody DyLight™ 488 Conjugated Pre-Adsorbed

Overview

Description:	Donkey Anti-Mouse IgG (H&L) Antibody DyLight™ 488 Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Rb Rt & Sh Serum Proteins) - 610-741-124
Item No.:	610-741-124
Size:	100 µg
Applications:	Dot Blot, WB, IF, IHC, Multiplex
Reactivity:	Mouse
Host Species:	Donkey

Product Details

Background:	Anti-Mouse IgG DyLight488 Antibody generated in donkey 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:	Donkey anti-Mouse IgG DyLight 488™ Conjugated Antibody, Donkey anti Mouse IgG Antibody DyLight 488™ Conjugation
Host Species:	Donkey
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 488
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	3.8

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 beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Donkey 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.

Application Details

Tested Applications:	Dot Blot, WB
Suggested Applications:	IF, IHC, Multiplex (Based on references)
Application Note:	Anti-Mouse IgG DyLight488 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



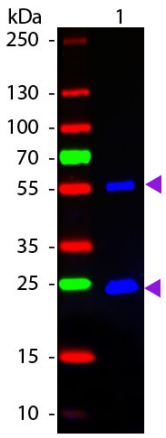
Western Blot
Rockland Rabbit anti-Transferrin (109-4134 lot 3033, green), Goat-anti-Alpha-1-Anti-Trypsin (100-101-147 lot 5842), and Mouse-a-GST (200-301-200 lot 24882) were used in a multiplex system to detect target proteins under reducing (R) conditions (+4% BME) in albumin depleted human serum with 320 ng of added GST. Sample was run by SDS-PAGE, transferred to 0.2 um PVDF using the BioRad Trans-Blot Turbo and blocked in 2.5% Blotto, 2.5% BSA, 0.02% Tween over night at 4°C. Membrane was probed with three primary antibodies at 1:1000 dilution (in MB-070 over night at 4°C). Detection shown was using DyLight549 Donkey anti-Rabbit IgG (611-742-127 lot 21100, shown as green) DyLight 488 Donkey anti-Mouse IgG (610-741-124 lot 21095, shown as blue), and DyLight 649 Donkey anti-Goat IgG (605-743-125 lot 20834, shown as red) at 1:10000 (in MB-070 30 min RT). Blots were washed, rinsed in methanol, dried and Images were collected using the BioRad VersaDoc System.

Diagram
Properties of DyLight™ Fluorescent Dyes.

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

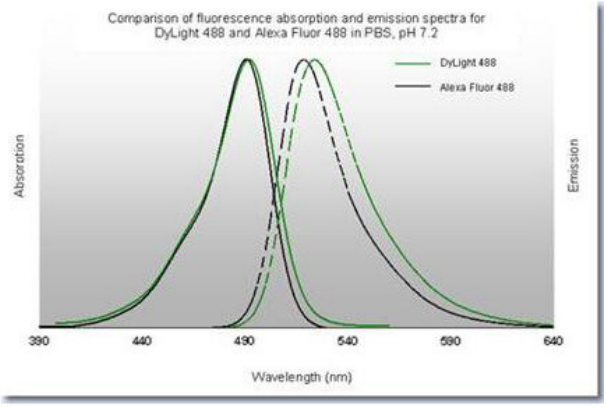


Immunofluorescence Microscopy
DyLight™ dyes can be used for multi-color immunofluorescence microscopy with uniform fluorescence intensity throughout the image. DyLight™ dyes are exceptionally bright and photostable and are optimized for microscopy and microarray detection methods. This image shows anti-Histone 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).



Western Blot
Western Blot of Fluorescein conjugated Donkey Anti-Mouse IgG Pre-Adsorbed secondary antibody. Lane 1: Mouse IgG. Lane 2: None. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: Fluorescein donkey secondary antibody at 1:1,000 for 60 min at RT. Blocking: MB-070 for 30 min at RT. Predicted/Observed size: 25 & 55 kDa, 25 & 55 kDa for Mouse IgG. Other band(s): None.

Diagram



References

- Ocegueda E et al. Role of Succinate Dehydrogenase in Age-Related Th17 Inflammation. *Aging Cell.* (2026)
- Rockhold JD et al. Everolimus alleviates CD4+ T cell inflammation by regulating autophagy and cellular redox homeostasis. *Geroscience.* (2024)
- Zukowski E et al. STAT3 modulates CD4+ T mitochondrial dynamics and function in aging. *Aging Cell.* (2023)
- Conway, R et al. Obesity and Fatty Acids Promote Mitochondrial Translocation of STAT3 Through ROS-Dependent Mechanisms. *Frontiers in Aging* (2022)
- Golenberg N, Squirrell JM, Bennin DA, et al. Citrullination regulates wound responses and tissue regeneration in zebrafish. *J Cell Biol.* (2020)
- Bharath LP, Agrawal M, McCambridge G, et al. Metformin Enhances Autophagy and Normalizes Mitochondrial Function to Alleviate Aging-Associated Inflammation. *Cell Metab.* (2020)
- Watanabe T et al. Glucagon-like Peptide-1 Receptor Expression in the Pancreatic D Cells of Three Avian Species; White Leghorn Chickens, Northern Bobwhites, and Common Ostriches. *J Poult Sci.* (2018)
- De Luigi A et al. Doxycycline hinders phenylalanine fibril assemblies revealing a potential novel therapeutic approach in phenylketonuria. *Scientific Reports* (2015)

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