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Datasheet for 605-741-125

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

Overview

Description:	Donkey Anti-Goat IgG (H&L) Antibody DyLight™ 488 Conjugated (Min X Ch GP Ham Hs Ms Rb & Rt Serum Proteins) - 605-741-125
Item No.:	605-741-125
Size:	100 µg
Applications:	Dot Blot, IF, Multiplex
Reactivity:	Goat
Host Species:	Donkey

Product Details

Background:	Anti-Goat IgG DyLight Antibody generated in donkey detects goat 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 heavy and light chains of the antibody molecule are present.
Synonyms:	donkey anti-Goat IgG Antibody DyLight™ 488 Conjugation, donkey anti-Goat IgG DyLight™ 488 Conjugated Antibody
Host Species:	Donkey
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 488
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	5.6

Target Details

Reactivity:	Goat

Immunogen:	Goat IgG whole molecule
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Goat 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, Goat IgG and Goat Serum. No reaction was observed against Chicken, Guinea Pig, Hamster, Horse, Mouse, Rabbit and Rat Serum Proteins. This antibody will react with heavy chains of Goat IgG and with light chains of most Goat immunoglobulins.

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	IF, Multiplex (Based on references)
Application Note:	Anti-Goat IgG DyLight 488 Antibody has been tested by dot blot. This product 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

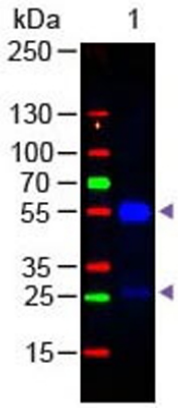
Formulation

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
Western Blot of Donkey anti-Goat IgG Antibody DyLight™ 488 Conjugated Pre-Adsorbed.
Lane 1: Goat IgG.
Load: 50 ng per lane.
Secondary antibody: Goat IgG (H&L) Antibody DyLight™ 488 Conjugated Pre-Adsorbed at 1:1,000 for 60 min at RT.
Block: MB-070 for 30 min at RT.
Predicted/Observed size: 55 and 28 kDa.

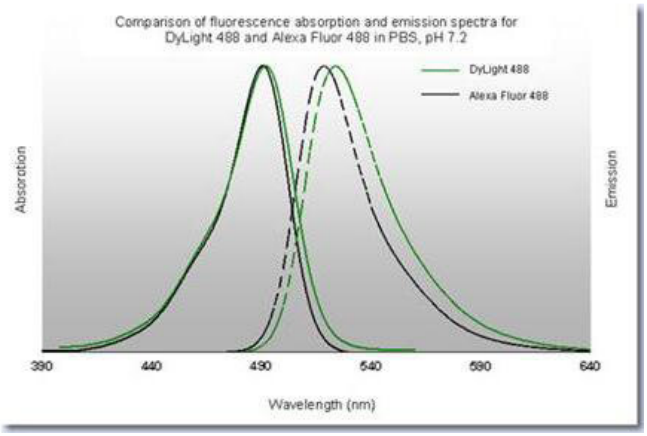


Immunofluorescence Microscopy
DyLight™ dyes can be used for multi-color immunofluorescence microscopy with uniform fluorescence intensity throughout the image. DyLight™ dyes are exceptionally bright and photostable and are optimized for microscopy and microarray detection methods. This image shows anti-Histone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

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



References

- Onoda A et al. A Novel Staining Method for Detection of Brain Perivascular Injuries Induced by Nanoparticle: Periodic Acid-Schiff and Immunohistochemical Double-Staining. *Front Toxicol.* (2022)
- Iguchi, N et al. Functional constipation induces bladder overactivity associated with upregulations of Htr2 and Trpv2 pathways. *Scientific Reports* (2021)
- Onoda A, Kawasaki T, Tsukiyama K, Takeda K, Umezawa M. Carbon nanoparticles induce endoplasmic reticulum stress around blood vessels with accumulation of misfolded proteins in the developing brain of offspring. *Sci Rep.* (2020)
- Umezawa M et al. Maternal inhalation of carbon black nanoparticles induces neurodevelopmental changes in mouse offspring. *Particle and Fibre Toxicology* (2018)
- Onoda et al. Dose-dependent induction of astrocyte activation and reactive astrogliosis in mouse brain following maternal exposure to carbon black nanoparticle. *Particle and Fibre Toxicology* (2017)
- Onoda et al. Perivascular Accumulation of β-Sheet-Rich Proteins in Offspring Brain following Maternal Exposure to Carbon Black Nanoparticles. *Frontiers in Cellular Neuroscience* (2017)
- Nishino T et al. Distinct distribution of the tensin family in the mouse kidney and small intestine. *Exp Anim.* (2012)

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