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Datasheet for 605-745-125

Goat IgG (H&L) Antibody DyLight™ 800 Conjugated Pre-Adsorbed

Overview

Description:	Donkey Anti-Goat IgG (H&L) Antibody DyLight™ 800 Conjugated (Min X Ch GP Ham Hs Ms Rb & Rt Serum Proteins) - 605-745-125
Item No.:	605-745-125
Size:	100 µg
Applications:	IF, WB
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™ 800 Conjugated Pre-Adsorbed, Donkey anti-Goat IgG DyLight™ 800 Conjugated Antibody
Host Species:	Donkey
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 800
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.6

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.
Relevant Links:	• 605-745-125 SDS

Application Details

Suggested Applications:	IF, WB (Based on references)
Application Note:	The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation. 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.
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

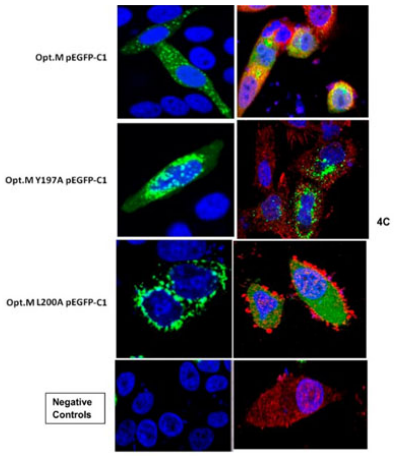
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

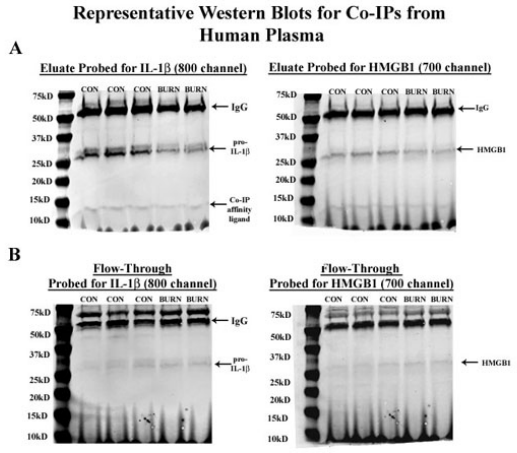
Shipping Condition:	Ambient

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

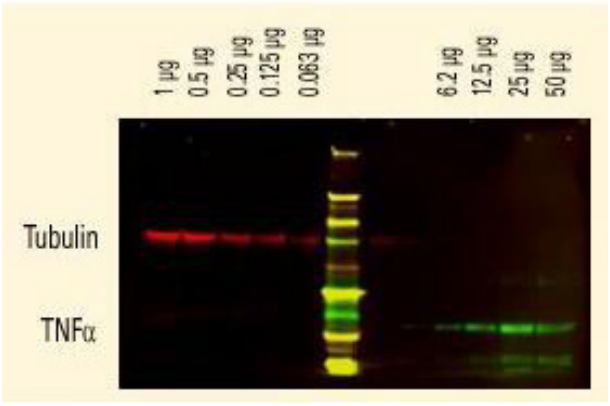


Immunofluorescence Microscopy
Immunofluorescence results using Donkey Anti-Goat IgG DyLight 800.
Effect of mutation in YXXL domain of HRSV M protein.
C) The mutation of the tyrosine at amino acid residue 197 to alanine and leucine at amino acid residue 200 to alanine causes a distinct phenotypic change in the localization of the HRSV Matrix protein. HEp2 cells were transfected with indicated pEGFP-C1 Opt. M constructs and were fixed with paraformaldehyde at 24 hours post transfection as described previously. Cells were imaged for Opt.M, adaptor protein and DAPI using CLSM protocols described previously. Negative controls include transfection of cells with empty plasmid vector (pEGFP-C1) without M insert (left side panel) and mock transfected cells with staining for adaptor protein only with goat anti Ap3u3A followed by rabbit anti goat Alexa Fluor 546 antibody (right side panel). The first 3 images on the left side panel shows staining for Opt.M and DAPI. The first 3 images on the right side panel shows merged image with staining for Opt.M, adaptor protein and DAPI. The results were reproducible in at least two independent assays. Fig 4. PMID: 29028839.



Western Blot

Entire western blots for co-immunoprecipitation of HMGB1 and IL-1β in human plasma.Co-immunoprecipitation was performed for HMGB1 and IL-1β in human control and burn plasma. Entire eluate and flow through for these samples are presented. (A) Entire blots of eluates probed for IL-1β and for HMGB1. Bands positive for IgG and pro-IL-1β as well as the Catch and Release® affinity ligand were observed. The blot probed for HMGB1 showed a broad band consistent with free HMGB1 near 29kD. (B) Entire western blots of flow through. Minimal pro-IL-1β and HMGB1 were found in the flow through. Fig S4. PMID:29601597.



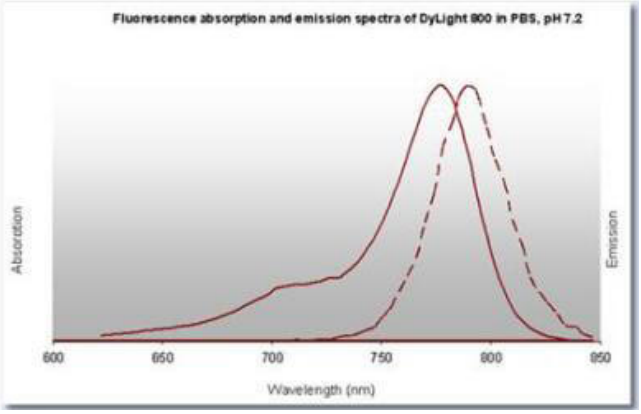
Western Blot

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.

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

- Coleman et al. HMGB1/IL-1β complexes in plasma microvesicles modulate immune responses to burn injury. *PLOS One* (2018)
- Coleman Jr LG et al. HMGB1/IL-1β complexes regulate neuroimmune responses in alcoholism. *Brain Behav Immun.* (2018)
- Ward et al. Interaction of the Human Respiratory Syncytial Virus matrix protein with cellular adaptor protein complex 3 plays a critical role in trafficking. *PLOS One* (2017)
- Li JB et al. Effects of Chinese Fructus Mume formula and its separated prescription extract on insulin resistance in type 2 diabetic rats. *J Huazhong Univ Sci Technolog Med Sci.* (2013)

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