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Datasheet for 610-144-121

Mouse IgG (H&L) Antibody DyLight™ 680 Conjugated Pre-Adsorbed

Overview

Description:	Goat Anti-Mouse IgG (H&L) Antibody DyLight™ 680 Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Rb Rt & Sh Serum Proteins) - 610-144-121
Item No.:	610-144-121
Size:	100 µg
Applications:	IF, IHC, Microarray, Multiplex, WB
Reactivity:	Mouse
Host Species:	Goat

Product Details

Background:	Anti-Mouse IgG DyLight 680 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™680 Conjugated, Goat Anti-Mouse IgG Antibody DyLight™680 Conjugated, Anti-mouse IgG secondary antibody, anti-mouse IgG DyLight™680 conjugated secondary antibody
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 680
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.1

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-Goat 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

Suggested Applications:	IF, IHC, Microarray, Multiplex, WB (Based on references)
Application Note:	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

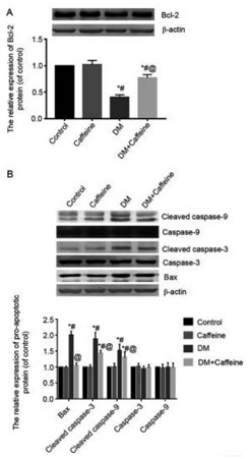
Formulation

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)

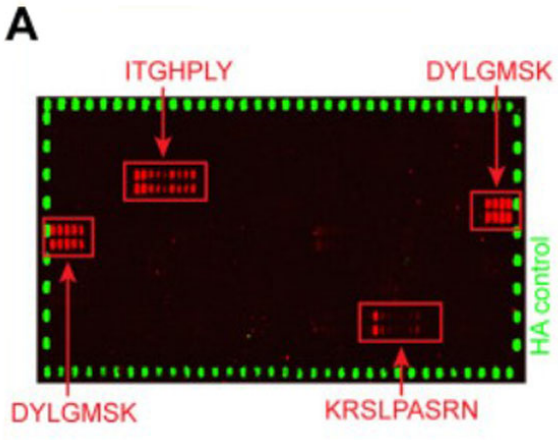
Shipping & Handling

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

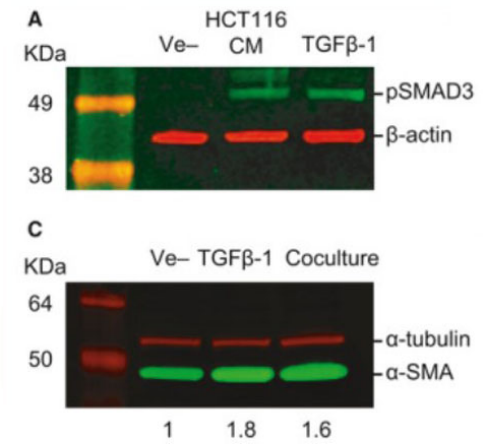


Western Blot
Western Blot Results using Goat Anti-Mouse IgG (H&L) Antibody DyLight™ 680 Conjugated.
Expression levels of Bcl-2, Bax, caspase-3 and caspase-9 proteins in the DRG.
(A) The expression level of Bcl-2 protein in rat bladders was detected by western blot analysis.
(B) The expression levels of Bax, caspase-3, cleaved caspase-3, caspase-9 and cleaved caspase-9 proteins in rat bladders were detected by western blot analysis. *P<0.05 vs. control group; #P<0.05 vs. caffeine group; @P<0.05 vs. DM group. Bcl-2, B-cell lymphoma-2; Bax, Bcl-2-associated X protein; DRG, dorsal root ganglion; DM, diabetes mellitus.
Fig 3. PMID: 33791010.

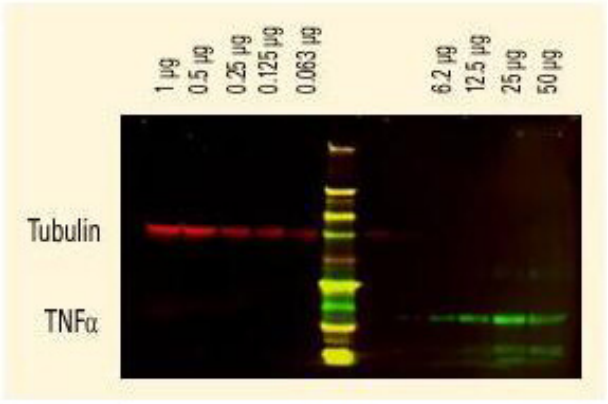


Western Blot
Peptide array results using Goat Anti-Mouse IgG (H&L) Antibody DyLight™ 680 Conjugated.
Peptide arrays identify known immunogenic epitopes in L1.
(A) Synthetic 15-mer peptides with residue overlaps of 14 residues were spotted on microarrays and incubated with serum mix from five tumor-bearing animals with high titers against both L1 isoforms. Bound serum antibodies were detected with fluorophore-conjugated secondary antibodies.

Fig 5. PMID: 32746966.



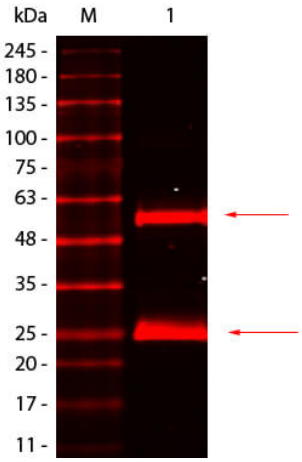
Western Blot
Western Blot Results using Goat Anti-Mouse IgG (H&L) Antibody DyLight™ 680 Conjugated.
TGF-β-mediated crosstalk between pericytes and CRC cells modulates pericyte secretome.
(A) Incubation in HCT116 CM for 1 h induces SMAD3 phosphorylation in PC, as assessed by western blot. Exogenous recombinant TGF-β (10 ng·mL−1) was used as a positive control, and β-actin was used as loading control (n = 3).
(B) Confocal microscopy images of SMAD3 subcellular localization in PC cultured alone or cocultured with HCT116 cells for 48 h (n = 3). SMAD3 is detected in the cytoplasm of PC in monoculture (arrows show nonstained nuclei). Nuclear translocation of SMAD3 takes place after coculture with HCT116 cells for 48 h (arrowheads indicate stained nuclei). HCT116 cells treated with 10 ng·mL−1 TGF-β1 were used as a positive control. Scale bar = 10 µm.
Fig 5. PMID: 32767843.



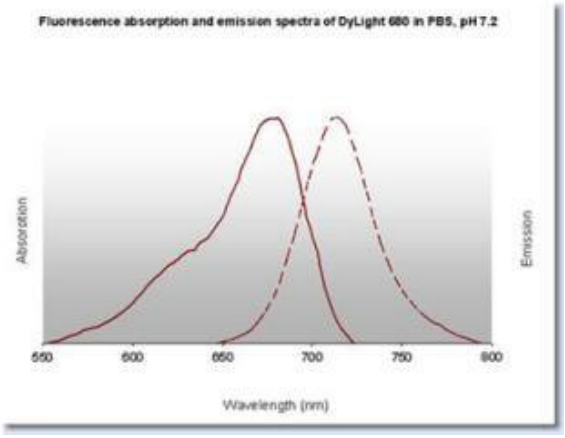
Western Blot
DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNFa was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed 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



Western Blot
Western Blot of Goat anti-Mouse IgG Antibody DyLight 680 Conjugated Pre-absorbed. Lane 1: Mouse IgG. Load: 50 ng per lane. Primary antibody: none. Secondary antibody: Goat anti-Mouse IgG Antibody DyLight 680 Conjugated Pre-absorbed at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 55 kDa, 25 kDa for Mouse IgG.



Diagram

References

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