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Datasheet for 603-144-002

Chicken IgG (H&L) Antibody DyLight™ 680 Conjugated

Overview

Description:	Goat Anti-Chicken IgG (H&L) Antibody DyLight™ 680 Conjugated - 603-144-002
Item No.:	603-144-002
Size:	100 µg
Applications:	Dot Blot, WB
Reactivity:	Chicken
Host Species:	Goat

Product Details

Background:	Anti-Chicken IgG DyLight Antibody generated in goat detects chicken IgY. 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:	goat anti-Chicken IgG DyLight™ 680 Conjugated Antibody, goat anti-Chicken IgG Antibody DyLight™680 Conjugation, Chicken Secondary Antibody, goat anti-Chicken IgY DyLight™ 680
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 680
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.9

Target Details

Reactivity:	Chicken

Immunogen:	Chicken IgG, whole molecule
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Chicken IgG coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities, conjugation to fluorochrome and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Chicken IgG and Chicken Serum. This antibody will react with heavy chains of Chicken IgG and Chicken IgY and with light chains of most Chicken immunoglobulins.

Application Details

Tested Applications:	Dot Blot, WB
Application Note:	Anti-Chicken IgG DyLight680 has been tested by dot blot and western 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

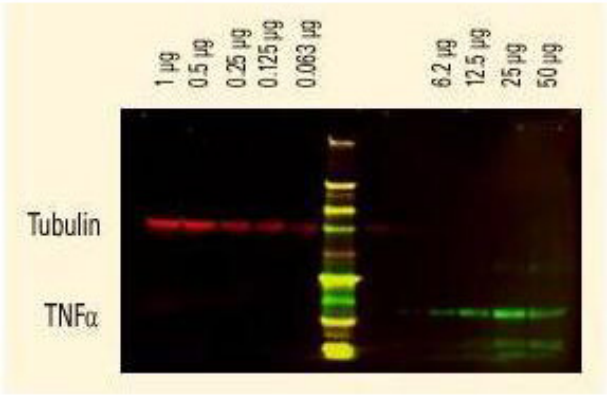
Shipping Condition:	Ambient

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.

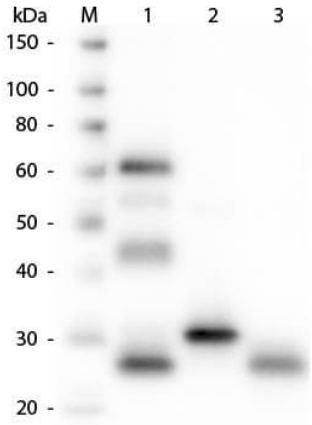
Images

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

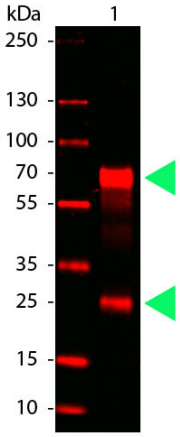


Western Blot
DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 549 conjugate. Anti-TNFa was detected using a DyLight™ 649 conjugate. The image was captured using the Typhoon™ 9410 Imaging System.



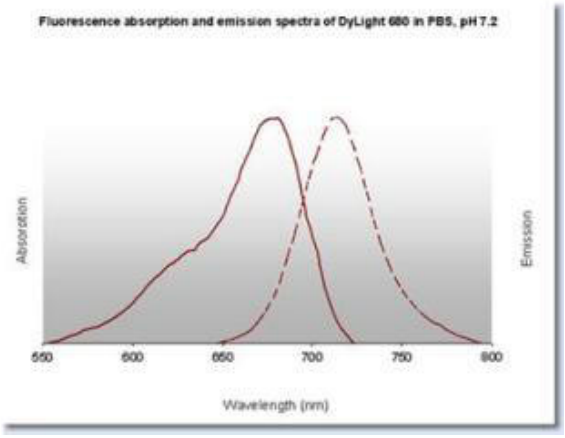
Western Blot

Western Blot of Unconjugated Anti-Chicken IgG/IgY (H&L) (GOAT) Antibody (p/n 603-101-002). Lane M: 3 µl Molecular Ladder. Lane 1: Chicken IgG whole molecule (p/n 003-0102). Lane 2: Chicken IgG F(c) Fragment (p/n 003-0103). Lane 3: Chicken IgG Fab Fragment (p/n 003-0105). All samples were reduced. Load: 50 ng per lane. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Chicken IgG/IgY (H&L) (GOAT) Antibody (p/n 603-101-002) 1:1,000 for 60 min at RT. Secondary antibody: Anti-Goat IgG (DONKEY) Peroxidase Conjugated Antibody (p/n CUST10) 1:40,000 in MB-070 for 30 min at RT. Predicted/Observed Size: 25 and 72 kDa for Chicken IgY, 25 kDa for F(c) and Fab. Chicken F(c) migrates slightly higher.



Western Blot

Western Blot of DyLight™ 680 conjugated Goat anti-Chicken IgG antibody. Lane 1: Chicken IgG (p/n 003-0102). Load: 50 ng per lane. Primary antibody: none. Secondary antibody: DyLight™ 680 chicken secondary antibody at 1:5,000 for 60 min at RT. Block: MB-070 for 30 min RT. Predicted/Observed size: 72 kDa, 28 kDa for Chicken IgY. Other band(s): none.



Diagram

DyLight™ 680 Fluorescence Spectra

References

- Yuan R et al. Modulation of striatal cAMP levels: A key pathway in the treatment of hyperkinetic movement disorders. *iScience.* (2025)

Disclaimer

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