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Datasheet for 609-144-123

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

Overview

Description:	Goat Anti-Human IgG (H&L) Antibody DyLight™ 680 Conjugated (Min X Bv Ch Gt GP Ham Hs Ms Rb Rt & Sh Serum Proteins) - 609-144-123
Item No.:	609-144-123
Size:	100 µg
Applications:	Dot Blot, Microarray, WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Anti-Human IgG (H&L) DyLight 680 generated in goat detects human Immunoglobulin G (IgG), both heavy and light chains of the antibody molecule are present. It is a protein complex composed of four peptide chains — two identical heavy chains and two identical light chains arranged in a Y-shape typical of antibody monomers. Each IgG has two antigen binding sites. Representing approximately 75% of serum immunoglobulins in humans, IgG is the most abundant antibody isotype found in the circulation. IgG molecules are synthesized and secreted by plasma B cells. 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 Human IgG DyLight 680™ Conjugated Antibody, Goat Anti-Human IgG Antibody DyLight 680™ conjugation
Host Species:	Goat
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 680
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	3.0

Target Details

Reactivity:	Human
Immunogen:	Human IgG whole molecule
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Human 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, Human IgG and Human Serum. No reaction was observed against Bovine, Chicken, Goat, Guinea Pig, Hamster, Horse, Mouse, Rabbit, Rat and Sheep Serum Proteins. This antibody will react with heavy chains of Human IgG and with light chains of most Human immunoglobulins.
Relevant Links:	• PEPperCHIP Peptide Microarray Application Note

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	Microarray, WB (Based on references)
Application Note:	Anti-Human IgG (H&L) DyLight 680 has been tested by dot 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

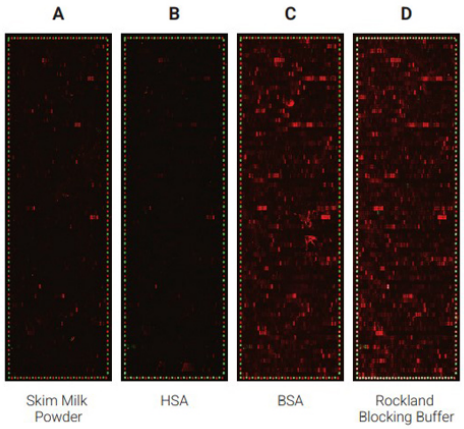
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

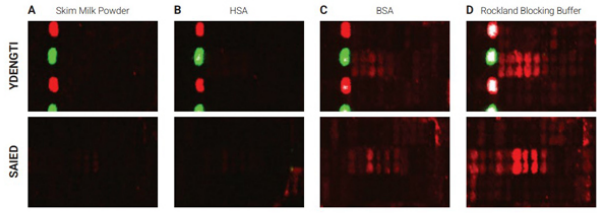
Shipping & Handling

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.

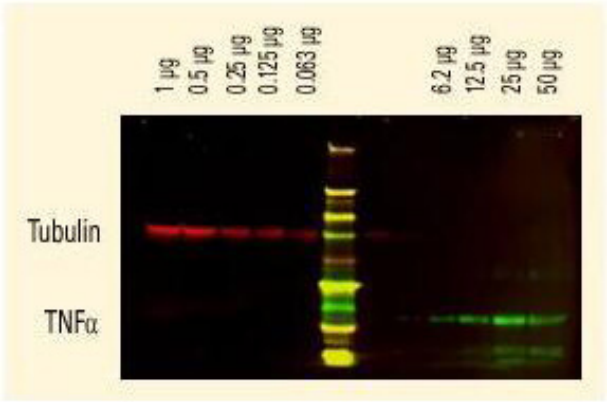
Images



Comparison of the performance of different blocking reagents in epitope mappings with PEPperCHIP® Peptide Microarrays.
The PEPperCHIP® Peptide Microarrays were blocked for 30 minutes with either 2% skim milk powder (A), 1% HSA (B), 1% BSA (C) or 100% Rockland Blocking Buffer [p/n MB-070] (D). A human serum sample was assayed at dilution 1:200, followed by detection with secondary goat anti-Human IgG (H+L) DyLight™ 680 Antibody [p/n 609-144-123] and a control anti-HA (12CA5)-DyLight™ 800 Antibody. Red spots = sample IgG response and frame of polio control peptides, green spots = frame of HA control peptides.



Selected sections of the PEPperCHIP® Peptide Microarrays after assay with different blocking reagents. The microarrays were blocked for 30 minutes with either 2% skim milk powder (A), 1% HSA (B), 1% BSA (C) or 100% Rockland Blocking Buffer [p/n MB-070] (D), respectively. A human serum sample was assayed at dilution 1:200, followed by detection with secondary goat Anti-Human IgG (H+L) DyLight™ 680 Antibody [p/n 609-144-123]. Red spots = sample responses and polio control peptides, green spots = HA control peptides. The underlying binding motifs of the respective sections are indicated on the left.

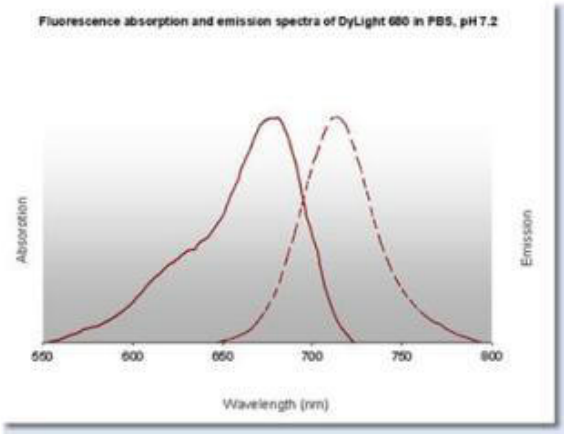


Western Blot
DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNFa was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed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



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