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Datasheet for 613-744-168

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

Overview

Description:	Donkey Anti-Sheep IgG (H&L) Antibody DyLight™ 680 Conjugated (Min X Ch GP Ham Hs Hu Ms Rb & Rt Serum Proteins) - 613-744-168
Item No.:	613-744-168
Size:	100 µg
Applications:	WB
Reactivity:	Sheep
Host Species:	Donkey

Product Details

Background:	Anti-Sheep IgG (H&L) DyLight™680 Antibody generated in donkey detects reactivity to sheep 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. This Anti-Sheep IgG is conjugated to DyLight™680.
Synonyms:	Donkey Anti Sheep IgG DyLight 680™ Conjugated Antibody, Donkey Anti-Sheep IgG Antibody DyLight 680™ Conjugation
Host Species:	Donkey
Specificity:	IgG (H&L)
Conjugate:	DyLight™ 680
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	3.1

Target Details

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

Application Details

Tested Applications:	WB
Application Note:	Anti-Sheep IgG (H&L) DyLight™680 Antibody has been tested by western 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)

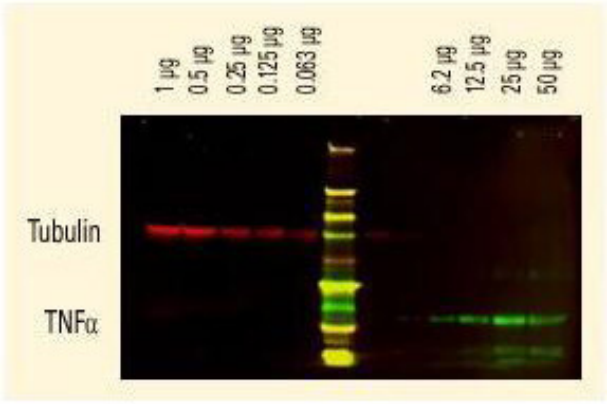
Shipping & Handling

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.

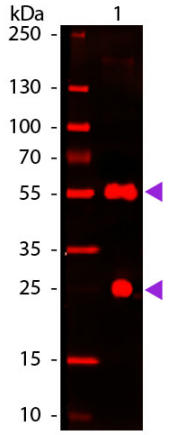
Images

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

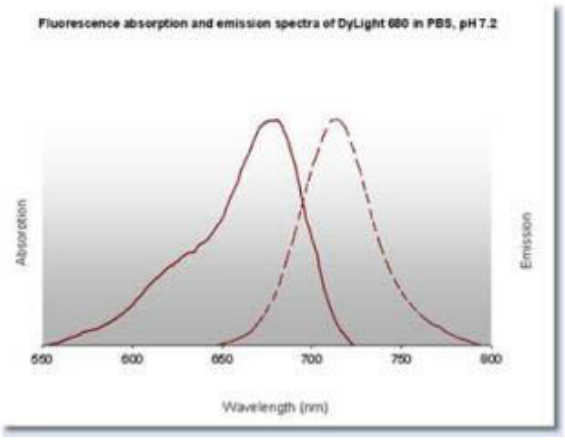


Western Blot
DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNFa was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed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



Western Blot

Western blot of DyLight™ 680 conjugated Donkey Anti-Sheep IgG Pre-Adsorbed secondary antibody. Lane 1: Sheep IgG. Lane 2: None. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: DyLight™ 680 donkey secondary antibody at 1:5,000 for 60 min at RT. Blocking: MB-070 for 30 min at RT. Predicted/Observed size: 25 & 55 kDa, 25 & 55 kDa for Sheep IgG. Other band(s): None.



Diagram

References

- Volpato A et al. Extending fluorescence anisotropy to large complexes using reversibly switchable proteins. *Nat Biotechnol.* (2023)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.