

Datasheet for 600-444-383**DYKDDDDK Tag (Anti-FLAG®) Antibody DyLight™ 680 Conjugated****Overview**

Description:	Antibody for the detection of FLAG® conjugated proteins (RABBIT) Antibody DyLight™ 680 Conjugated - 600-444-383
Item No.:	600-444-383
Size:	100 µg
Applications:	IF, Multiplex
Reactivity:	FLAG-Tag
Host Species:	Rabbit

Product Details

Background:	Epitope tags are short peptide sequences that are easily recognized by tag-specific antibodies. Due to their small size, epitope tags do not affect the biochemical properties of the tagged protein. Most often, sequences encoding the epitope tag are included with the target DNA at the time of cloning to produce fusion proteins containing the epitope tag sequence. This allows Anti epitope tag antibodies to serve as universal detection reagents for any tag-containing protein produced by recombinant means. This means that anti-epitope tag antibodies are a useful alternative to generating specific antibodies to identify, immunoprecipitate or immunoaffinity purify a recombinant protein. The anti-epitope tag antibody is usually functional in a variety of antibody-dependent experimental procedures.
Synonyms:	rabbit anti DYKDDDDK DyLight™ 680 Conjugated, rabbit antibody for the detection of FLAG™ conjugated proteins DyLight™ 680 Conjugated
Host Species:	Rabbit
Conjugate:	DyLight™ 680
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.8

Target Details

Reactivity:	FLAG-Tag
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Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was purified from whole rabbit serum prepared by repeated immunizations with the Enterokinase Cleavage Site (ECS) peptide (D-Y-K-D-D-D-K) conjugated to KLH using maleimide. This antibody reacts with FLAGä conjugated proteins.
Purity/Specificity:	This affinity purified antibody is directed against the FLAGä epitope tag and is useful in determining its presence in over expressed proteins in various assays. The antibody recognizes the FLAGä epitope tag (Asp-Tyr-Lys-Asp-Asp-Asp-Lys) fused to either the amino- or carboxy-termini of targeted proteins in transfected or transformed cells.

Application Details

Suggested Applications:	IF, Multiplex (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.
ELISA:	1:10,000 - 1:25,000
FLISA:	>1:20,000
IF:	>1:5,000
WB:	1:10,000 - 1:25,000

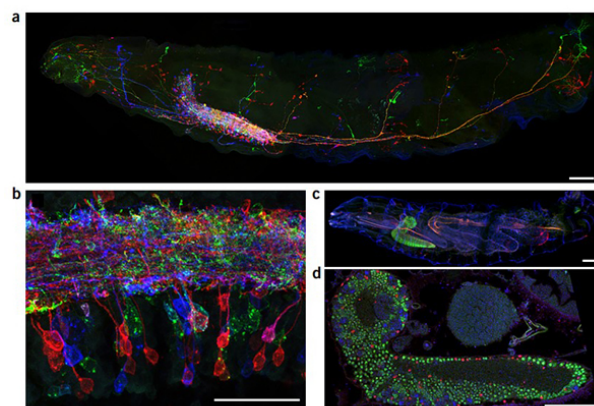
Formulation

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



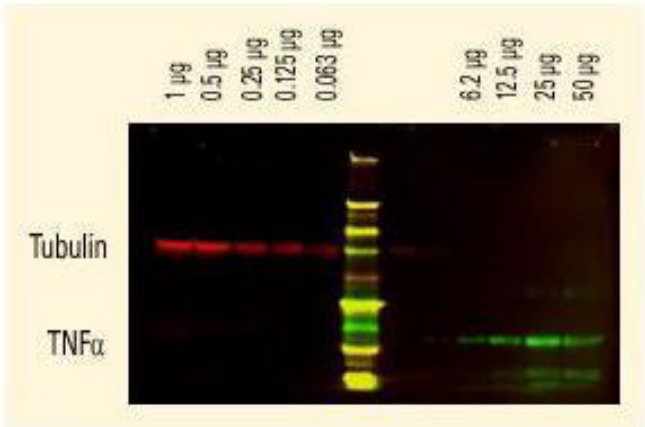
Immunofluorescence Microscopy

Immunofluorescence using the Antibody for the detection of FLAG™ conjugated proteins DyLight™ 680 Conjugated. Staining of second-instar larvae (L2). (a,b) Second-instar larvae stained for the multicolor flip-out antigens that decorate random neuronal membranes of a subset of Elav-gal4-57C10-MCFO-line-6-positive neurons. (c,d) Second-instar larvae stained for the nuclear proteins Dpn (blue), Elav (green), and Repo (red), using the optional Pro-K treatment (Steps 31–35) to increase detection of deep-tissue nuclear antigens. Scale bars, 50 μm. Additional details regarding antibodies used can be found in Table 2. Figure 4. PMID: 27906168.



Immunofluorescence Microscopy

Immunofluorescence using the Antibody for the detection of FLAG™ conjugated proteins DyLight™ 680 Conjugated. Staining of third-instar larvae (L3). (a) Third-instar larvae stained for Dpn (blue), Elav (green), Repo (red), and processed using the optional ProK treatment (Steps 31–35). Inset: High-magnification view of larval CNS. (b) Third-instar larvae stained for the multicolor flip-out antigens that decorate neuronal membranes of a subset of Elav-gal4-57C10-MCFO neurons. Scale bars, 50 μm. Additional details regarding antibodies used can be found in Table 2. Figure 5. PMID: 27906168.



Western Blot

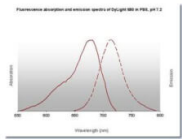
DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNFα was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

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

- Manning L et al. Immunofluorescent antibody staining of intact *Drosophila* larvae. *Nat Protoc.* (2017)

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.