

Datasheet for 200-343-383**DYKDDDDK Tag (Anti-FLAG®) Antibody DyLight™ 649 Conjugated****Overview**

Description:	Antibody for the detection of FLAG® conjugated proteins (MOUSE) Monoclonal Antibody DyLight™ 649 Conjugated - 200-343-383
Item No.:	200-343-383
Size:	100 µg
Applications:	ELISA, FC, Multiplex, WB
Reactivity:	FLAG-Tag
Host Species:	Mouse

Product Details

Background:	The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation. This antibody is optimally suited for monitoring the expression of FLAG™ tagged fusion proteins. As such, this antibody can be used to identify fusion proteins containing the FLAG™ epitope. The antibody recognizes the epitope tag fused to either the amino- or carboxy- termini of targeted proteins. The epitope tag peptide sequence was first derived from the 11-amino-acid leader peptide of the gene-10 product from bacteriophage T7. DYKDDDDK is the most commonly used hydrophilic octapeptide tag.
Synonyms:	mouse anti-FLAG™ tag DyLight™649 conjugation, Enterokinase Cleavage Site (ECS), DyLight™649 conjugated mouse anti-DYKDDDDK, Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Lys
Host Species:	Mouse
Conjugate:	DyLight™ 649
Clonality:	Monoclonal
Clone ID:	29E4.G7
Format:	IgG2a
F/P Ratio:	3.6

Target Details

Reactivity:	FLAG-Tag
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Immunogen Type:	Conjugated Peptide
Immunogen:	This antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to the FLAG™ epitope tag peptide DYKDDDDK (Asp-Tyr-Lys-Asp-Asp-Asp-Lys) conjugated to KLH using maleimide.
Purity/Specificity:	This antibody is directed against the FLAG™ epitope tag and is useful in determining its presence in over expressed proteins in various assays. The antibody recognizes the FLAG™ 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

Tested Applications:	ELISA, FC, Multiplex, WB
Application Note:	Anti-FLAG DyLight™649 has been tested by ELISA, Western blot, and Flow Cytometry. 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
FC:	User Optimized
FLISA:	>1:20,000
IF:	>1:5,000
WB:	>1:10,000-1:25,000

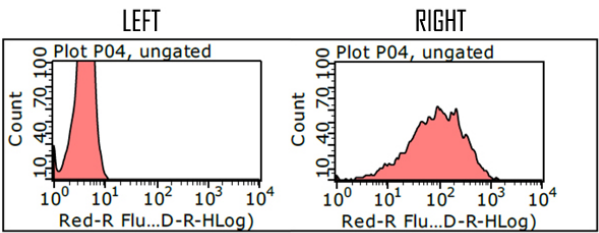
Formulation

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



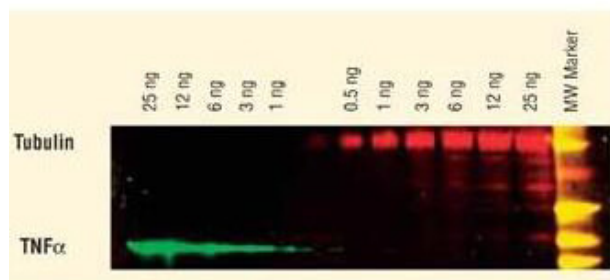
Flow Cytometry

Cytoflow of Mouse Anti-FLAG™ Antibody DyLight™ 649 Conjugated (p/n 200-343-383). Cells: Yeast Saccharomyces cerevisiae cells expressing FLAG-tagged VHH on surface. (LEFT) unstained; (RIGHT) Mouse Anti-FLAG™ Antibody DyLight™ 649 secondary antibody at 1:200.

Western Blot

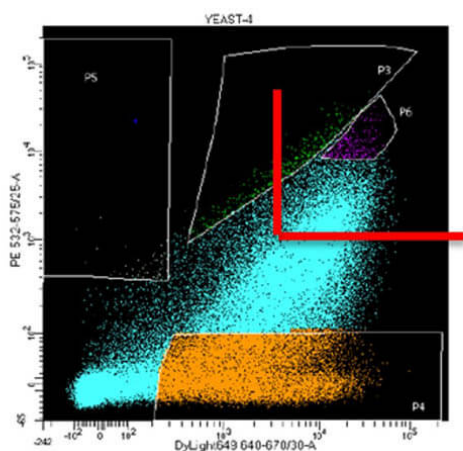
Properties of DyLight™ Conjugates.

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

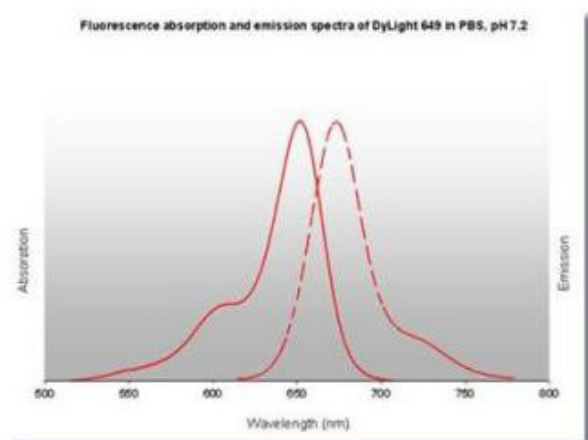
DyLight™ dyes can be used for two-color western blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 549 conjugate. Anti-TNF α was detected using a DyLight™ 649 conjugate. The image was captured using the Typhoon™ 9410 Imaging System.



Flow Cytometry

Anti-FLAG DyLight™ 649 conjugate - X-axis (p/n 200-343-383) and Streptavidin-PE conjugate - Y-axis (p/n S000-08) are used in FACS sorting of yeast surface display camelid VHH immunized library to isolate yeast clones expressing antibodies to a target antigen. VHH antibodies displayed on yeast cell surface are tagged with FLAG epitope. Yeast library was doubly stained with Anti-FLAG DyLight™ 649 conjugate to monitor VHH expression and biotinylated antigen/Streptavidin-PE conjugate complexes to detect VHH binding to the antigen. Double positive yeast cells were isolated using FACSaria II cell sorter.

Diagram



References

- Laprise F et al. SARS-CoV-2 Accessory Protein ORF8 Targets the Dimeric IgA Receptor pIgR. *Viruses*. (2024)

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.