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Datasheet for 200-341-383

DYKDDDDK Tag (Anti-FLAG®) Antibody Dylight™ 488 Conjugated

Overview

Description:	Antibody for the detection of FLAG® conjugated proteins (MOUSE) Monoclonal Antibody DyLight™ 488 Conjugated - 200-341-383
Item No.:	200-341-383
Size:	100 µg
Applications:	ELISA, 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™488 conjugation, Enterokinase Cleavage Site (ECS), DyLight™488 conjugated mouse anti-DYKDDDDK, Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Lys
Host Species:	Mouse
Conjugate:	DyLight™ 488
Clonality:	Monoclonal
Clone ID:	29E4.G7
Format:	IgG2a
F/P Ratio:	2.8

Target Details

Reactivity:	FLAG-Tag

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-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-Asp-Lys) fused to either the amino- or carboxy- termini of targeted proteins in transfected or transformed cells.

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-FLAG DyLight™488 has been tested by ELISA 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.
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:	>1:10,000
IF:	>1:5,000

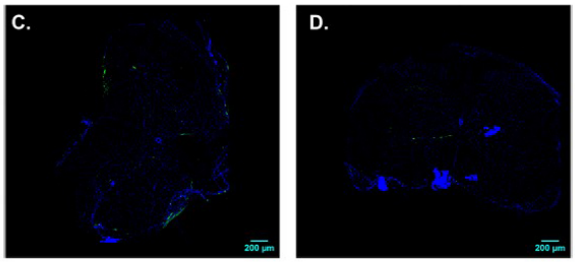
Formulation

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

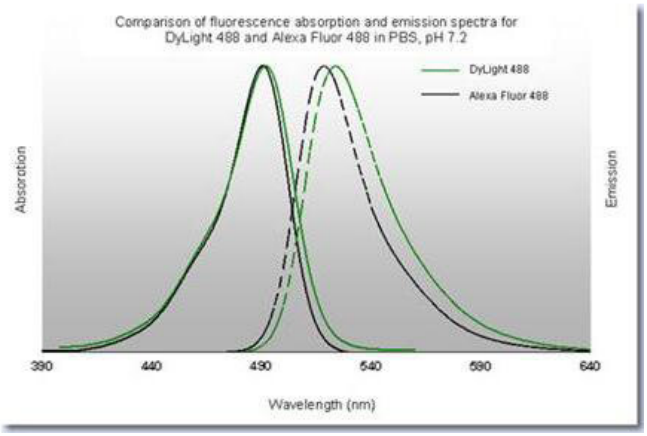


Immunofluorescence Microscopy
Proof-of-concept showing enhanced CNS penetrance and retention of an RVG29-modified anti-C1q Nanobody (Nb). Healthy and TMEV-IDD mice were treated intraperitoneally (I.P) with FLAG-tagged nanobodies (Nbs), either conjugated to the RVG29 peptide or left unmodified. (C and D) Representative immunofluorescence images of thoracic spinal cord sections from TMEV-IDD mice 72 h post-injection are shown for (C) RVG29-modified anti-C1q Nb-treated mice and (D) unmodified anti-C1q Nb-treated mice. Green denotes FLAG immunoreactivity, and blue indicates DAPI (nuclear stain). Scale bars, 200 µm. For quantification, z-stacks were acquired at 10 × magnification, projected, and processed in ImageJ with the FIJI plugin set. Fig 5.
PMID: 41786004

Diagram
Properties of DyLight™ Fluorescent Dyes.

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

- Linzey M et al. Central nervous system-penetrant anti-C1q therapy reduces neuroinflammation and preserves neurological function in a model of progressive multiple sclerosis. *Brain Behav Immun.* (2026)

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