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Datasheet for 600-442-378

V5 Epitope Tag Antibody Dylight™ 549 Conjugated

Overview

Description:	Anti-V5 Epitope Tag (RABBIT) Antibody DyLight™ 549 Conjugated - 600-442-378
Item No.:	600-442-378
Size:	100 µg
Applications:	EM, IF, IHC, Multiplex
Reactivity:	V5-Tag
Host Species:	Rabbit

Product Details

Background:	In order to improve expression levels, solubility, folding, purification and detection of recombinant proteins, a very common strategy is the fusion of peptides or proteins also known as “tags”, to the target protein. Because these tags are entities with known sequences and well characterized physicochemical properties, they are an essential tool in molecular biology that facilitates expression and purification of recombinant proteins. Because fusion tags constitute themselves antigenic epitopes for which antibodies can be developed they particularly useful for specific detection of the target protein. This Anti-V5 Epitope Tag Antibody generated in rabbit is conjugated to DyLight™549.
Synonyms:	Rabbit Anti-V5 Epitope Tag DyLight 549™ Conjugated Antibody, Rabbit Anti V5 Epitope Tag Antibody DyLight 549™ Conjugation, Rabbit Anti-V5 Tag DyLight 549™ Conjugated Antibody
Host Species:	Rabbit
Conjugate:	DyLight™ 549
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	3.6
Specific Activity:	5.1

Target Details

Reactivity:	V5-Tag

Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding aa 95-108 (G-K-P-I-P-N-P-L-L-G-L-D-S-T) of the V protein conjugated to KLH using maleimide.
Purity/Specificity:	This affinity purified antibody is directed against the V5 epitope tag and is useful in determining its presence in over expressed proteins in various assays. The antibody recognizes the V5 epitope tag (Gly-Lys-Pro-Ile-Pro-Asn-Pro-Leu-Leu-Gly-Leu-Asp-Ser-Thr) fused to either the amino- or carboxy- termini of targeted proteins in transfected or transformed cells.

Application Details

Suggested Applications:	EM, IF, IHC, Multiplex (Based on references)
Application Note:	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. 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 - 1:25,000

Formulation

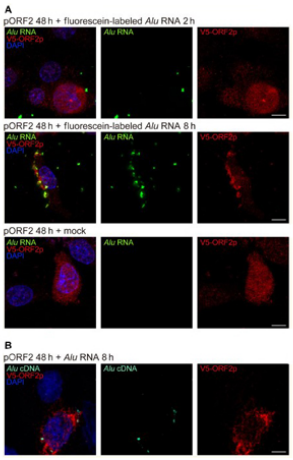
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

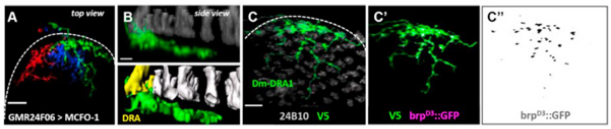
Shipping Condition:	Ambient

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



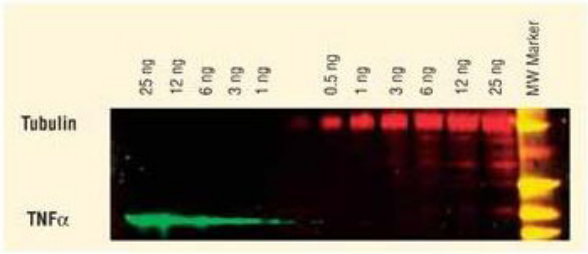
Immunofluorescence Microscopy
Immunofluorescence of Anti-V5 Epitope Tag Antibody DyLight™549 Conjugated.
Colocalization of L1 ORF2p, Alu RNA, and Alu cDNA. (A) Fluorescence imaging of O. palustris RPE cells coexpressing ORF2p-V5 (detected by anti-V5 antibody, red) and fluorescein-labeled Alu RNA (transfected 48 hours after V5-ORF2 transfection, green). Images were acquired 2 and 8 hours after Alu RNA transfection. Note the diffuse localization of ORF2p-V5 and punctate foci of fluorescein-Alu RNA after 2 hours and cytoplasmic colocalization of multiple punctate foci 8 hours after Alu RNA transfection. ORF2p-V5 localization remained diffuse in the absence of transfected fluorescein-Alu RNA (mock, bottom). (B) In situ hybridization of O. palustris RPE cells shows coexpression of V5-ORF2 (red) and Alu cDNA (teal), detected by an Alu cDNA specific probe (48 hours after V5-ORF2 transfection and 8 hours after Alu RNA transfection). Note the cytoplasmic colocalization of ORF2p-V5 (red) and Alu cDNA at 8 hours after Alu RNA transfection. DAPI, blue. Scale bars, 10 µm.
Fig. 5. PMID: 34586848.



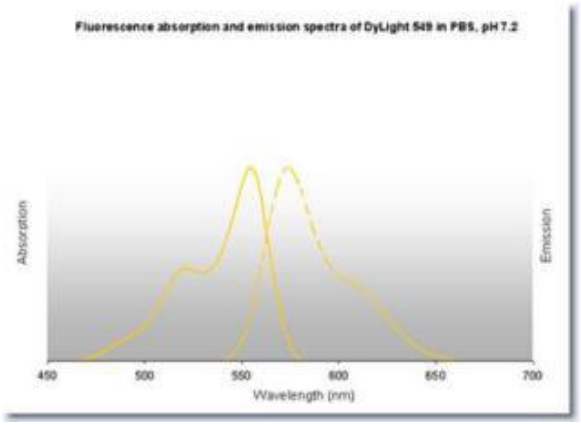
Immunofluorescence Microscopy
Immunofluorescence of Anti-V5 Epitope Tag Antibody DyLight™549 Conjugated.
Morphology of Modality-Specific Dm-DRA1 Cells at the Dorsal Edge of the Medulla.
(A) Adult whole-mounted brain with MCFO using Dm8-specific driver GMR24F06-Gal4 containing two clones touching the dorsal edge of the medulla (red cell and green cell). Dashed line is showing the edge of medulla.
(B) Top: side view of green cell from (A). Note photoreceptor contacts are restricted to DRA photoreceptors (yellow in surface view, bottom), whereas contacts with non-DRA photoreceptors (gray) are avoided, resulting in deep projections of the Dm-DRA1 cell penetrating the medulla centripetally, below the photoreceptors.
(C) Single-cell clone of a polar Dm-DRA1 cell (green) co-labeled with UAS-brpD3::GFP (purple), revealing presynaptic sites across the cellular surface, including the deep projections.
Scale bars, 15 µm in (A); 5 µm in (B), 7 µm in (C). Figure 2, PMID: 31402302.

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



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-TNFa was detected using a DyLight™ 649 conjugate. The image was captured using the Typhoon™ 9410 Imaging System.



Diagram

References

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