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Datasheet for 610-442-043

Mouse IgG3 (Gamma 3 chain) Antibody DyLight™ 549 Conjugated

Overview

Description:	Rabbit Anti-Mouse IgG3 (Gamma 3 chain) Antibody DyLight™ 549 Conjugated - 610-442-043
Item No.:	610-442-043
Size:	100 µg
Applications:	IF, Multiplex
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Anti-Mouse IgG3 DyLight 549 Antibody generated in rabbit detects reactivity to Mouse IgG3 (Gamma 3 chain). Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. IgG3 comprises almost 10% of the IgG subclass and has a high affinity for binding to the Fc receptor of phagocytic cells. 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.
Synonyms:	Rabbit Anti-Mouse IgG3 (Gamma 3 chain) DyLight 549™ Conjugated Antibody, Rabbit Anti Mouse IgG3 Antibody DyLight 549™ Conjugation
Host Species:	Rabbit
Specificity:	IgG3
Conjugate:	DyLight™ 549
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	3.1

Target Details

Reactivity:	Mouse

Immunogen:	Mouse IgG3 heavy chain
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using antigens 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-Rabbit Serum, Mouse IgG and Mouse Serum. Minimal cross reactivity was noted against other Mouse immunoglobulin classes or subclasses.

Application Details

Suggested Applications:	IF, 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

Formulation

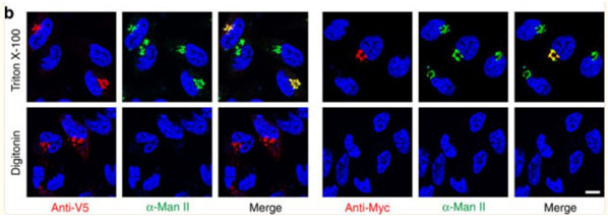
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution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



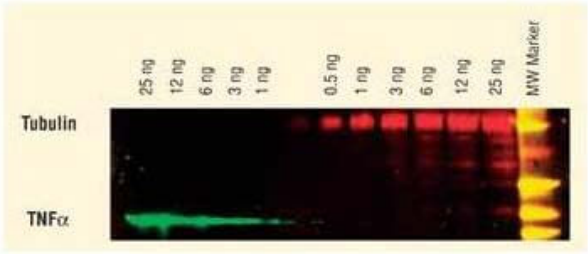
Immunofluorescence Microscopy
Homology modelling and topology of human CASD1. (b) Orientation of the N- and C-terminus of CASD1. LM-TK− cells expressing CASD1 with an N-terminal V5-tag and a C-terminal Myc-tag (V5-CASD1-Myc) were fixed and permeabilized with Triton X-100 (0.2%) or digitonin (5 µg ml−1). Cells were stained with anti-V5 or anti-Myc mAb (red) in combination with anti-α-mannosidase II (α-Man II) pAb (green) recognizing the luminal domain of the Golgi marker α-Man II. Nuclei were counterstained with DAPI (blue). Figure 1. PMID: 26169044.

Diagram
Properties of DyLight™ Conjugates.

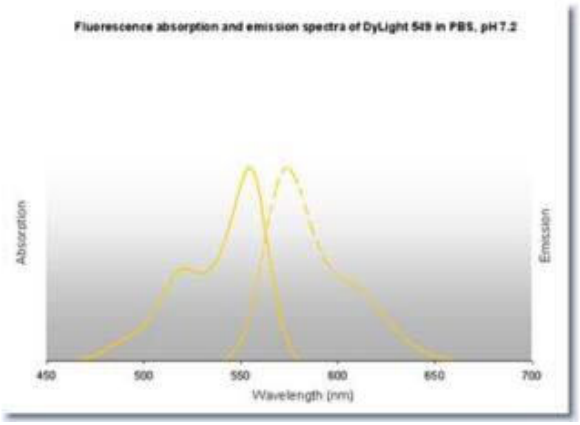
Emission	Color	DyLight™ Dye	Ex/Em (nm)	ε (M^{-1} cm^{-1})	Similar Dyes
Blue		**405**	**400/420**	**30,000**	**Alexa™ 405, Cascade Blue**
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®,TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		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™ 549 conjugate. Anti-TNFa was detected using a DyLight™ 649 conjugate. The image was captured using the Typhoon™ 9410 Imaging System.



Diagram



References

- Albers M et al. Interplay of SLC33A1-dependent and -independent Golgi sialic acid O-acetylation in CASD1 catalysis. *Nat Commun.* (2026)
- Baumann et al. 9-O-Acetylation of sialic acids is catalysed by CASD1 via a covalent acetyl-enzyme intermediate. *Nature Communications* (2015)

Disclaimer

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