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Datasheet for 610-141-007

Mouse IgM (mu chain) Antibody DyLight™ 488 Conjugated

Overview

Description:	Goat Anti-Mouse IgM (mu chain) Antibody DyLight™ 488 Conjugated - 610-141-007
Item No.:	610-141-007
Size:	100 µg
Applications:	IHC, Multiplex, Other
Reactivity:	Mouse
Host Species:	Goat

Product Details

Background:	Anti-Mouse IgM DyLight antibody specifically detects mouse IgM. Immunoglobulin M is the largest antibody isotype and the first to be secreted against an initial exposure to antigen. IgM is predominantly produced in the spleen. Formed from covalently linking 5 immunoglobulins together, the approximate molecular weight of IgM is 900kDa and possesses 10 binding sites (though due to the size of most antigens, not all sites are capable of binding at once). Due to this large size, IgM is typically isolated to the serum. Anti-Mouse IgM antibody is ideal for investigators in Immunology, Microbiology, and Cell Biology.
Synonyms:	Goat Anti-Mouse IgM (mu chain) Antibody DyLight 488™ Conjugated, Goat Anti Mouse IgM mu chain DyLight 488™ Conjugated Antibody
Host Species:	Goat
Specificity:	IgM µ chain
Conjugate:	DyLight™ 488
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	4.0

Target Details

Reactivity:	Mouse
Immunogen:	Mouse IgM whole molecule

Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse IgM 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-Goat Serum, Mouse IgM and Mouse Serum. No reaction was observed against other mouse heavy or light chain proteins.

Application Details

Suggested Applications:	IHC, Multiplex, Other (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.
FLISA:	>1:20,000
IF:	>1:5,000
WB:	>1:10,000

Formulation

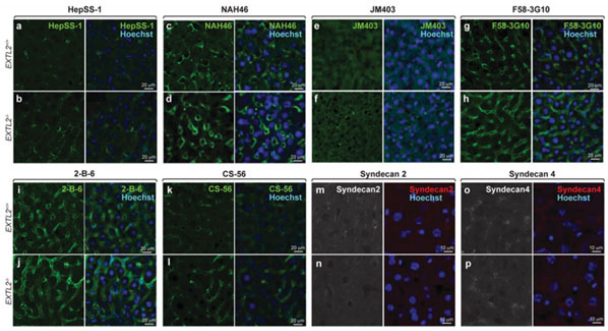
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution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

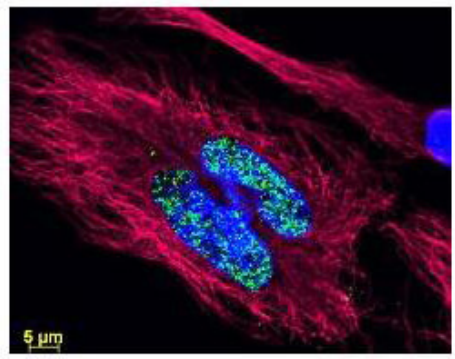
Images



Immunohistochemistry
Comparison between EXTL2 + / + and EXTL2 − / − mice with regard to the expression and localization of GAGs and SDCs Liver sections (Vibratome, 30 µm/slice) before administration of CCl4 were stained with various antibodies against GAGs. HepSS-1 (a and b), NAH46 (c and d) and JM403 (e and f) recognize HS structures, -[GlcUAβ1-4GlcNSα1-4]n-, -[GlcUAβ1-4GlcNAcα1-4]n- and -[GlcUAβ1-4GlcNH2α1-4]n- respectively. F58-3G10 (g and h) recognizes HS neo-epitope generated by digesting HS with heparitinese. 2-B-6 (iand j) recognizes 4-O-sulfated CS neo-epitope generated by digesting CS with CSase ABC; CS-56 (k and l) recognizes CS structures, -[GlcUAβ1-3GalNAc(6-O-sulfate)β1-4]n-; SDC2 (m and n), SDC4 (o and p). The following secondary antibodies were used to detect primary antibodies: Alexa Fluor® 594 donkey anti-rabbit IgG (H + L) [1:400], goat anti-mouse IgM (µ chain) antibody DyLight™ 488 conjugated [1:400] (p/n 610-141-007), and AffiniPure Fab Fragment goat anti-mouse IgG (H + L) DyLight™ 488 conjugated [1:250]. Figure 4. PMID: 23734945.

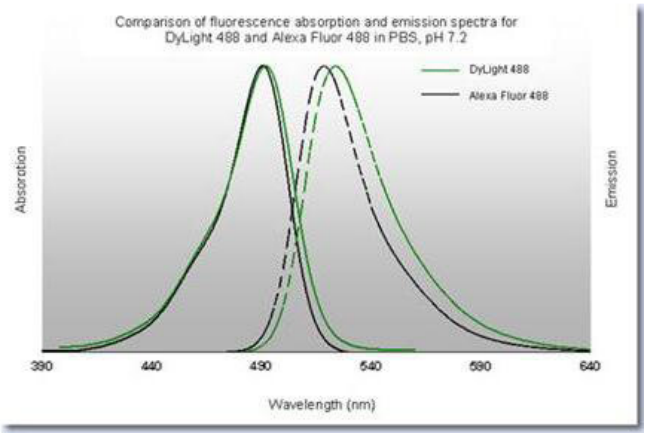
Emission	Color	DyLight™ Dye	Ex/Em (nm)	ε (M^{-1} cm^{-1})	Similar Dyes
Blue		**405**	**400/420**	**30,000**	**Alexa™ 405, Cascade Blue**
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®,TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	140,000	Alexa™ 680, Cy5.5®, IRDye™ 700
Infrared		800	770/794	270,000	IRDye™ 800

Diagram
Properties of DyLight™ Fluorescent Dyes.



Immunofluorescence Microscopy
DyLight™ dyes can be used for multi-color immunofluorescence microscopy with uniform fluorescence intensity throughout the image. DyLight™ dyes are exceptionally bright and photostable and are optimized for microscopy and microarray detection methods. This image shows anti-histone detection using a DyLight™ 488 conjugate (green). Anti-tubulin was detected using a DyLight™ 549 conjugate (red). Nuclei were counter-stained using DAPI (blue). The image was captured using an Axio Imager.Z1 (Zeiss Micro Imaging Inc).

Diagram



References

- Nadanaka S et al. Roles of EXTL2, a member of the EXT family of tumour suppressors, in liver injury and regeneration processes. *Biochem J.* (2013)

Disclaimer

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