

Labeled Goat Anti–Mouse IgM Antibodies

Table 1. Contents and storage information.

Material	Amount	Concentration	Storage	Stability *
Alexa Fluor® dye and DSB-X™ biotin conjugates	250 µL	2 mg/mL in 0.1 M sodium phosphate, 0.1 M NaCl, pH 7.5, 5 mM sodium azide	<ul style="list-style-type: none"> • Store undiluted • 2–6°C • Protect from light • Avoid repeated freezing and thawing 	When stored as directed, products are stable for at least 3 months.
Allophycocyanin (APC) and R-phycoerythrin (RPE) conjugates		1 mg/mL in 0.1 M sodium phosphate, 0.1 M NaCl, pH 7.5, 5 mM sodium azide		
* For longer storage, divide the solution into single-use aliquots and freeze at ≤–20°C. Frozen aliquots are stable for at least six months. AVOID REPEATED FREEZING AND THAWING.				
Degree of labeling: Typically 3–8 fluorophore or biotin molecules per antibody; the exact degree of labeling is indicated on the product label.				
Approximate fluorescence excitation/emission maxima: See Table 2.				

Introduction

Invitrogen's Molecular Probes™ goat anti–mouse IgM conjugates (Table 2) are prepared from antibodies purified by mouse IgM–affinity chromatography. The antibodies react specifically with IgM heavy chains (µ chains) and not with immunoglobulin light chains. To minimize cross-reactivity, the goat anti–mouse IgM antibodies have been adsorbed against human IgM prior to labeling.

In addition to the antibodies listed in this product manual, Invitrogen prepares conjugates of many species-specific anti–IgG antibodies, as well as conjugates of avidin, streptavidin, NeutrAvidin™ biotin-binding protein, protein A, and protein G. Refer to www.invitrogen.com or contact Technical Support for more information about these products.

At the time of preparation, the products are certified to be free of unconjugated label.

Table 2. Invitrogen's labeled goat anti-mouse IgM antibodies.*

Catalog #	Label	Ex †	Em †
A31552	Alexa Fluor® 350	346	442
A21042	Alexa Fluor® 488	495	519
A21045	Alexa Fluor® 546	556	573
A21426	Alexa Fluor® 555	555	565
A21043	Alexa Fluor® 568	578	603
A21044	Alexa Fluor® 594	590	617
A21046	Alexa Fluor® 633 ‡	632	647
A21238	Alexa Fluor® 647 ‡	650	668
A21048	Alexa Fluor® 680 ‡	679	702
A10688	allophycocyanin	650	660
A10689	R-phycoerythrin (RPE)	496	578
A10690 §	R-phycoerythrin (RPE)	496	578
D20693	DSB-X™ biotin	NA	NA

* These goat anti-mouse IgM antibodies have been adsorbed against human IgG₁, IgG_{2a}, IgG_{2b}, IgG₃, IgA, human serum and purified human para-proteins to minimize cross-reactivity. † Approximate fluorescence excitation (Ex) and emission (Em) maxima, in nm. ‡ Human vision is insensitive to light beyond ~650 nm, and therefore it is not possible to view the fluorescence of the Alexa Fluor® 633, 647, and 680 dyes by looking through a conventional fluorescence microscope. § F(ab)₂ fragment.

Guidelines for Use

It is a good practice to centrifuge the protein conjugate solution briefly in a microcentrifuge before use; only the supernatant should then be added to the experiment. This step eliminates any protein aggregates that may form during storage, and reduces nonspecific background staining.

Because staining protocols vary with application, the appropriate dilution of antibody should be determined empirically. For these labeled antibodies, a final concentration of 1–10 µg/mL should be satisfactory for most immunohistochemical applications.¹

Reference

1. Short Protocols in Molecular Biology, 2nd Edition, F.M. Ausubel et al., Eds., John Wiley and Sons (1992) pp. 14-24–14-30.

Product List Current prices may be obtained from our website or from our Customer Service Department.

Cat #	Product Name	Unit Size
A31552	Alexa Fluor® 350 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
A21042	Alexa Fluor® 488 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
A21045	Alexa Fluor® 546 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
A21426	Alexa Fluor® 555 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
A21043	Alexa Fluor® 568 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
A21044	Alexa Fluor® 594 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
A21046	Alexa Fluor® 633 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
A21238	Alexa Fluor® 647 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
A21048	Alexa Fluor® 680 goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL
D20693	DSB-X™ biotin goat anti-mouse IgM (µ chain) *2 mg/mL*	250 µL

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