

## Labeled Donkey Anti-Goat IgG Antibodies

**Table 1** Contents and storage

Material	Amount	Concentration	Storage	Stability
Labeled donkey anti-goat IgG (H +L) antibodies	0.5 mL	2 mg/mL solution in 0.1 M sodium phosphate, 0.1 M NaCl, pH 7.5, containing 5 mM sodium azide	<ul style="list-style-type: none"> <li>• 2–8°C *</li> <li>• Protect from light</li> </ul>	When stored as directed, products are stable for at least 3 months.
* For longer storage, divide the solution into single-use aliquots and freeze at ≤–20°C. Frozen aliquots are stable for at least 6 months. Avoid repeated freezing and thawing.				
<b>Degree of Labeling:</b> Typically 2–8 fluorophore or biotin molecules per IgG molecule; the exact degree of labeling is indicated on the certificate of analysis for each product lot.				
<b>Approximate fluorescence excitation and emission maxima:</b> See Table 2, page 2.				

### Introduction

Molecular Probes' donkey anti-goat IgG antibody conjugates (Table 2, page 2) are prepared from affinity-purified antibodies that react with IgG heavy chains and all classes of immunoglobulin light chains from goat. To minimize cross-reactivity, the donkey anti-goat IgG antibodies have been adsorbed against rabbit, mouse, rat, and human IgG prior to labeling. These antibodies have been conjugated to either DSB-X™ biotin, a reversible form of biotin, or one of our excellent Alexa Fluor® dyes. The approximate fluorescence excitation and emission maxima for each of the conjugates are shown in Table 2, page 2. For Qdot® nanocrystal conjugates of donkey anti-goat IgG antibodies, see Table 3, page 2.

In addition to the secondary antibodies described in this manual, Molecular Probes offers fluorescent conjugates of many other species-specific anti-IgG antibodies, as well as conjugates of avidin, streptavidin, NeutrAvidin® biotin-binding protein, protein A, and protein G. For more information about these products, refer to our website at [www.lifetechnologies.com](http://www.lifetechnologies.com) or contact Technical Support.

At the time of preparation, the products are certified to be free of unconjugated label and are tested in an immunofluorescence experiment to ensure low non-specific staining.

**Table 2** Labeled donkey anti-goat IgG antibodies\*

Catalog no.	Label	Ex (nm) †	Em (nm) †
D20698	DSB-X™ biotin	NA	NA
A21081	Alexa Fluor® 350	346	442
A11055	Alexa Fluor® 488	495	519
A11056	Alexa Fluor® 546	556	573
A21432	Alexa Fluor® 555	555	565
A11057	Alexa Fluor® 568	578	603
A11058	Alexa Fluor® 594	590	617
A21082	Alexa Fluor® 633	632	647
A21447	Alexa Fluor® 647‡	650	668
A21083	Alexa Fluor® 660‡	663	690
A21084	Alexa Fluor® 680‡	679	702
A11370	Alexa Fluor® 790‡	784	814

\* These donkey anti-goat IgG antibodies have been adsorbed against rabbit, mouse, rat, and human IgG to minimize crossreactivity. † 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 these dyes by looking through a conventional fluorescence microscope.

**Table 3** Qdot® conjugates of donkey anti-goat IgG antibodies

Catalog no.	Label	Ex *	Em *
Q22072	Qdot® 525	<525	525
Q22075	Qdot® 565	<565	565
Q22078	Qdot® 585	<585	585
Q22081	Qdot® 605	<605	605
Q22084	Qdot® 625	<625	625
Q22087	Qdot® 655	<655	655

\* Qdots are excitable (Ex, in nm) at any wavelength below their emission maxima (Em, in nm). For most practical applications, they should be excited at wavelengths below 450 nm. For additional information, refer to the product manual "Qdot® Streptavidin Conjugates", available at [www.lifetechnologies.com/manuals](http://www.lifetechnologies.com/manuals).

## 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 will eliminate any protein aggregates that may have formed during storage, thereby reducing non-specific background staining.

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

Alexa Fluor® 680 and Alexa Fluor® 790 IgG conjugates have been validated for fluorescent western detection and are compatible with most standard fluorescent western instrumentation. They are amenable to standard western blot fluorescent detection protocols and can be used in single or multicolored experiments. For more information, refer to the technical note: Multicolored western detection using Alexa Fluor® secondary antibodies, available for downloading at [www.lifetechnologies.com](http://www.lifetechnologies.com) or by contacting Technical Support.

## Reference

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1. *Short Protocols in Molecular Biology, 2<sup>nd</sup> 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.

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Cat #	Product Name	Unit Size
A21081	Alexa Fluor® 350 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A11055	Alexa Fluor® 488 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A11056	Alexa Fluor® 546 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A21432	Alexa Fluor® 555 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A11057	Alexa Fluor® 568 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A11058	Alexa Fluor® 594 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A21082	Alexa Fluor® 633 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A21447	Alexa Fluor® 647 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A21083	Alexa Fluor® 660 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A21084	Alexa Fluor® 680 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
A11370	Alexa Fluor® 790 donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL
D20698	DSB-X™ biotin donkey anti-goat IgG (H+L) *2 mg/mL*	0.5 mL

Visit [www.lifetechnologies.com/antibody](http://www.lifetechnologies.com/antibody) for details on antibody research reagents and tools.

# Purchaser Notification

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## Corporate Headquarters

5791 Van Allen Way  
Carlsbad, CA 92008  
USA  
Phone: +1 760 603 7200  
Fax: +1 760 602 6500  
Email: techsupport@lifetech.com

## European Headquarters

Inchinnan Business Park  
3 Fountain Drive  
Paisley PA4 9RF  
UK  
Phone: +44 141 814 6100  
Toll-Free Phone: 0800 269 210  
Toll-Free Tech: 0800 838 380  
Fax: +44 141 814 6260  
Tech Fax: +44 141 814 6117  
Email: euroinfo@invitrogen.com  
Email Tech: eurotech@invitrogen.com

## Japanese Headquarters

LOOP-X Bldg. 6F  
3-9-15, Kaigan  
Minato-ku, Tokyo 108-0022  
Japan  
Phone: +81 3 5730 6509  
Fax: +81 3 5730 6519  
Email: jpinfo@invitrogen.com

Additional international offices are listed at  
[www.lifetechnologies.com](http://www.lifetechnologies.com)

These high-quality reagents and materials must be used by, or directly under the supervision of, a technically qualified individual experienced in handling potentially hazardous chemicals. Read the Safety Data Sheet provided for each product; other regulatory considerations may apply.

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