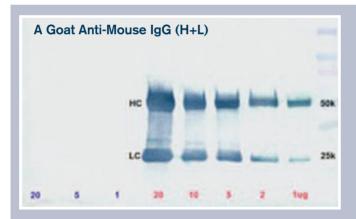
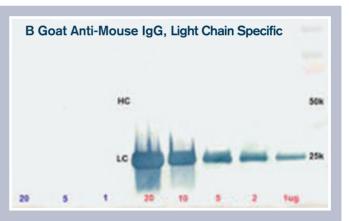


Specializing in Secondary Antibodies and Conjugates

Anti-IgG, Light Chain Specific for Western Blotting after Immunoprecipitation

When labeled secondary antibodies specific for both heavy and light chains of IgG, e.g. anti-IgG (H+L), are used to detect protein bands on Western blots following immunoprecipitation (IP), two heavy bands appear (Figure A) corresponding to the heavy (50 kDa) and light chains (25 kDa) of the precipitated primary antibody. These bands usually obscure detection of any protein of interest with a molecular weight near 50 kDa or 25 kDa. However, when labeled anti-IgG, **Light Chain Specific** antibodies are used for detection, they bind only to the light chain band on the blot (Figure B) and to light chains on the native primary antibodies used for detection. Therefore, a 50 kDa protein may be detected on blots without interference from the precipitated IgG in the same band by incubation with its unlabeled primary antibody followed by labeled anti-IgG, **Light Chain Specific**. Similarly, a 25 kDa protein may be detected after IP without interference by using its unlabeled primary antibody followed by labeled anti-IgG, Fc fragment specific.





Figures A+B. Heavy (50 kDa) and light (25 kDa) chains of reduced and SDS-denatured mouse IgG were separated by SDS-PAGE and detected on Western blots using HRP-goat anti-mouse IgG (H+L) (A) and HRP-goat anti-mouse IgG, LC specific (B). Both heavy and light chain bands were detected with anti-IgG (H+L) (A). However, no heavy chain band was detected when anti-IgG, LC specific antibodies were used (B) even on lanes heavily overloaded with IgG.

Anti-IgG, **Light Chain Specific** antibodies also have been thoroughly adsorbed to minimize cross-reactivity with immunoglobulins from other species which may be present on blots.

Although the antibodies react strongly with *native* IgG light chains, some do not react as strongly with *reduced* and *denatured* light chains. Therefore, they are not recommended for sensitive detection and quantitation of reduced and denatured light chains on Western blots.

www.jacksonimmuno.com

Tel: 800-367-5296 Fax: 610-869-0171 Email:cuserv@jacksonimmuno.com



Table of Anti-IgG, Light Chain Specific Antibodies for Western Blotting after IP

Antibody Description	Unconjugated	Alexa Fluor® 488 A=493, E=519	Cyanine Cy3 A=550, E=570	Alexa Fluor® 594 A=591, E=614	Alexa Fluor® 647 A=651, E=667	Biotin-SP (long spacer)	Horseradish Peroxidase	Alkaline Phosphatase
IgG Fraction Monoclonal Mouse Anti-Goat † IgG, Light Chain Specific (min X Hrs, Hu, Ms, Rb, Rat Ig)	1.0 mg 205-002-176	0.5 mg 205-542-176	0.5 mg 205-162-176	0.5 mg 205-582-176	0.5 mg 205-602-176	0.5 ml 205-062-176	0.5 ml 205-032-176	0.5 ml 205-052-176
AffiniPure Goat Anti- Mouse IgG Light Chain* Specific (min X Bov, Gt, Hrs, Hu,Rb, Rat, Shp Ig)	1.0 mg 115-005-174	0.5 mg 115-545-174	0.5 mg 115-165-174	0.5 mg 115-585-174	0.5 mg 115-605-174	0.5 ml 115-065-174	0.5 ml 115-035-174	0.5 ml 115-055-174
IgG Fraction Monoclonal Mouse Anti-Rabbit IgG, Light Chain Specific (min X Bov, Gt, Arm Hms, Hrs, Hu, Ms, Rat, Shp Ig)	1.0 mg 211-002-171	0.5 mg 211-542-171	0.5 mg 211-162-171	0.5 mg 211-582-171	0.5 mg 211-602-171	0.5 ml 211-062-171	0.5 ml 211-032-171	0.5 ml 211-052-171
AffiniPure Goat Anti-Rat IgG, Light Chain* Specific (min X Bov, Gt, Hrs, Hu, Ms, Rb, Shp Ig)	1.0 mg 112-005-175	0.5 mg 112-545-175	0.5 mg 112-165-175	0.5 mg 112-585-175	0.5 mg 112-605-175	0.5 ml 112-065-175	0.5 ml 112-035-175	0.5 ml 112-055-175
IgG Fraction Monoclonal Mouse Anti-Sheep IgG, Light Chain Specific (min X Bov, Hrs, Hu, Ms, Rb, Rat Ig)	1.0 mg 213-002-177	0.5 mg 213-542-177	0.5 mg 213-162-177	0.5 mg 213-582-177	0.5 mg 213-602-177	0.5 ml 213-062-177	0.5 ml 213-032-177	0.5 ml 213-052-177

Table of Alexa Flour® 680 and 790 Conjugates for High Sensitivity

Antibody Description	Alexa Fluor® 680 A=684, E=702	Alexa Fluor® 790 A=792, E=803
IgG Fraction Monoclonal Mouse Anti-Goat † IgG, Light Chain Specific (min X Hrs, Hu, Ms, Rb, Rat Ig)	0.3 mg 205-622-176	0.3 mg 205-652-176
AffiniPure Goat Anti- Mouse IgG Light Chain* Specific (min X Bov, Gt, Hrs, Hu,Rb, Rat, Shp Ig)	0.3 mg 115-625-174	0.3 mg 115-655-174
IgG Fraction Monoclonal Mouse Anti-Rabbit IgG, Light Chain Specific (min X Bov, Gt, Arm Hrns, Hrs, Hu, Ms, Rat, Shp Ig)	0.3 mg 211-622-171	0.3 mg 211-652-171
AffiniPure Goat Anti-Rat IgG, Light Chain* Specific (min X Bov, Gt, Hrs, Hu, Ms, Rb, Shp Ig)	0.3 mg 112-625-175	0.3 mg 112-655-175
IgG Fraction Monoclonal Mouse Anti-Sheep IgG, Light Chain Specific (min X Bov, Hrs, Hu, Ms, Rb, Rat Ig)	0.3 mg 213-622-177	0.3 mg 213-652-177

- † Warning: BSA and dry milk may contain IgG which will react with this antibody. Use of BSA and/or dry milk to block or dilute this antibody may increase background and/or reduce secondary antibody titer.
- * This antibody reacts primarily with kappa light chains. It is not suitable for detection of primary antibodies with lambda light chains.

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Jackson ImmunoResearch Laboratories Inc.

872 West Baltimore Pike | West Grove | PA USA 19390



www.jacksonimmuno.com

Tel: 800-367-5296 Fax: 610-869-0171 Email:cuserv@jacksonimmuno.com