Jackson ImmunoResearch LABORATORIES, INC.

Specializing in **Secondary Antibodies** and **Conjugates**

Bovine Anti-Goat IgG (H+L)

Bovine serum albumin (BSA) and dry milk are used extensively for blocking non-specific binding of antibodies and for stabilizing antibodies and other proteins during freeze drying and in dilute solutions. However, dry milk and most commercial sources of BSA contain bovine IgG which interferes with the use of any anti-goat IgG (as well as anti-sheep IgG) secondary antibodies. When BSA or dry milk are used for blocking, any bovine IgG which binds to a tissue or substrate will be labeled by anti-goat IgG. This background may lead to false interpretations or needless repetition of experiments. Similarly, BSA and dry milk in antibody diluents may form immune complexes between the bovine IgG and anti-goat IgG, thus lowering antibody titer and creating background from unbound bovine IgG remaining in the diluent. Also, bovine IgG bound to cells after they are cultured in media containing fetal calf serum may result in background labeling on cell surfaces and on Western blots of cell lysate proteins.

The reason for this problem is the close phylogenetic relationship between cows and goats. Anti-goat IgG reacts so completely with bovine IgG that it is economically unfeasible to create by solid phase adsorption an anti-goat IgG antibody which does not cross-react with bovine IgG. Our new bovine anti-goat IgG (H+L) was created by immunizing a cow host with goat IgG. By recognizing only non-self epitopes on goat IgG, the host was able to produce anti-goat IgG which inherently had minimal reactivity for bovine IgG.

Blocking with 5% normal serum from the host species of the secondary antibody, instead of BSA or dry milk, is still recommended as the most efficient block. However, our new bovine anti-goat IgG (H+L) antibodies listed in the tables below will be useful for all applications in which goat primary antibodies must be selectively labeled in the presence of bovine IgG. The antibody has been extensively adsorbed to minimize cross-reaction with many other species for multiple labeling experiments, and to reduce backgound labeling of tissue associated immunoglobulins in those species.

Antibody Description		Unconjugated	DyLight 405 A=400, E=421	Coumarin AMCA A=350, E=450	Alexa Fluor® 488 A=493, E=519	Fluorescein FITC A=492, E=520	Cyanine Cy3 A=550, E=570	Rhodamine TRITC A=550, E=570
Bovine Anti-Goat IgG (H+L) (min X Bov, Ck, GP, Sy Ham, Hrs, Hu, Ms, Rb, Rat Sr Prot)	ML*	1.0 mg 805-005-180	0.5 mg 805-475-180	0.5 mg 805-155-180	0.5 mg 805-545-180	0.5 mg 805-095-180	0.5 mg 805-165-180	0.5 mg 805-025-180

Antibody Description		Rhodamine Red-X RRX A=570, E=590	Alexa Fluor® 594 A=591, E=614	Alexa Fluor® 647 A=651, E=667	Biotin-SP (long spacer)	Horseradish Peroxidase	Alkaline Phosphatase
Bovine Anti-Goat IgG (H+L) (min X Bov, Ck, GP, Sy Ham, Hrs, Hu, Ms, Rb, Rat Sr Prot)	ML*	0.5 mg 805-295-180	0.5 mg 805-585-180	0.5 mg 805-605-180	0.5 ml 805-065-180	0.5 ml 805-035-180	0.5 ml 805-055-180

* ML= Multiple Labeling (see Multiple Labeling at www.jacksonimmuno.com for an explanation).

www.jacksonimmuno.com

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

Certified by BSI to ISO 9001:2008 under certificate number FM 545248.

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