



Anti-RAT IgG (H&L) (GOAT) Antibody Biotin Conjugated - 612-1602

Code: 612-1602

Size: 2 mg

Product Description: Anti-RAT IgG (H&L) (GOAT) Antibody Biotin Conjugated - 612-1602

Concentration: 2.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Lyophilized

Label	Biotin
Host	Goat
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Reconstitution Volume	1.0 mL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Sodium Azide
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.
Synonyms	Goat anti-Rat IgG biotin Conjugated Antibody, Goat anti-Rat IgG Antibody biotin Conjugation
Application Note	Anti-RAT IgG Biotin Conjugated antibody is suitable for immunoassays where specificity to the Rat immunoglobulin heavy and or light chain regions is desired. Anti-Rat antibody has been assayed against 1.0 g of Rat IgG in a standard capture ELISA using Peroxidase Conjugated Streptavidin and ABTS (2,2'-azino-bis-[3-ethylbenzothiazoline-6-sulfonic acid]) as a substrate for 30 minutes at room temperature. A working dilution of 1:100,000 to 1:500,000 is suggested for this product. Optimal concentrations in immunoassays should be determined by the researcher.
Background	RAT IgG Biotin Conjugated antibody detects rat immunoglobulin G. Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the complement cascade, and opsinization for phagocytosis. The whole IgG molecule possesses both the F(c) region, recognized by high-affinity Fc receptor proteins, as well as the F(ab) region possessing the epitope-recognition site. Both the Heavy and Light chains of the antibody molecule are present. Secondary Antibodies are available in a variety of formats and conjugate types. When choosing a secondary antibody product, consideration must be given to species and immunoglobulin specificity, conjugate type, fragment and chain specificity, level of cross-reactivity, and host-species source and fragment composition.
Purity And Specificity	Anti-RAT IgG Biotin Conjugated antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Rat IgG coupled to agarose. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-biotin, anti-Goat Serum, Rat IgG and Rat Serum.
Assay Dilutions	User Optimized
ELISA	1:20,000 - 1:100,000
Western Blot	1:2,000 - 1:10,000
Immunohistochemistry	1:1,000 - 1:5,000
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	Rat IgG whole molecule
General Reference	Janeway CA, Jr. et al. (2001). Immunobiology. (5th ed.). Garland Publishing.

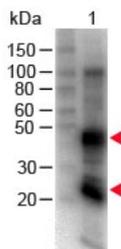
Related Products

112-1102	Anti-RAT IgG (H&L) (GOAT) Antibody - 112-1102
ABTS-100	ABTS ELISA PEROXIDASE SUBSTRATE - ABTS-100

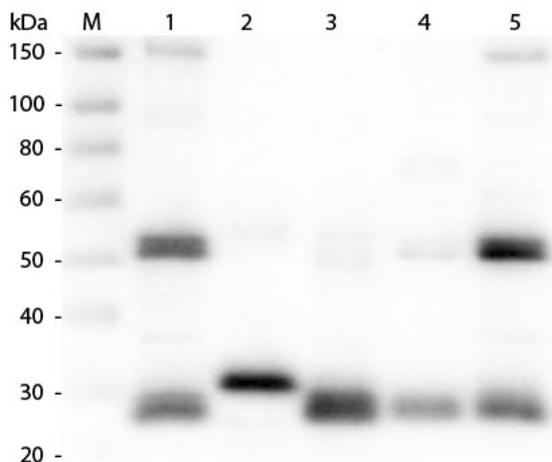
B304 NORMAL GOAT SERUM (NGS) - B304
 BSA-50 BOVINE SERUM ALBUMIN - Fraction V (Immunoglobulin and
 Protease Free) - BSA-50

Images

1 Western Blot of Goat anti-Rat IgG (H&L) Antibody Biotin Conjugated. Lane 1: Rat IgG. Load: 100 ng per lane. Primary antibody: Rat IgG (H&L) Antibody Biotin Conjugated at 1:1000 for 60 min RT. Secondary antibody: HRP Conjugated Streptavidin at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT.



2 Western Blot of Unconjugated Anti-Rat IgG (H&L) (GOAT) Antibody (p/n 612-1102). Lane M: 3 µl Molecular Ladder. Lane 1: Rat IgG whole molecule (p/n 012-0102). Lane 2: Rat IgG F(c) Fragment (p/n 012-0103). Lane 3: Rat IgG Fab Fragment (p/n 012-0105). Lane 4: Rat IgM Whole Molecule (p/n 012-0107). Lane 5: Rat Serum (p/n D310-05). All samples were reduced. Load: 50 ng per lane. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Rat IgG (H&L) (GOAT) Antibody (p/n 612-1102) 1:1,000 for 60 min at RT. Secondary Antibody: Anti-Goat IgG (DONKEY) Peroxidase Conjugated Antibody (p/n CUST10) 1:40,000 in MB-070 for 30 min at RT. Predicted/Observed Size: 25 and 55 kDa for Rat IgG and Serum, 25 kDa for F(c) and Fab, 78 and 25 kDa for IgM. Rat F(c) migrates slightly higher.



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