

Datasheet for 612-1102

Rat IgG (H&L) Antibody**Overview**

Description:	Goat Anti-Rat IgG (H&L) Antibody - 612-1102
Item No.:	612-1102
Size:	2 mg
Applications:	ELISA, WB, IHC
Reactivity:	Rat
Host Species:	Goat

Product Details**Background:**

Anti-RAT IgG (H&L) (GOAT) Antibody generated in goat detects specifically rat IgG whole molecule. 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 opsonization 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. Anti-rat IgG antibody is ideal for investigators involved in serum protein component research.

Synonyms:	Goat anti-rat IgG, Rat antibody, rat antibodies, immunoglobulin, Goat anti rat IgG
Host Species:	Goat
Specificity:	IgG (H&L)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Rat
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Immunogen:	Rat IgG whole molecule
Purity/Specificity:	Anti-RAT IgG (H&L) (GOAT) Antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Rat IgG coupled to agarose beads. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Rat IgG and Rat Serum.

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	IHC (Based on references)
Application Note:	Anti-RAT IgG (H&L) (GOAT) Antibody has been tested by ELISA and western blot and is suitable for Immunohistochemistry applications. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000-1:100,000
IHC:	1:1,000-1:5,000
WB:	1:2,000-1:10,000

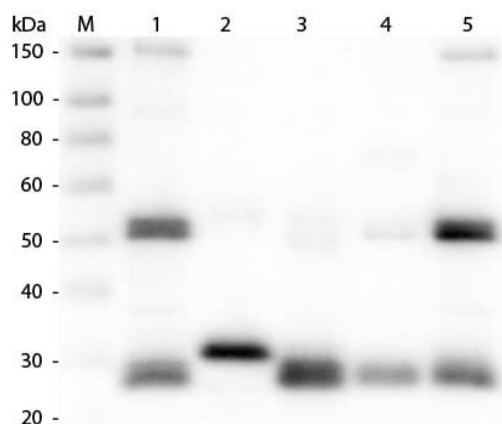
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	2.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C prior to opening. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Anti-Rat IgG (H&L) (GOAT) Antibody (p/n 612-1102). Lane M: 3 μ l 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.

References

- Scekcic-Zahirovic et al. Motor neuron intrinsic and extrinsic mechanisms contribute to the pathogenesis of FUS-associated amyotrophic lateral sclerosis. *Acta Neuropathologica* (2017)
- Viorela Pop et al. Early brain injury alters the blood-brain barrier phenotype in parallel with β -amyloid and cognitive changes in adulthood. *J Cereb Blood Flow Metab.* (2013)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.