Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 611-1102

Rabbit IgG (H&L) Antibody

Overview

Description:	Goat Anti-Rabbit IgG (H&L) Antibody - 611-1102
Item No.:	611-1102
Size:	2 mg
Applications:	Dot Blot, ELISA, WB, Biochemical Assay, FC, IHC, LFA, Purification
Reactivity:	Rabbit
Host Species:	Goat

Product Details

Background:	Anti-Rabbit IgG (H&L) Antibody generated in goat detects reactivity to Rabbit IgG. 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 compliment 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.
Synonyms:	goat anti-Rabbit IgG Antibody, goat anti Rabbit IgG
Host Species:	Goat
Specificity:	IgG (H&L)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Rabbit
Immunogen Type:	Native Protein

Immunogen:	Anti-Rabbit IgG (H&L) was produced by repeated immunization with rabbit whole IgG molecule in goat.
Purity/Specificity:	Rabbit Secondary Antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Rabbit IgG coupled to agarose beads. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Rabbit IgG and Rabbit Serum.

Application Details

Tested Applications:	Dot Blot, ELISA, WB
Suggested Applications:	Biochemical Assay, FC, IHC, LFA, Purification (Based on references)
Application Note:	Anti-Rabbit IgG (H&L) has been tested by ELISA, dot blot, and western blot. This antibody is suitable for use in immunoelectrophoresis, western-blot, competitive western-blot, ELISA and competitive ELISA assays. Specific conditions for reactivity and signal detection 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:	1:10,000 - 1:60,000
IF:	User Optimized
IHC:	1:500 - 1:2,500
IP:	User Optimized
WB:	1:1,000 - 1:5,000

Formulation

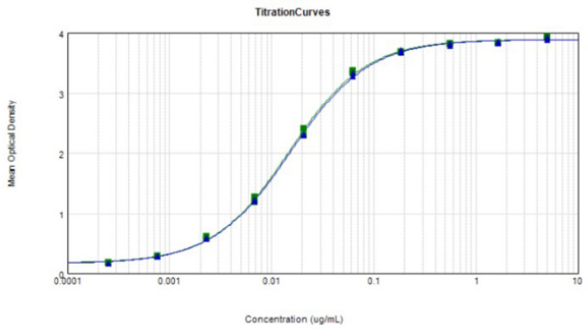
Physical State:	Liquid (sterile filtered)
Concentration:	2.20 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Shipping & Handling

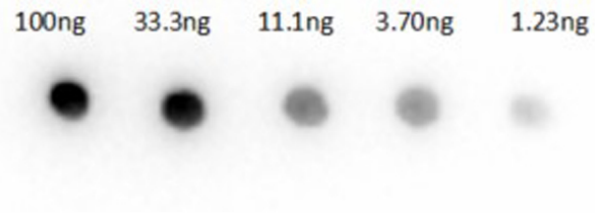
Shipping Condition:	Wet Ice
Storage Condition:	Store Rabbit Secondary Antibody at 4° C prior to opening. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.

Expiration: Expiration date is one (1) year from date of receipt.

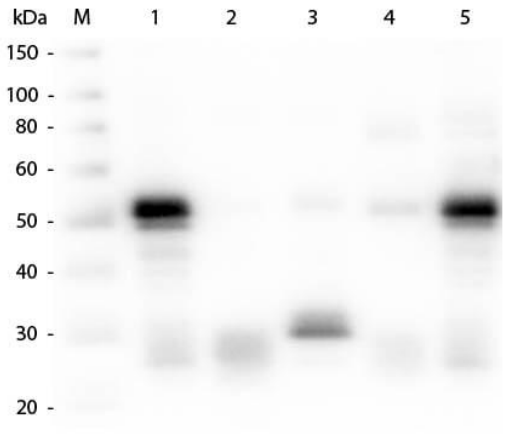
Images



ELISA
ELISA results of Goat Anti-Rabbit IgG Antibody tested against purified Rabbit IgG protein. Each well was coated in duplicate with 10 µg of Rabbit IgG (p/n 011-0102) [blue and green lines]. The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. The titer is 1:67,500. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% fish gelatin as blocking buffer, Donkey Anti-Goat IgG Peroxidase Conjugate (p/n 605-703-125), and TMB substrate (p/n TMBE-1000).



Dot Blot
Dot Blot Results of Goat Anti-Rabbit IgG Antibody.
Rabbit IgG (p/n 011-0102) samples loaded 100ng, 33.3ng, 11.1ng, 3.70ng, 1.23ng.
Primary Antibody: Goat Anti-Rabbit IgG Antibody at 1.0µg/mL for 60mins at RT.
Secondary Antibody: Donkey Anti-Goat IgG Peroxidase Conjugate at 1:40,000 for 30mins at RT.
BlockOut® - Universal Blocking Buffer (p/n MB-073) for 60mins at RT.



Western Blot
Western Blot of Anti-Rabbit IgG (H&L) (GOAT) Antibody (p/n 611-1102). Lane M: 3 µl Molecular Ladder. Lane 1: Rabbit IgG whole molecule (p/n 011-0102). Lane 2: Rabbit IgG F(ab) Fragment (p/n 011-0105). Lane 3: Rabbit IgG F(c) Fragment (p/n 010-0103). Lane 4: Rabbit IgM Whole Molecule (p/n 011 -0107). Lane 5: Normal Rabbit Serum (p/n B309). All samples were reduced. Load: 50 ng per lane. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Rabbit IgG (H&L) (GOAT) Antibody (p/n 611-1102) 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 50 kDa for Rabbit IgG and Serum, 25 kDa for F(c) and F(ab), 70 and 23 kDa for IgM. Rabbit F(c) migrates slightly higher.

References

- Yuanxiang Huang et al. Edaravone Dexborneol Downregulates Neutrophil Extracellular Trap Expression and Ameliorates Blood-Brain Barrier Permeability in Acute Ischemic Stroke. *Mediators Inflamm.* (2022)
- Saito S et al. Overexpressed angiotensin-converting enzyme in neutrophils suppresses glomerular damage in crescentic glomerulonephritis. *Am J Physiol Renal Physiol.* (2022)
- Chen Z, Zhang Z, Zhai X, et al. Rapid and Sensitive Detection of anti-SARS-CoV-2 IgG, Using Lanthanide-Doped Nanoparticles-Based Lateral Flow Immunoassay. *Anal Chem.* (2020)
- Li et al. Sesquiterpene lactone 6-O-angeloylplenolin reverses vincristine resistance by inhibiting YB-1 nuclear translocation in colon carcinoma cells. *Oncology Letters* (2018)
- Skytt et al. Glia-Neuron Interactions in the Retina Can Be Studied in Cocultures of Müller Cells and Retinal Ganglion Cells. *BioMed Research International* (2016)
- Konior A et al. Seasonal superoxide overproduction and endothelial activation in guinea-pig heart; seasonal oxidative stress in rats and humans. *J Mol Cell Cardiol.* (2011)

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.