

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

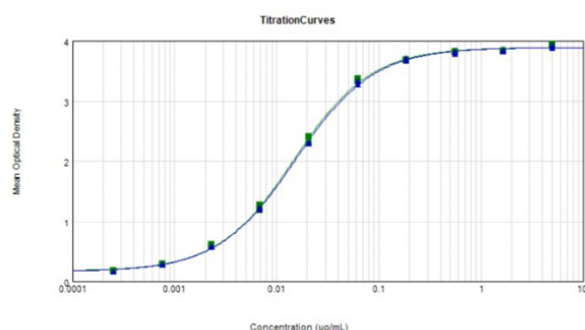
Physical State:	Liquid (sterile filtered)
Concentration:	2.20 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

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 5 µg/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.

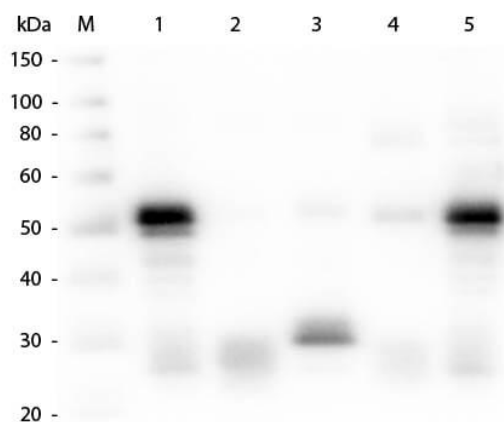
Primary Antibody: Goat Anti-Rabbit IgG Antibody at 1.0 µg/mL for 60mins at RT.

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.

100ng 33.3ng 11.1ng 3.70ng 1.23ng





Western Blot

Western Blot of Anti-Rabbit IgG (H&L) (GOAT) Antibody (p/n 611-1102). Lane M: 3 μ l 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

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- 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)
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- 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)
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