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Datasheet for 610-1102

Mouse IgG (H&L) Antibody

Overview

Description:	Goat Anti-Mouse IgG (H&L) Antibody - 610-1102
Item No.:	610-1102
Size:	2 mg
Applications:	ELISA, WB, LFA
Reactivity:	Mouse
Host Species:	Goat

Product Details

Background:	Anti-Mouse IgG Antibody generated in goat detects reactivity to Mouse 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. This unconjugated secondary antibody has been validated and optimized yielding good sensitivity and reproducible results with Rockland's primary antibodies.
Synonyms:	Goat anti-Mouse IgG Secondary Antibody, Mouse Secondary Antibody, GAM Antibody, Gt-a-Ms antibody, anti-mouse secondary, Goat anti Mouse IgG
Host Species:	Goat
Specificity:	IgG (H&L)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Mouse
Immunogen Type:	Native Protein
Immunogen:	Anti-Mouse IgG whole molecule was produced by repeated immunization with Mouse IgG whole molecule in goat.
Purity/Specificity:	Secondary Antibody Anti-Mouse IgG (H&L) was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse IgG coupled to agarose. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Mouse IgG and Mouse Serum.
Relevant Links:	• 610-1102 SDS

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	LFA (Based on references)
Application Note:	Anti-Mouse IgG affinity purified antibody is generated in goat detects specifically Mouse IgG whole molecule. This anti-Mouse IgG secondary antibody has been tested by ELISA and western blot and is ideal for investigators who routinely perform ELISA, Sandwich ELISA, titration assays, western-blot, immunoprecipitation and more generally immunoassays. 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:	1:25,000
FC:	User Optimized
FLISA:	User Optimized
IF:	User Optimized
IHC:	1:1,000 - 1:5,000
IP:	User Optimized
WB:	1:3,000 - 1:15,000

Formulation

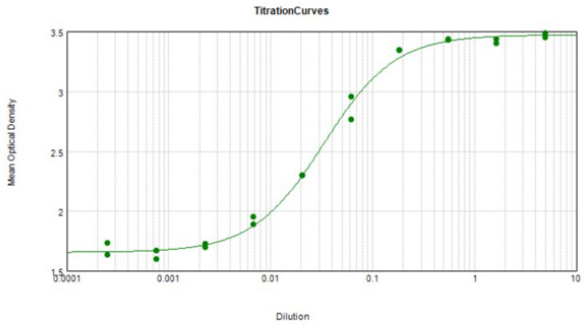
Physical State:	Liquid (sterile filtered)

Concentration:	2.01 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

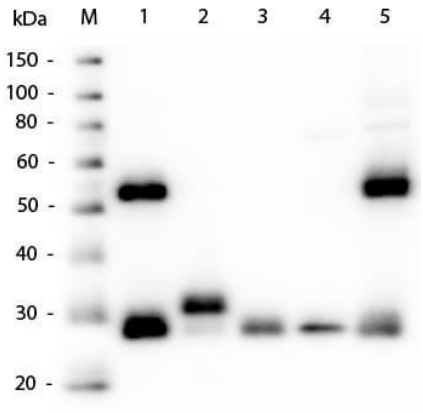
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store Anti-Mouse 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.

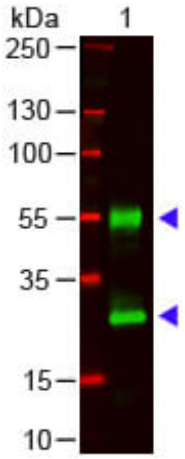
Images



ELISA
ELISA Results of Goat Anti-Mouse IgG Antibody tested against purified Mouse IgG protein. Each well was coated in duplicate with 1.0 µg of Mouse IgG (p/n 010-0102). The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. The titer is 1:35,800. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using Donkey Anti-Goat IgG Peroxidase Conjugate at 1:40,000 and TMB substrate p/n TMBE-1000.



Western Blot
Western Blot of Goat Anti-Mouse IgG (H&L) Antibody. Lane M: Molecular Ladder. Lane 1: Mouse IgG whole molecule (p/n 010-0102). Lane 2: Mouse IgG F(c) Fragment (p/n 010-0103). Lane 3: Mouse IgG F(ab) Fragment (010-0105). Lane 4: Mouse IgM Kappa (p/n 010-001-339). Lane 5: Mouse Serum (p/n D308). Load: 50ng per lane. Block: (p/n MB-070) for 30 min at RT. Primary Antibody: Anti-Mouse IgG (H&L) Antibody 1:1000 for 60 min at RT. Secondary antibody: HRP Donkey Anti-Goat IgG (p/n 605-703-125) at 1:40,000 for 30 min at RT . Predicted/Observed Size: 28 and 55 kDa for Mouse IgG, F (c), F(ab), IgM Kappa, and Serum. Mouse F(c) migrates slightly higher.



Western Blot
Western Blot of Goat anti-Mouse IgG (H&L) Antibody. Lane 1: Mouse IgG. Load: 100 ng per lane. Primary Antibody: Mouse IgG (H&L) Antibody 1:1000 overnight at 4°C. Secondary antibody: DyLight™ 800 goat secondary antibody at 1:20,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed Size: 28 and 55 kDa/28 and 55 kDa for Mouse IgG. Other band(s): none.

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)
- Latif MB et al. Relative contributions of the cGAS-STING and TLR3 signaling pathways to attenuation of herpes simplex virus 1 replication. *J Virol.* (2020)
- Seemann S, Ernst M, Cimmaruta C, et al. Proteostasis regulators modulate proteasomal activity and gene expression to attenuate multiple phenotypes in Fabry disease. *Biochem J.* (2020)
- Liu X et al. Acetate production from glucose and coupling to mitochondrial metabolism in mammals. *Cell.* (2018)
- Dian Widiyanti et al. Development of immunochromatography-based methods for detection of leptospiral lipopolysaccharide antigen in urine *Clin Vaccine Immunol.* (2013)
- Waldschmidt TJ et al. Abnormal T cell-dependent B-cell responses in SCID mice receiving allogeneic bone marrow in utero. Severe combined immune deficiency. *Blood.* (2002)
- Corstjens P. et al. Use of up-converting phosphor reporters in lateral-flow assays to detect specific nucleic acid sequences: a rapid, sensitive DNA test to identify human papillomavirus type 16 infection. *Clin Chem.* (2001)

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