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Datasheet for 610-4102

Mouse IgG (H&L) Secondary Antibody

Overview

Description:	Rabbit Anti-Mouse IgG (H&L) Antibody - 610-4102
Item No.:	610-4102
Size:	2 mg
Applications:	ELISA, EM, IHC, IP, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Anti-Mouse IgG Antibody generated in rabbit detects reactivity to Mouse IgG heavy and light chains. 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:	rabbit anti-Mouse IgG Antibody, rabbit anti-mouse IgG heavy and light chain antibody, rb anti-ms IgG heavy and light chain, Anti-Mouse Secondary Antibody, rabbit anti Mouse IgG Antibody
Host Species:	Rabbit
Specificity:	IgG (H&L)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Mouse

Immunogen:	Mouse IgG whole molecule
Purity/Specificity:	Anti-Mouse IgG (H&L) Antibody 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-Rabbit Serum, Mouse IgG and Mouse Serum.
Relevant Links:	• 610-4102 SDS

Application Details

Tested Applications:	ELISA
Suggested Applications:	EM, IHC, IP, WB (Based on references)
Application Note:	Anti-Mouse IgG Antibody has been tested by ELISA and is ideal for Western Blotting, Immunohistochemistry, ELISA as well as other antibody detection methods.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:400,000
IHC:	1:1,000 - 1:5,000
WB:	1:2,000 - 1:10,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	2.08 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

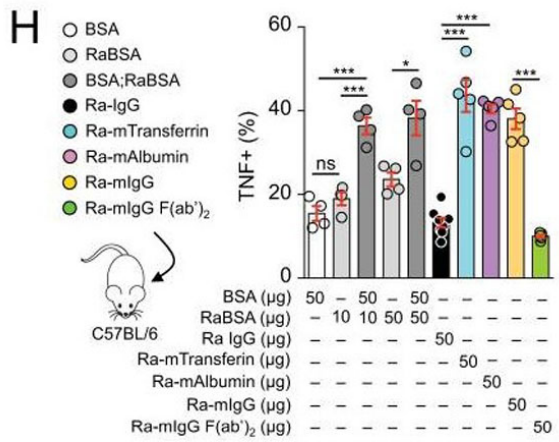
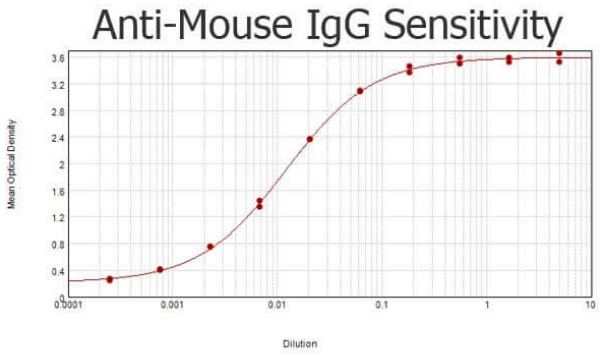


Figure
FcγRIV-dependent uptake and activation of kidney, but not dermal, macrophages by small immune complexes, 'auto' antibodies, and NZWxBXSB serum. (H) TNF staining in kidney F4/80bright macrophages from wt mice 1 hour after i.v. injection of the indicated amounts of BSA, RaBSA, BSA;RaBSA, rabbit IgG (Ra-IgG), rabbit anti-mouse transferrin (Ra-mTransferrin) [p/n 600-401-255], rabbit anti-mouse albumin (Ra-mAlbumin) [p/n 600-401-254], rabbit anti-mouse IgG (Ra-mIgG) [p/n 610-4102] or Ra- mIgG (Fab')2 [p/n 310-4102]. N= 4–5 mice per treatment. Fig 5. PMID: 27477514.



ELISA
ELISA results of purified Rabbit anti-Mouse IgG Antibody tested against purified Mouse IgG. 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. 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 (p/n MB-067) as blocking buffer, Goat anti-Rabbit IgG Antibody Peroxidase Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) (p/n 611-103-122) and TMB substrate (p/n TMBE-1000).

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)
- Stamatiades et al. Immune Monitoring of Trans-endothelial Transport by Kidney-Resident Macrophages. *Cell* (2016)
- Sone H et al. Pancreatic beta cell senescence contributes to the pathogenesis of type 2 diabetes in high-fat diet-induced diabetic mice. *Diabetologia.* (2005)
- Harada S et al. Insulin-induced egr-1 expression in Chinese hamster ovary cells is insulin receptor and insulin receptor substrate-1 phosphorylation-independent. Evidence of an alternative signal transduction pathway. *J Biol Chem.* (1995)

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