

Datasheet for 610-4120**Mouse IgG (H&L) Antibody Pre-adsorbed****Overview**

Description:	Rabbit Anti-Mouse IgG (H&L) Antibody (Min X Human Serum Proteins) - 610-4120
Item No.:	610-4120
Size:	2 mg
Applications:	ELISA, CUT&RUN, EM, IF
Reactivity:	Mouse
Host Species:	Rabbit

Product Details**Background:**

Anti-Mouse IgG antibody generated in rabbit detects specifically mouse IgG (H&L). 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. This anti-Mouse secondary antibody is ideal for investigators who routinely perform titration assays, western-blot, immunoprecipitation and more generally immunoassays.

Synonyms:	rabbit anti-Mouse IgG Antibody, Rabbit-a-Mouse IgG (H&L), Mouse IgG Antibody in rabbit
Host Species:	Rabbit
Specificity:	IgG (H&L)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Mouse
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Immunogen Type:	Native Protein
Immunogen:	Anti-Mouse IgG was produced by repeated immunization with mouse IgG whole molecule in rabbit
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Mouse IgG coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis (IEP) resulted in a single precipitin arc against anti-Rabbit Serum, Mouse IgG and Mouse Serum. No reaction was observed against Human Serum Proteins.

Application Details

Tested Applications:	ELISA
Suggested Applications:	CUT&RUN, EM, IF (Based on references)
Application Note:	Anti-Mouse IgG (H&L) Antibody has been tested by ELISA and is suitable for immunoblotting (Western or dot blot), ELISA, CUT&RUN, and immunohistochemistry.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:40,000
IHC:	1:1,000 - 1:5,000
WB:	1:2,000 - 1:10,000

Formulation

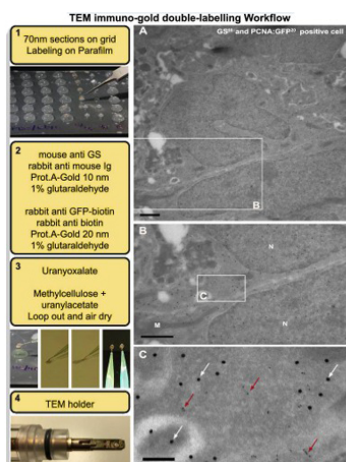
Physical State:	Liquid (sterile filtered)
Concentration:	2.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

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.

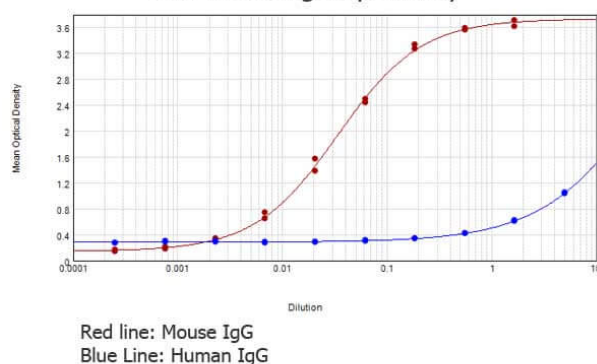
Images



Immunofluorescence Microscopy

TEM immuno-gold double-labelling workflow and example of positive labelling on Tokuyasu chemical-fixed cryosections. Left: Major steps (1–4) required for TEM immuno-gold double-labelling workflow and associated images. (A,B,C) Cytosolic PCNA:GFP+/GS+ immuno-gold double-labelling at low (A) and high (B,C) magnifications demonstrating co-localization of the 10 nm (GS; red arrowheads) and 20 nm (PCNA:GFP; white arrowheads) particles. N, nucleus. Scale bar (A) 2 μ m; (B,C) 200 nm. Fig 6. PMID: 33441723

Anti-Mouse IgG Specificity



ELISA

ELISA results of purified Rabbit anti-Mouse IgG Antibody (min x Human Serum Proteins) tested against purified Mouse IgG. Each well was coated in duplicate with 1.0 μ g of Mouse IgG (p/n 010-0102) [red line] and Human IgG (p/n 009-0102) [blue line]. The starting dilution of antibody was 5 μ g/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, 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 ELISA Substrate (p/n TMBE-1000).

References

- van der Beek J et al. Loss of the HOPS complex disrupts early-to-late endosome transition, impairs endosomal recycling and induces accumulation of amphisomes. *Mol Biol Cell.* (2024)
- Rawat S et al. RUFY1 binds Arl8b and mediates endosome-to-TGN CI-M6PR retrieval for cargo sorting to lysosomes. *J Cell Biol.* (2023)
- De Mazière A et al. An optimized protocol for immuno-electron microscopy of endogenous LC3. *Autophagy.* (2022)
- Burns CH et al. Pancreatic β -Cell-Specific Deletion of VPS41 Causes Diabetes Due to Defects in Insulin Secretion. *Diabetes.* (2021)
- Oorschot V et al. TEM, SEM, and STEM-based immuno-CLEM workflows offer complementary advantages. *Sci Rep.* (2021)
- Fujiwara Y et al. Preparation of optimized concanavalin A-conjugated Dynabeads® magnetic beads for CUT&Tag. *PLoS One.* (2021)
- Kooijmans et al. Recombinant phosphatidylserine-binding nanobodies for targeting of extracellular vesicles to tumor cells: a plug-and-play approach. *Nanoscale* (2018)
- Vonk et al. Mesenchymal Stromal/stem Cell-derived Extracellular Vesicles Promote Human Cartilage Regeneration In Vitro. *Theranostics* (2018)
- Kooijmans SAA et al. PEGylated and targeted extracellular vesicles display enhanced cell specificity and circulation time. *J Control Release.* (2016)
- Oorschot VMJ et al. Immuno correlative light and electron microscopy on Tokuyasu cryosections. *Methods Cell Biol.* (2014)

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