

Datasheet for 609-1307**Human IgM (mu chain) Antibody Peroxidase Conjugated****Overview**

Description:	Goat Anti-Human IgM (mu chain) Antibody Peroxidase Conjugated - 609-1307
Item No.:	609-1307
Size:	1 mg
Applications:	ELISA
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Anti-Human IgM (mu heavy chain) Peroxidase generated in goat detects specifically Human IgM mu heavy chain. Immunoglobulin M is the largest antibody isotype and the first to be secreted against an initial exposure to antigen. IgM is predominantly produced in the spleen. Formed from covalently linking 5 immunoglobulins together. Anti-Human IgM mu chain antibody is ideal for investigators in Immunology, Microbiology, and Cell Biology.
Synonyms:	Goat Anti-Human IgM (mu chain) Antibody Peroxidase Conjugation, Goat Anti-human IgM mu chain Antibody HRP Conjugated
Host Species:	Goat
Specificity:	IgM μ chain
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Human
Immunogen:	Human IgM whole molecule

Purity/Specificity:	Human IgM (mu chain) Antibody, Peroxidase Conjugated, was prepared from monospecific antiserum by immunoaffinity chromatography using antigens coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase, anti-Goat Serum, Human IgM and Human Serum. No reaction was observed against other human heavy or light chain proteins.
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Application Details

Tested Applications:	ELISA
Application Note:	Anti-Human IgM (mu heavy chain) Peroxidase has been tested by ELISA and is suitable for western blot, immunohistochemistry, and immunoassays where specificity to the immunoglobulin mu chain region is desired. Optimal concentrations in immunoassays should be determined by the researcher.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:180,000
IHC:	1:500 - 1:2,500
WB:	1:2,000 - 1:20,000

Formulation

Physical State:	Lyophilized
Concentration:	1.0 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) Gentamicin Sulfate. Do NOT add Sodium Azide!
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

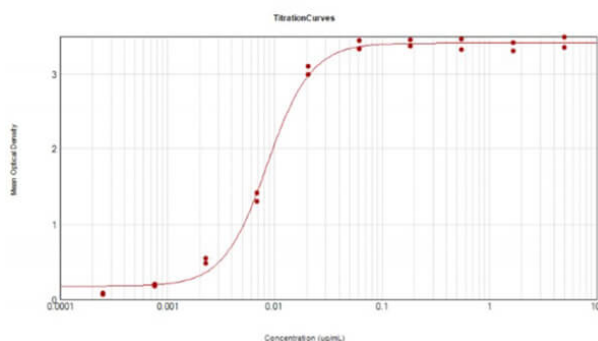
Shipping & Handling

Shipping Condition:	Ambient
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Storage Condition: Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

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

Images



ELISA

ELISA Results of purified Goat Anti-Human IgM Peroxidase Conjugated Antibody tested against purified Human IgM. The working dilution for Anti-Human IgM HRP is 1:120,000. Each well was coated in duplicate with 1.0 µg of Human IgM (p/n 009-0107). 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 Gel/PBS Blocking buffer (p/n MB-066) and TMBE-1000 substrate.

References

- Fox A. et al. Evidence of a significant secretory-IgA-dominant SARS-CoV-2 immune response in human milk following recovery from COVID-19. *medRxiv* (2020)
- Jian L, Xiujian S, Yuangang Y, et al. Evaluation of antibody detection against the NDO-BSA, LID-1 and NDO-LID antigens as confirmatory tests to support the diagnosis of leprosy in Yunnan province, southwest China. *Trans R Soc Trop Med Hyg.* (2020)
- Crawford et al. Human Cytomegalovirus Induces Cellular and Humoral Virus-specific Immune Responses in Humanized BLT Mice. *Scientific Reports* (2017)
- Serrano-Coll H et al. Anti-natural octyl disaccharide-leprosy IDRI diagnostic (NDO-LID) antibodies as indicators of leprosy reactions and neuritis. *Trans R Soc Trop Med Hyg.* (2017)
- McCallen J et al. Cross-reactivity of select PEG-binding antibodies to other polymers containing a CCO backbone. *ACS Biomater Sci Eng.* (2017)
- Yang Q et al. Analysis of pre-existing IgG and IgM antibodies against polyethylene glycol (PEG) in the general population. *Anal Chem.* (2016)

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.