

Datasheet for 609-4331**Human IgM (Fc5u) Antibody Peroxidase Conjugated****Overview**

Description:	Rabbit Anti-Human IgM (Fc5u) Antibody Peroxidase Conjugated - 609-4331
Item No.:	609-4331
Size:	1.5 mg
Applications:	ELISA
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Anti-Human IgM Fc5 μ Peroxidase antibody generated in rabbit specifically detects Fc5 μ portion of the human IgM 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. Due to this large size, IgM is typically isolated to the serum. Anti-Human IgM Fc5 μ antibody is ideal for investigators in Immunology, Microbiology, and Cell Biology.
Synonyms:	Rabbit Anti-Human IgM (Fc5u) Antibody Peroxidase Conjugation, Rabbit Anti Human IgM Fc5u HRP Conjugated Antibody
Host Species:	Rabbit
Specificity:	IgM Fc5 μ
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Human
Immunogen:	Human IgM Fc5 μ fragment

Purity/Specificity:	This product 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-Rabbit Serum, Human IgM and Human Serum. Specificity was confirmed by ELISA minimal cross reactivity against other human heavy or light chain isotypes.
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Application Details

Tested Applications:	ELISA
Application Note:	Anti-Human IgM (Fc5 μ) Peroxidase conjugate has been tested by ELISA and is suitable for immunoblotting (western or dot blot), ELISA, immunoelectron microscopy and immunohistochemistry as well as other antibody-based enzymatic assays requiring lot-to-lot consistency.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:15,000 - 1:60,000
IHC:	1:1,000 - 1:5,000
WB:	1:2,000 - 1:10,000

Formulation

Physical State:	Lyophilized
Concentration:	1.5 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)

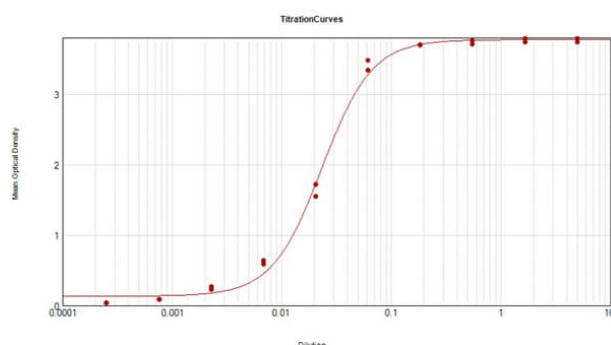
Shipping & Handling

Shipping Condition:	Ambient
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 target and detector	NDO-LID		
	IgM	IgG	IgG/M (protein A)
Sensitivity	78.0 (73.0–83.0)	81.6 (77.0–86.1)	86.3 (82.2–90.3)
Specificity	97.0 (94.0–100)	95.6 (92.0–99.4)	93.6 (93.0–100)
PPV	98.3 (96.5–100)	97.6 (95.5–99.7)	98.1 (96.3–100)
NPV	66.7 (60.0–73.5)	70.2 (63.4–77.1)	76.1 (69.5–82.8)



ELISA

Diagnostic accuracy of detecting IgG and IgG/M antibodies against natural octyl disaccharide-leprosy IDRI diagnostic (NDO-LID) using HRP anti-human IgG (p/n 609-1316), HRP anti-human IgM (p/n 609-4331), and HRP Protein A (p/n PA 00-03). ELISA = enzyme-linked immunosorbent assay; NPV = negative predictive value; PPV = positive predictive value. Results are shown as percent, with confidence intervals in parentheses. Table 5. PMID: 29141725.

ELISA

ELISA Results of Rabbit Anti-Human IgM F(c)5 μ Antibody Peroxidase Conjugate tested against purified Human IgM F(c)5 μ HRP. Each well was coated in duplicate with 1.0 μ g of Human IgM F(c)5 μ (p/n 009-0131). The working dilution is 1:43,000. 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 TMB substrate (p/n TMBE-1000).

References

- Munoz et al. Comparison of Enzyme-Linked Immunosorbent Assay Using Either Natural Octyl Disaccharide-Leprosy IDRI Diagnostic or Phenolic Glycolipid-I Antigens for the Detection of Leprosy Patients in Colombia. *The American Journal of Tropical Medicine and Hygiene* (2018)

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.