

Datasheet for 112-4107

Rat IgM (mu) Antibody

Overview

Description:	Rabbit Anti-Rat IgM (mu) Antibody - 112-4107
Item No.:	112-4107
Size:	2 mL
Applications:	IHC
Reactivity:	Rat
Host Species:	Rabbit

Product Details

Background:	Anti-Rat IgM antibody generated in rabbit specifically detects rat 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, the approximate molecular weight of IgM is 900kDa and possesses 10 binding sites (though due to the size of most antigens, not all sites are capable of binding at once). Due to this large size, IgM is typically isolated to the serum. Anti-Rat IgM antibody is ideal for investigators in Immunology, Microbiology, and Cell Biology.
Synonyms:	rabbit anti-Rat IgM (mu) Antibody, rabbit anti Rat IgM mu
Host Species:	Rabbit
Specificity:	IgM μ chain
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Reactivity:	Rat
Immunogen:	Rat IgM mu heavy chain
Purity/Specificity:	This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against Rat IgM and Rat Serum. No reaction was observed against Rat IgG F(ab') ₂ or Rat IgG F(c).

Application Details

Suggested Applications:	IHC (Based on references)
Application Note:	Anti-Rat IgM antibody is suitable for use in ELISA, immunohistochemistry, and western blot. Specific conditions for reactivity 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:	1:20,000 - 1:100,000
IHC:	1:1,000 - 1:5,000
WB:	1:2,000 - 1:10,000

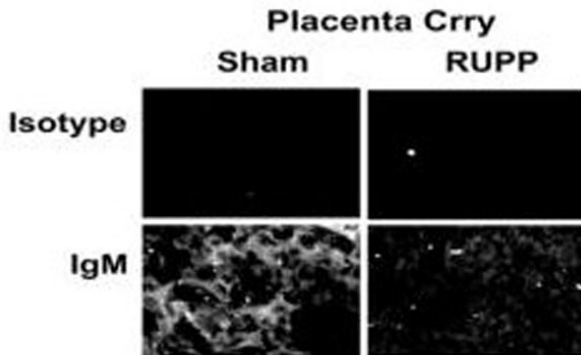
Formulation

Physical State:	Lyophilized
Concentration:	90 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	2.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

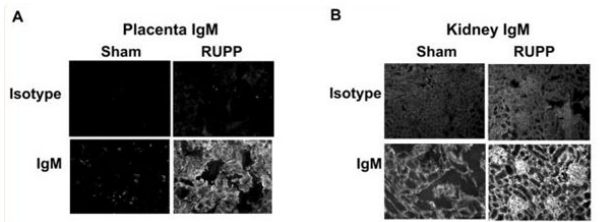
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for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



Immunohistochemistry

Complement regulators Crry, CD55 and CD59 change in placenta and kidney cortex in RUPP compared to Sham animals. B. Immunohistochemistry was conducted as described in Materials and Methods, and staining graded by a blinded observer from 0–3, negative to strongly positive. Representative images at 200X magnification are provided. Figure 3. PMID: 27588825.



Immunohistochemistry

IgM deposition is significantly increased in placenta (A) and kidney (B) in RUPP compared to Sham animals. Immunohistochemistry was conducted as described in Materials and Methods, and staining graded by a blinded observer from 0–3, negative to strongly positive. Representative images at 200X magnification are provided. Figure 4. PMID: 27588825.

References

- Regal et al. Role of IgM and angiotensin II Type I receptor autoantibodies in local complement activation in placental ischemia-induced hypertension in the rat. *Molecular Immunology* (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.