Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 612-4107

Rat IgM (mu chain) Antibody

Overview

Description:	Rabbit Anti-Rat IgM (mu chain) Antibody - 612-4107
Item No.:	612-4107
Size:	2 mg
Applications:	WB
Reactivity:	Rat
Host Species:	Rabbit

Product Details

Background:	Anti-Rat IgM antibody generated in rabbit specifically detects rat 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, 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 chain) Antibody, Rabbit Anti-Rat IgM mu chain Antibody
Host Species:	Rabbit
Specificity:	IgM µ chain
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Rat
Immunogen:	Rat IgM whole molecule
Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Rat IgM coupled to agarose followed by solid phase adsorption(s). Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum, Rat IgM and Rat Serum. No reaction was observed against other rat heavy or light chain proteins.

Application Details

Tested Applications:	WB
Application Note:	Anti-Rat IgM mu heavy chain antibody is tested by western blot and suitable for use in immunoelectrophoresis, western-blot, competitive western-blot, ELISA and competitive ELISA assays. Specific conditions for reactivity and signal detection 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:	1:50,000 - 1:250,000
IHC:	1:1,000 - 1:5,000
WB:	1:5,000 - 1:25,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	2.4 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



Western Blot

Western Blot of Anti-Rat IgM (mu chain) (RABBIT) Antibody (p/n 612-4107). Lane M: 3 µl Molecular Ladder. Lane 1: Rat IgG whole molecule (p/n 012-0102). Lane 2: Rat IgG F(c) Fragment (p/n 012-0103). Lane 3: Rat IgG Fab Fragment (p/n 012-0105). Lane 4: Rat IgM Whole Molecule (p/n 012-0107). Lane 5: Rat Serum (p/n D310-05). All samples were reduced. Load: 50 ng per lane. Block: MB-070 for 30 min at RT. Primary Antibody: Anti-Rat IgM (mu chain) (RABBIT) Antibody (p/n 612-4107) 1:2,000 for 60 min at RT. Secondary Antibody: Anti-Rabbit IgG (GOAT) Peroxidase Conjugated Antibody (p/n 611-103-122) 1:40,000 in MB-070 for 30 min at RT. Predicted/Observed Size: 25 and 55 kDa for Rat IgG and Serum, 25 kDa for F(c) and Fab, 78 and 25 kDa for IgM. Rat F(c) migrates slightly higher.

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.