Order online now!

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

Datasheet for 612-4507

Rat IgM (mu chain) Antibody Alkaline Phosphatase Conjugated

Overview

Description:	Rabbit Anti-Rat IgM (mu chain) Antibody Alkaline Phosphatase Conjugated - 612-4507
Item No.:	612-4507
Size:	1 mg
Applications:	ELISA
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. This Anti-Rat IgM antibody is conjugated to alkaline phosphatase.
Synonyms:	Rabbit Anti-Rat IgM (mu chain) Antibody alkaline phosphatase Conjugated, Rabbit Anti-Rat IgM mu Antibody alk phos Conjugation
Host Species:	Rabbit
Specificity:	IgM μ chain
Conjugate:	Alkaline Phosphatase (AP)
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 IgG 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-Alkaline Phosphatase (calf intestine), anti-Rabbit Serum, Rat IgM, and Rat Serum. No reaction was observed against other rat heavy or light chain proteins.

Application Details

Tested Applications:	ELISA
Application Note:	Anti-Rat IgM Alkaline Phosphatase Conjugated Antibody has been tested by ELISA and is assayed against 1.0 µg of Rat IgM in a standard capture ELISA using pNPP p-nitrophenyl phosphate code # NPP-10 as a substrate for 30 minutes at room temperature. A working dilution of 1:1,000 to 1:3,000 of the reconstitution concentration is suggested for this product.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
IHC:	1:200 - 1:1,000
WB:	1:500 - 1:2,500

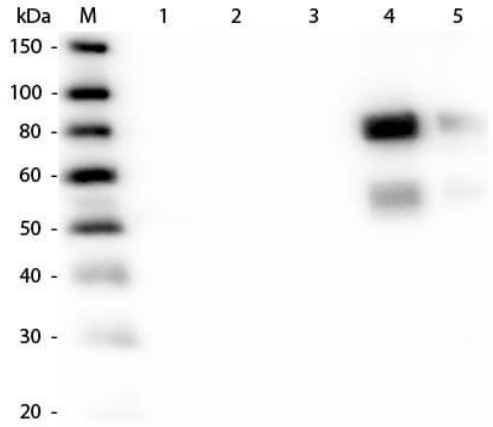
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.05 M Tris Chloride, 0.15M Sodium Chloride, 0.001M Magnesium Chloride, 0.0001M Zinc Chloride, 50% (v/v) Glycerol; pH 8.0
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C before opening. DO NOT FREEZE. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. Freezing alkaline phosphatase conjugates will result in a substantial loss of enzymatic activity.
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.