

Datasheet for 612-1507**Rat IgM (mu chain) Antibody Alkaline Phosphatase Conjugated****Overview**

Description:	Goat Anti-Rat IgM (mu chain) Antibody Alkaline Phosphatase Conjugated - 612-1507
Item No.:	612-1507
Size:	1 mg
Applications:	Dot Blot, ELISA
Reactivity:	Rat
Host Species:	Goat

Product Details

Background:	Anti-Rat IgM antibody generated in goat 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. This Rat IgM is conjugated to Alkaline phosphatase.
Synonyms:	goat anti-Rat IgM (mu chain) Antibody Alkaline Phosphatase Conjugation, goat anti-Rat IgM mu chain Alkaline Phosphatase Conjugated Antibody
Host Species:	Goat
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 IgM 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-Goat Serum, Rat IgM and Rat Serum. No reaction was observed against other rat heavy or light chain proteins.
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Application Details

Tested Applications:	Dot Blot, ELISA
Application Note:	Anti-Rat IgM Alkaline Phosphatase antibody has been tested by ELISA and dot blot and is assayed against 1.0 ug 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 1:500 to 1:2,000 is suggested for this product.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:30,000
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) (GOAT) Antibody (p/n 612-1107). 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) (GOAT) Antibody (p/n 612-1107) 1:1,000 for 60 min at RT. Secondary Antibody: Anti-Goat IgG (DONKEY) Peroxidase Conjugated Antibody (p/n CUST10) 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

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