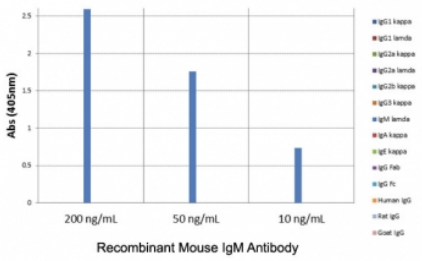
Mouse IgM Antibody for ELISA Biotin Conjugate / Biotinylated Anti-Mouse IgM Detection Antibody [clone RM109] (R20170BTN)

Catalog No.	Formulation	Size
R20170BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

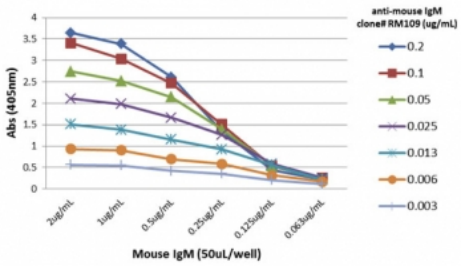
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Biotin Conjugate
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM109
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01872
Gene ID	16019
Applications	ELISA: 0.005ug/ml-0.2ug/ml
Limitations	This Mouse IgM Antibody for ELISA Biotin Conjugate / Biotinylated Anti-Mouse IgM Detection Antibody is available for research use only.



Mouse IgM Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that the parent clone RM109 antibody selectively recognizes mouse IgM / Ighm, with strong signal observed across tested concentrations. No cross-reactivity is detected with other mouse immunoglobulin classes including IgG1, IgG2a, IgG2b, IgG3, IgA, or IgE, and no reactivity is observed with human, rat, or goat IgG. This binding profile reflects selective recognition of mouse IgM and is representative of the performance retained in the biotinylated format of the Mouse IgM Antibody for ELISA / Biotinylated Anti-Mouse IgM Detection Antibody.



Mouse IgM Antibody Biotin ELISA Titration Curve. ELISA titration using plates coated with serial dilutions of mouse IgM demonstrates strong, concentration-dependent binding of clone RM109 across a broad dynamic range. Signal intensity decreases proportionally with antibody dilution, confirming high sensitivity and consistent binding kinetics. Detection was performed using an alkaline phosphatase-conjugated anti-rabbit IgG secondary antibody. This titration profile reflects the intrinsic binding performance of the parent clone RM109 antibody and is representative of the characteristics retained in the biotinylated format of the Mouse IgM Antibody for ELISA / Biotinylated Anti-Mouse IgM Detection Antibody.

Description

Mouse immunoglobulin mu (Ighm) encodes the heavy chain constant region of IgM, an immunoglobulin isotype that serves as the primary antibody produced during early immune responses in murine systems. IgM is predominantly secreted as a pentameric molecule, enabling high avidity antigen binding and efficient activation of the complement cascade. This structural configuration allows IgM to function as a first-line humoral defense and makes it a key biomarker of early immune activation in mouse models used for studying infection, vaccination, and immune regulation.

Mouse IgM Antibody for ELISA Biotin Conjugate / Biotinylated Anti-Mouse IgM Detection Antibody is engineered for enhanced sensitivity and selective detection of mouse IgM in ELISA workflows utilizing streptavidin-based signal amplification systems. Mouse IgM antibody, also referred to as anti-Ighm antibody or mouse IgM immunoglobulin antibody, enables accurate detection of IgM in biological samples derived from murine systems. This biotinylated recombinant rabbit monoclonal antibody clone RM109 provides selective recognition of mouse IgM while enabling amplified signal generation for improved assay performance in low-abundance detection scenarios.

In sandwich ELISA configurations, biotinylated detection antibodies provide increased assay sensitivity and expanded dynamic range through streptavidin-mediated amplification. The Mouse IgM Antibody for ELISA / Biotinylated Anti-Mouse IgM Detection Antibody binds selectively to IgM, allowing accurate detection even at low analyte concentrations while maintaining high specificity. This is particularly important in preclinical studies where precise measurement of IgM is required to track early immune responses and antibody production dynamics.

Clone RM109 antibody recognizes mouse IgM, ensuring selective detection without cross-reactivity to other mouse immunoglobulin classes such as IgG, IgA, IgD, or IgE. The recombinant rabbit monoclonal format provides strong affinity, consistent performance, and reproducibility across ELISA platforms. Biotin conjugation enhances assay flexibility by enabling compatibility with streptavidin-based detection systems commonly used in ELISA assays.

Measurement of mouse IgM using biotinylated detection antibodies is widely applied in immunology research, infectious disease models, and vaccine development studies. Because IgM is produced early following antigen exposure and reflects acute-phase immune activation, accurate detection provides critical insight into immune response timing, vaccine-induced antibody production, and experimental outcomes in murine systems. This antibody supports these applications by enabling sensitive and reliable detection of Ighm-containing immunoglobulins in ELISA-based systems requiring enhanced signal amplification, high specificity, and consistent assay performance.

For detection of total mouse IgM, see our Recombinant Mouse IgM Antibody RM109 page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Mouse IgM Antibody for ELISA Biotin Conjugate / Biotinylated Anti-Mouse IgM Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Mouse IgM was used as the immunogen for this biotinylated recombinant Mouse IgM Antibody for ELISA Biotin Conjugate.

Storage

Store the Mouse IgM Antibody for ELISA Biotin Conjugate at -20oC.

Alternate Names

Biotin anti-mouse IgM antibody, Biotinylated Ighm antibody, Mouse IgM biotin ELISA antibody, Mouse IgM detection biotin antibody, Mouse IgM antibody

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