





## 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 / 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.

This antibody is part of a broader [immunoglobulin detection antibody collection](#), including reagents for Ig classes and light chains across multiple species and immunoassay formats.

## Application Notes

The stated application concentrations are suggested starting points. Titration of the Mouse IgM Antibody for ELISA / 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.

## **Storage**

Store the recombinant Mouse IgM antibody 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