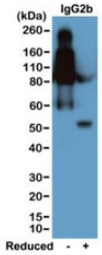
Mouse IgG2b Antibody for ELISA / Biotinylated Anti-Mouse IgG2b ELISA Detection Antibody [clone RM108] (R20167BTN)

Catalog No.	Formulation	Size
R20167BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

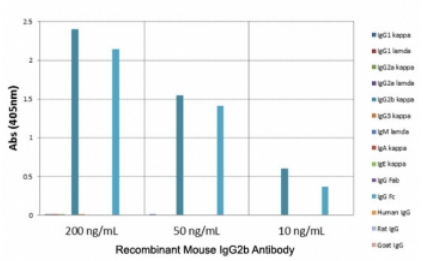
Recombinant RABBIT MONOCLONAL

Bulk quote request

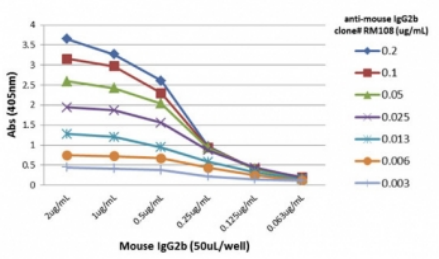
Availability	1-3 business days
Species Reactivity	Mouse
Format	Biotin Conjugate
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM108
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01867
Gene ID	16016
Applications	ELISA: 0.005ug/ml-0.2ug/ml Western Blot (stronger on non-reduced samples): 0.1-0.5ug/ml
Limitations	This Mouse IgG2b Antibody for ELISA / Biotinylated Anti-Mouse IgG2b ELISA Detection Antibody is available for research use only.



Mouse IgG2b Antibody Biotin WB. Western blot analysis of non-reduced (-) and reduced (+) mouse IgG2b demonstrates that the parent clone RM108 antibody detects intact IgG2b at approximately 150 kDa under non-reducing conditions, with weaker detection of the reduced heavy chain near 50 kDa. This binding pattern reflects recognition of native immunoglobulin structure and confirms specificity for mouse IgG2b. These results represent the intrinsic binding characteristics of clone RM108 and are retained in the biotinylated format of the Mouse IgG2b Antibody / Biotinylated Anti-Mouse IgG2b Detection Antibody.



Mouse IgG2b Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that the parent clone RM108 antibody selectively recognizes Mouse IgG2b, with strong signal observed across tested concentrations. No cross-reactivity is detected with IgG1, IgG2a, IgG3, IgM, IgA, or IgE, or with human, rat, or goat IgG. This binding profile reflects Fc region-directed specificity for mouse IgG2b and is retained in the biotinylated format of the Mouse IgG2b Antibody for ELISA / Biotinylated Anti-Mouse IgG2b ELISA Detection Antibody.



Mouse IgG2b Antibody Biotin ELISA Titration Curve. ELISA titration using plates coated with serial dilutions of mouse IgG2b demonstrates strong, concentration-dependent binding of clone RM108 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 RM108 antibody and is representative of the characteristics retained in the biotinylated format of the Mouse IgG2b Antibody for ELISA / Biotinylated Anti-Mouse IgG2b ELISA Detection Antibody.

Description

Mouse immunoglobulin gamma 2b (IgG2b) is a functionally versatile IgG subclass in murine systems that contributes to both inflammatory and regulatory immune responses. IgG2b exhibits moderate Fc receptor binding and complement activation, positioning it between IgG2a, which drives strong effector responses, and IgG1, which is more commonly associated with regulatory or Th2-type immunity. This intermediate functional profile makes IgG2b an important indicator of immune response balance and antibody-mediated activity in preclinical and immunological studies.

Mouse IgG2b Antibody for ELISA / Biotinylated Anti-Mouse IgG2b ELISA Detection Antibody is engineered for enhanced sensitivity and subclass-specific detection in ELISA workflows utilizing streptavidin-based signal amplification systems. Mouse IgG2b antibody, also referred to as anti-IgG2b antibody or anti-mouse IgG2b subclass antibody, is widely used for detecting and quantifying IgG2b with high specificity. This biotinylated recombinant rabbit monoclonal antibody clone RM108 provides selective recognition of the mouse IgG2b constant region while enabling amplified signal generation for improved assay performance.

In sandwich ELISA configurations, biotinylated detection antibodies provide increased assay sensitivity and expanded dynamic range through streptavidin-mediated amplification. The Mouse IgG2b Antibody for ELISA / Biotinylated Anti-Mouse IgG2b ELISA Detection Antibody binds selectively to captured IgG2b, allowing accurate detection even at low analyte concentrations. This is particularly valuable in applications such as low-abundance antibody detection, immune profiling, and detailed subclass analysis in murine systems where subtle differences in antibody levels must be resolved.

Clone RM108 antibody targets the constant region of mouse IgG2b heavy chains, ensuring selective detection without cross-reactivity to other IgG subclasses including IgG1, IgG2a, IgG2c, and IgG3. 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-HRP and streptavidin-AP detection systems commonly used in ELISA assays.

Measurement of IgG2b using biotinylated detection antibodies is widely applied in immunology research, vaccine development, and antibody characterization studies in murine models. Because IgG2b reflects intermediate effector function and is often co-expressed with other subclasses, accurate detection provides insight into immune response balance and antibody function. This antibody supports these applications by enabling sensitive and reliable detection of IgG2b 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 IgG2b Antibody for ELISA / Biotinylated Anti-Mouse IgG2b ELISA Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Mouse IgG2b was used as the immunogen for this biotinylated recombinant Mouse IgG2b antibody.

Storage

Store the recombinant Mouse IgG2b antibody at -20oC.

Alternate Names

Biotin anti-mouse IgG2b antibody, Biotinylated IgG2b detection antibody, Mouse IgG2b biotin ELISA antibody, Immunoglobulin G2b biotin antibody, IgG2b biotin detection antibody

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