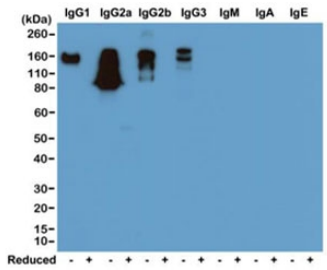
Mouse IgG Antibody for ELISA Biotin Conjugate / Biotinylated Fc-Specific Anti-Mouse IgG Detection Antibody [clone RM104] (R20163BTN)

Catalog No.	Formulation	Size
R20163BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

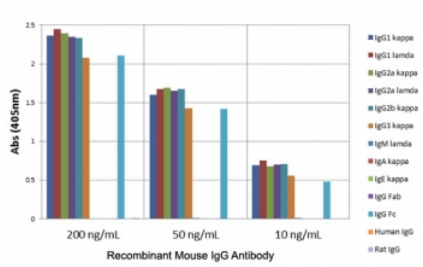
Recombinant RABBIT MONOCLONAL

Bulk quote request

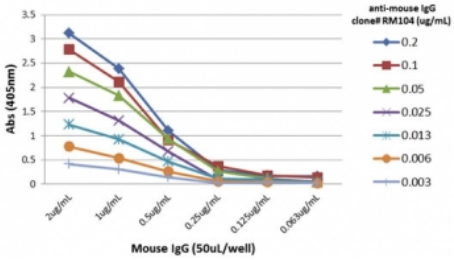
Availability	1-3 business days
Species Reactivity	Mouse
Format	Biotin Conjugate
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM104
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01868
Gene ID	16017
Applications	ELISA: 0.005-0.2ug/ml Western Blot (non-reduced): 0.1-0.5ug/ml
Limitations	This Mouse IgG Antibody for ELISA Biotin Conjugate / Biotinylated Fc-Specific Anti-Mouse IgG Detection Antibody is available for research use only.



Mouse IgG Antibody Biotin Western Blot Subclass Reactivity Analysis. Western blot analysis of nonreduced (-) and reduced (+) mouse immunoglobulins demonstrates that the parent clone RM104 antibody selectively recognizes mouse IgG subclasses, with strong signal observed for nonreduced IgG1, IgG2a, IgG2b, and IgG3, consistent with Fc-region-dependent binding. Signal is reduced under reducing conditions due to disruption of Fc conformation. No cross-reactivity is detected with IgM, IgA, or IgE. This binding profile reflects Fc-specific recognition and is representative of the characteristics retained in the biotinylated format of the Mouse IgG Antibody / Biotinylated Fc-Specific Anti-Mouse IgG Detection Antibody.



Mouse IgG Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that the parent clone RM104 antibody selectively recognizes mouse IgG / Ighg through Fc-region binding, with strong signal observed for IgG1, IgG2a, IgG2b, and IgG3 across tested concentrations. No cross-reactivity is detected with IgM, IgA, or IgE, and no reactivity is observed with human or rat IgG. This binding profile reflects Fc-specific recognition and is representative of the performance retained in the biotinylated format of the Mouse IgG Antibody for ELISA / Biotinylated Fc-Specific Anti-Mouse IgG Detection Antibody.



Mouse IgG Antibody Biotin ELISA Titration Curve. ELISA titration using plates coated with serial dilutions of mouse IgG demonstrates strong, concentration-dependent binding of clone RM104 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 RM104 antibody and is representative of the characteristics retained in the biotinylated format of the Mouse IgG Antibody for ELISA / Biotinylated Fc-Specific Anti-Mouse IgG Detection Antibody.

Description

Mouse immunoglobulin gamma (Ighg) encodes the heavy chain constant regions of IgG, the predominant antibody class in murine serum and a key component of adaptive immunity. Mouse IgG consists of multiple subclasses including IgG1, IgG2a, IgG2b, IgG2c, and IgG3, which share conserved Fc domains that mediate effector functions and interactions with immune components. Due to its abundance and role in class-switched immune responses, IgG serves as a primary marker of sustained immunity in mouse models used for preclinical and experimental research.

Mouse IgG Antibody for ELISA Biotin Conjugate / Biotinylated Fc-Specific Anti-Mouse IgG Detection Antibody is engineered for enhanced sensitivity and broad detection of total mouse IgG in ELISA workflows utilizing streptavidin-based signal amplification systems. Mouse IgG antibody, also referred to as anti-Ighg antibody or mouse IgG immunoglobulin antibody, enables accurate detection of IgG across subclasses in biological samples derived from murine systems. This biotinylated recombinant rabbit monoclonal antibody clone RM104 recognizes the Fc region of mouse IgG, ensuring consistent subclass-independent detection 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 IgG Antibody for ELISA / Biotinylated Fc-Specific Anti-Mouse IgG Detection Antibody binds selectively to IgG, allowing accurate detection across a wide concentration range while maintaining specificity against non-IgG immunoglobulin classes. Fc-targeted recognition ensures uniform detection across subclasses and reduces variability associated with Fab-dependent binding differences.

Clone RM104 antibody recognizes mouse IgG and does not cross-react with other mouse immunoglobulin classes such as IgM, IgA, or IgE, and shows no reactivity with human or rat IgG. Limited cross-reactivity with goat IgG may be observed under certain conditions. The Fc region of RM104 has been engineered to eliminate Fc receptor binding, reducing non-specific interactions and improving assay specificity in complex matrices. The recombinant rabbit monoclonal format provides strong affinity, consistent performance, and reproducibility across ELISA platforms.

Measurement of total mouse IgG using biotinylated detection antibodies is widely applied in immunology research, antibody development, and preclinical studies. Because IgG reflects class-switched immune responses and long-term immunity, accurate detection provides critical insight into antibody production, immune status, and experimental outcomes in murine systems. This antibody supports these applications by enabling sensitive and reliable detection of Ighg-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 IgG Antibody for ELISA Biotin Conjugate / Biotinylated Fc-Specific Anti-Mouse IgG Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

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

Storage

Store the recombinant Mouse IgG antibody at -20oC.

Alternate Names

Biotin anti-mouse IgG antibody, Mouse IgG Fc biotin antibody, Biotinylated Ighg antibody, Mouse IgG detection biotin antibody, pan-mouse IgG antibody

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