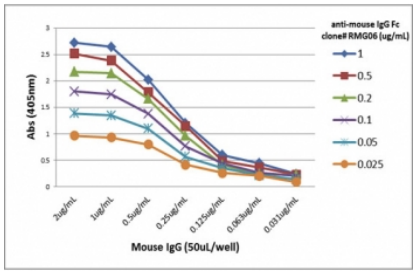
Mouse IgG Fc Antibody for ELISA / Biotinylated Anti-Mouse IgG Fc Detection Antibody [clone RMG06] (R20175BTN)

Catalog No.	Formulation	Size
R20175BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

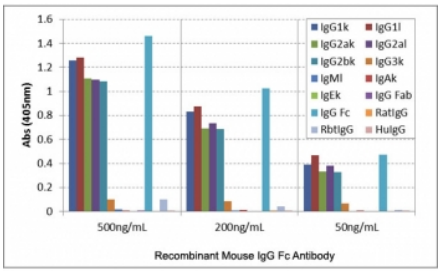
Recombinant GOAT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Biotin Conjugate
Host	Goat
Clonality	Recombinant Goat Monoclonal
Isotype	Goat IgG
Clone Name	RMG06
Purity	Protein G purified from animal origin-free supernatant
UniProt	N/A
Gene ID	N/A
Applications	ELISA : 0.05ug/ml-1ug/ml
Limitations	This Mouse IgG Fc Antibody for ELISA / Biotinylated Anti-Mouse IgG Fc Detection Antibody is available for research use only.



Mouse IgG Fc Antibody Biotin ELISA Titration Curve. ELISA titration analysis using plates coated with serial dilutions of mouse IgG demonstrates strong, concentration-dependent binding of clone RMG06 across a broad dynamic range. Signal intensity decreases proportionally with both antigen concentration and antibody dilution, confirming consistent Fc-region-specific recognition of mouse IgG. Detection was performed using an alkaline phosphatase-conjugated anti-goat IgG secondary antibody. This titration profile reflects the intrinsic binding performance of the parent clone RMG06 antibody and is representative of the characteristics retained in the biotinylated format of the Mouse IgG Fc Antibody for ELISA / Biotinylated Anti-Mouse IgG Fc Detection Antibody.



Mouse IgG Fc Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulin subclasses demonstrates that the parent clone RMG06 antibody recognizes the Fc region of mouse IgG1, IgG2a, and IgG2b with strong signal, with only minimal reactivity observed toward IgG3. No detectable binding is observed with IgM, IgA, or IgE, nor with IgG from human, rat, or rabbit sources. This binding profile reflects Fc-region-specific recognition and strong subclass selectivity and is representative of the performance retained in the biotinylated format of the Mouse IgG Fc Antibody for ELISA / Biotinylated Anti-Mouse IgG Fc Detection Antibody.

Description

Mouse immunoglobulin G (IgG) is widely used in research as a primary antibody species and as a key component of immunoassay systems, making its accurate detection essential for assay performance and reproducibility. Because mouse-derived antibodies are commonly used across ELISA and antibody-based workflows, detection strategies that target conserved regions of IgG are critical for ensuring consistent signal generation independent of antigen specificity. This is particularly important in applications requiring quantitative analysis or comparison across multiple antibody populations.

Mouse IgG antibody, also referred to as anti-mouse IgG antibody or mouse immunoglobulin G antibody, is frequently used for detection of mouse-derived antibodies in ELISA-based systems. Mouse IgG Fc Antibody for ELISA / Biotinylated Anti-Mouse IgG Fc Detection Antibody is specifically optimized for selective recognition of the Fc region of mouse IgG while enabling enhanced signal amplification through biotin-streptavidin detection systems. Fc-directed detection ensures uniform recognition across mouse IgG subclasses, supporting accurate quantification and assay standardization across diverse antibody populations.

This recombinant goat monoclonal antibody, clone RMG06 antibody, recognizes the Fc region of mouse IgG with high specificity. The goat monoclonal format provides strong binding stability and reproducibility, while biotin conjugation enables interaction with streptavidin-linked enzymes to significantly increase assay sensitivity and expand dynamic range. This combination is particularly advantageous in ELISA workflows requiring detection of low-abundance antibodies, improved signal-to-noise ratio, and enhanced performance in complex biological samples.

In ELISA workflows, biotinylated Fc-specific mouse IgG detection antibodies are widely used in sandwich ELISA and high-sensitivity detection formats where amplified signal generation is required. Because the Fc region is conserved across mouse IgG subclasses including IgG1, IgG2a, IgG2b, and IgG3, detection remains consistent across different antibody populations, enabling reproducible signal generation and precise quantification across experiments. This supports assay development workflows where sensitivity and consistency are critical.

Detection of mouse IgG is widely applied in immunology research, antibody development, and assay optimization. Fc-specific detection antibodies support these applications by enabling sensitive, amplified detection of mouse IgG independent of antigen-binding variability. This antibody provides a robust tool for ELISA-based systems requiring enhanced sensitivity, low background, and consistent performance across a wide range of experimental conditions.

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 Fc Antibody for ELISA / Biotinylated Anti-Mouse IgG Fc Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

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

Storage

Store the recombinant Mouse IgG Fc antibody at -20oC.

Alternate Names

Biotin anti-mouse IgG Fc antibody, Mouse IgG Fc detection antibody, Goat anti-mouse IgG Fc antibody, Fc-specific mouse IgG antibody, Mouse IgG Fc ELISA antibody