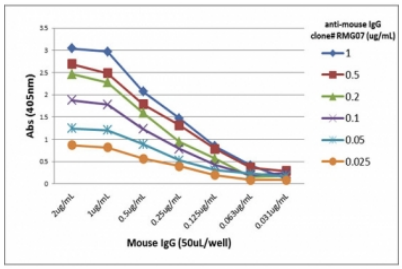
Mouse IgG Antibody for ELISA / Biotinylated Pan-Mouse IgG Detection Antibody [clone RMG07] (R20176BTN)

Catalog No.	Formulation	Size
R20176BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

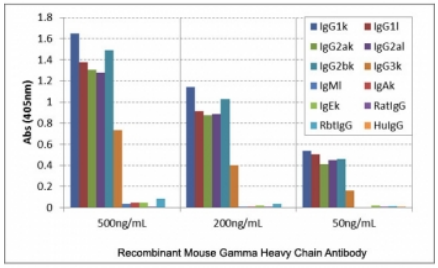
Recombinant GOAT MONOCLONAL

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	RMG07
Purity	Protein G purified from animal origin-free supernatant
UniProt	P01868
Gene ID	16017
Applications	ELISA : 0.05ug/ml-1ug/ml
Limitations	This Mouse IgG Antibody for ELISA / Biotinylated Pan-Mouse IgG Detection Antibody is available for research use only.



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 RMG07 across a broad dynamic range. Signal intensity decreases proportionally with antibody dilution, confirming consistent binding kinetics and reliable detection across concentrations. 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 RMG07 antibody and is representative of the characteristics retained in the biotinylated format of the Mouse IgG Antibody for ELISA / Biotinylated Pan-Mouse IgG Detection Antibody.



Mouse IgG Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that the parent clone RMG07 antibody broadly recognizes mouse IgG / Ighg, 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, rat, or rabbit IgG. This binding profile reflects broad subclass recognition and is representative of the performance retained in the biotinylated format of the Mouse IgG Antibody for ELISA / Biotinylated Pan-Mouse IgG Detection Antibody.

Description

Mouse immunoglobulin gamma (Ighg) encodes the heavy chain constant regions of IgG, the major antibody class present in murine serum and a key mediator of adaptive immunity. Mouse IgG includes multiple subclasses such as IgG1, IgG2a, IgG2b, and IgG3, which collectively represent the class-switched antibody response following antigen exposure. Due to its abundance and persistence, IgG serves as a primary indicator of sustained immune activity in murine models used for preclinical and experimental research.

Mouse IgG Antibody for ELISA / Biotinylated Pan-Mouse IgG Detection Antibody is engineered for enhanced sensitivity and broad detection of 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 goat monoclonal antibody clone RMG07 provides comprehensive recognition of mouse IgG including IgG1, IgG2a, IgG2b, and IgG3, enabling consistent signal generation across subclasses in ELISA assays.

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 Pan-Mouse IgG Detection Antibody supports accurate detection across a wide concentration range while maintaining specificity against non-IgG immunoglobulin classes. This is particularly useful in antibody quantification, immune monitoring, and high-throughput assay development where robust and scalable detection is required.

Clone RMG07 antibody recognizes mouse IgG and does not cross-react with other immunoglobulin classes such as IgM, IgA, or IgE, and shows no reactivity with human, rat, or rabbit IgG. The goat monoclonal format provides consistent performance and stable binding characteristics across assay conditions. Biotin conjugation enhances assay flexibility by enabling compatibility with streptavidin-based detection systems commonly used in ELISA assays.

Measurement of total mouse IgG using biotinylated detection antibodies is widely applied in immunology research, vaccine development, and antibody production studies. Because IgG reflects established immune responses and antibody production, accurate detection provides critical insight into immune status, antibody titers, and experimental outcomes in murine models. This antibody supports these applications by enabling sensitive and reliable detection of Ighg-containing immunoglobulins in ELISA-based systems requiring enhanced signal amplification, broad subclass coverage, 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 / Biotinylated Pan-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, Biotinylated Ighg antibody, Mouse IgG biotin ELISA antibody, pan-mouse IgG antibody, Mouse IgG detection biotin antibody