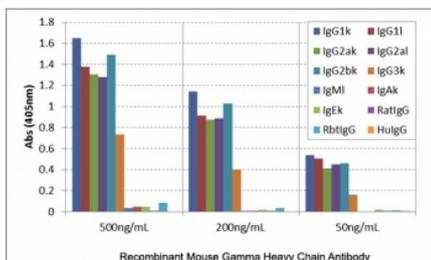# Mouse IgG Antibody for ELISA / Pan-Mouse IgG Detection Antibody [clone RMG07] (R20176)

Catalog No.	Formulation	Size
R20176-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

Recombinant **GOAT MONOCLONAL**

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Purified
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 / Pan-Mouse IgG Detection Antibody is available for research use only.

Mouse IgG Antibody for ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that clone RMG07 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 supports comprehensive subclass coverage and highlights the utility of this Mouse IgG Antibody for ELISA / Pan-Mouse IgG Detection Antibody for total IgG measurement in ELISA-based immunoassays.
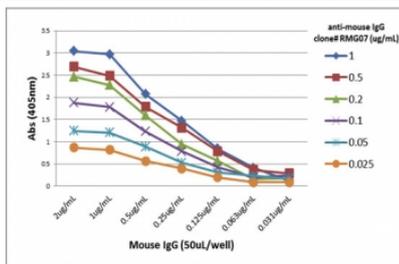
Mouse IgG Antibody for ELISA Titration Curve. ELISA titration analysis using plates coated with serial dilutions of mouse IgG demonstrates strong, concentration-dependent binding of clone RMG07 across a broad dynamic range. Signal intensity decreases proportionally with antibody dilution, confirming consistent binding performance and reliable detection across concentrations. Detection was performed using an alkaline phosphatase-conjugated anti-goat IgG secondary antibody, supporting accurate quantification of mouse IgG / Ighg in ELISA-based immunoassays.

Description

Mouse immunoglobulin gamma (Ighg) encodes the heavy chain constant regions of IgG, the predominant antibody class in murine circulation and a central component of adaptive immune responses. Mouse IgG comprises multiple subclasses including IgG1, IgG2a, IgG2b, and IgG3, which together represent the class-switched antibody response following antigen exposure. Because IgG is the most abundant immunoglobulin in mouse serum and reflects sustained antibody production, it serves as a primary marker of established immunity in preclinical and experimental systems.

Mouse IgG Antibody for ELISA / Pan-Mouse IgG Detection Antibody is optimized for broad and reliable detection of mouse IgG across all major subclasses in ELISA-based immunoassays. Mouse IgG antibody, also known as anti-Ighg antibody or mouse IgG immunoglobulin antibody, enables accurate quantification of total IgG in serum, plasma, and cell culture samples derived from murine models. This goat monoclonal antibody clone RMG07 recognizes mouse IgG including IgG1, IgG2a, IgG2b, and IgG3, providing comprehensive subclass coverage suitable for general-purpose ELISA applications.

In ELISA workflows, pan-IgG detection antibodies are widely used for routine antibody quantification, immune response monitoring, and assay normalization. The Mouse IgG Antibody for ELISA / Pan-Mouse IgG Detection Antibody functions effectively in ELISA formats to support consistent signal generation across subclasses, enabling accurate measurement of total IgG levels without requiring subclass-specific reagents. This makes it particularly valuable in screening assays, antibody production analysis, and high-throughput experimental workflows where robust and reliable 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 strong and stable binding characteristics, supporting consistent performance across assay conditions and sample types. This antibody is well suited for applications requiring broad IgG detection with minimal optimization and dependable assay reproducibility.

Detection of total mouse IgG is widely applied in immunology research, vaccine development, and antibody production studies. Because IgG reflects class-switched immune responses and long-term immunity, accurate measurement provides insight into immune status, antibody titers, and experimental outcomes in murine systems. This antibody supports these applications by enabling reliable detection of Ighg-containing immunoglobulins in ELISA-based systems requiring broad subclass coverage, consistent performance, and quantitative reliability.

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 / 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 recombinant Mouse IgG antibody.

Storage

Store the recombinant Mouse IgG antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).

Alternate Names

Anti-mouse IgG ELISA antibody, pan-mouse IgG antibody, Mouse IgG detection antibody, Ighg antibody mouse, Mouse IgG immunoglobulin antibody