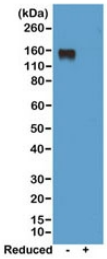
Mouse IgG2a Antibody for ELISA / Anti-Mouse IgG2a ELISA Detection Antibody [clone RM219] (R20166)

Catalog No.	Formulation	Size
R20166-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

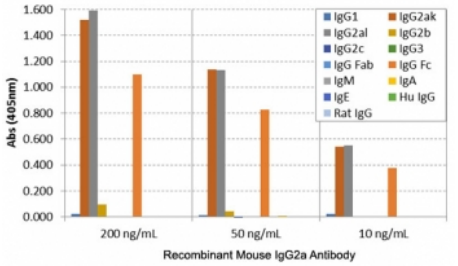
Recombinant RABBIT MONOCLONAL

Bulk quote request

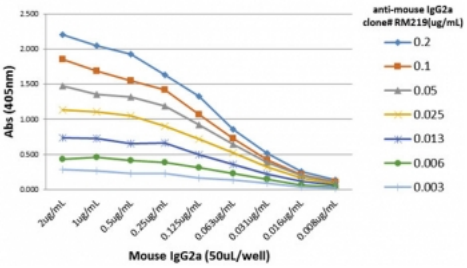
Availability	1-3 business days
Species Reactivity	Mouse
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM219
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01863
Gene ID	380793
Applications	ELISA : 0.005ug/ml-0.2ug/ml Western Blot (non-reduced Only) : 0.5-2ug/ml
Limitations	This Mouse IgG2a Antibody for ELISA / Anti-Mouse IgG2a ELISA Detection Antibody is available for research use only.



Mouse IgG2a Antibody for WB. Western blot analysis of non-reduced (-) and reduced (+) mouse IgG2a using clone RM219 at 0.5 ug/mL demonstrates strong detection of intact IgG2a at approximately 150 kDa under non-reducing conditions, with little to no signal observed in the reduced sample. This pattern is consistent with Fc region-directed recognition of native immunoglobulin structure and supports selective detection of mouse IgG2a independent of light chain type. These results support the use of this Mouse IgG2a Antibody / Anti-Mouse IgG2a Detection Antibody for robust detection of IgG2a in immunoassay applications.



Mouse IgG2a Antibody for ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that clone RM219 selectively recognizes Mouse IgG2a, with strong signal observed across tested concentrations. No cross-reactivity is detected with IgG1, IgG2b, IgG2c, IgG3, IgM, IgA, or IgE, or with human or rat IgG. The binding profile is consistent with Fc region-directed recognition and supports broad detection of IgG2a independent of light chain composition. These results support the use of this Mouse IgG2a Antibody for ELISA / Anti-Mouse IgG2a ELISA Detection Antibody for precise subclass-specific detection in ELISA-based immunoassays.



Mouse IgG2a Antibody for ELISA Titration Curve. ELISA titration analysis using plates coated with serial dilutions of mouse IgG2a demonstrates strong, concentration-dependent binding of clone RM219 across a broad dynamic range. Signal intensity decreases proportionally with antibody dilution, confirming high sensitivity and consistent binding performance. Detection was performed using an alkaline phosphatase-conjugated anti-rabbit IgG secondary antibody, supporting reliable quantification of Mouse IgG2a in ELISA-based immunoassays.

Description

Mouse immunoglobulin gamma 2a (IgG2a) is a major IgG subclass in murine systems and a defining marker of Th1-driven immune responses. IgG2a is strongly associated with inflammatory and cell-mediated immunity and is characterized by high affinity Fc receptor engagement and efficient complement activation. As a result, IgG2a is widely used as a functional readout of immune activation in preclinical models, particularly in studies involving infection, vaccination, and immunotherapy. Because IgG2a antibodies may contain either kappa or lambda light chains, detection strategies that capture total subclass levels independent of light chain composition are essential for comprehensive analysis.

Mouse IgG2a Antibody for ELISA / Anti-Mouse IgG2a ELISA Detection Antibody is specifically optimized for high-sensitivity and subclass-wide detection of IgG2a in ELISA-based immunoassays. Mouse IgG2a antibody, also known as anti-IgG2a antibody or anti-mouse IgG2a subclass antibody, is widely used to quantify total IgG2a responses and to distinguish IgG2a from other mouse IgG subclasses such as IgG1, IgG2b, IgG2c, and IgG3. This recombinant rabbit monoclonal antibody clone RM219 recognizes the Fc region of mouse IgG2a, enabling consistent detection of all IgG2a antibodies regardless of light chain type.

In ELISA workflows, Fc-directed detection provides a robust and broadly applicable strategy for measuring total IgG2a levels across diverse sample types, including serum, plasma, and cell culture supernatants. The Mouse IgG2a Antibody for ELISA / Anti-Mouse IgG2a ELISA Detection Antibody functions effectively as a detection reagent in sandwich ELISA formats, binding specifically to IgG2a captured on assay plates while minimizing background from other immunoglobulin subclasses. This broad recognition profile simplifies assay design and ensures accurate quantification in samples containing mixed antibody populations.

Clone RM219 antibody targets the Fc region of mouse IgG2a heavy chains, ensuring selective detection without cross-reactivity to other IgG subclasses including IgG1, IgG2b, IgG2c, and IgG3. Fc-directed binding provides stable and consistent interaction with the constant region of IgG2a, supporting reliable detection across both native and partially denatured conditions. The recombinant rabbit monoclonal format ensures high affinity binding, excellent reproducibility, and minimal lot-to-lot variability, making this antibody well suited for standardized ELISA workflows.

Detection of IgG2a is widely applied in immunology research, vaccine studies, and preclinical model systems where Th1-type immune responses are being evaluated. Because IgG2a levels correlate with inflammatory immune activation and effector function, accurate measurement is critical for interpreting immune outcomes. This antibody supports these applications by enabling robust and reproducible detection of IgG2a immunoglobulins in ELISA-based systems requiring high specificity, broad subclass coverage, and consistent 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 IgG2a Antibody for ELISA / Anti-Mouse IgG2a ELISA Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Mouse IgG2a was used as the immunogen for this recombinant Mouse IgG2a antibody.

Storage

Store the recombinant Mouse IgG2a antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).

Alternate Names

Anti-Mouse IgG2a ELISA antibody, Mouse IgG2a detection antibody, IgG2a ELISA detection antibody, Immunoglobulin G2a ELISA antibody, Mouse IgG2a Fc antibody

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