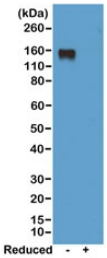
Mouse IgG2a Antibody for ELISA / Biotinylated Anti-Mouse IgG2a ELISA Detection Antibody [clone RM219] (R20166BTN)

Catalog No.	Formulation	Size
R20166BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

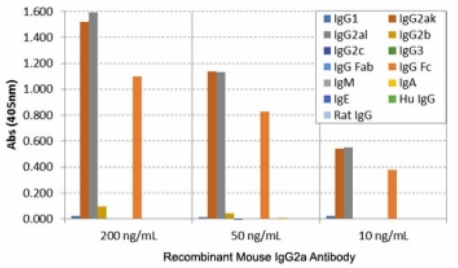
Recombinant RABBIT MONOCLONAL

Bulk quote request

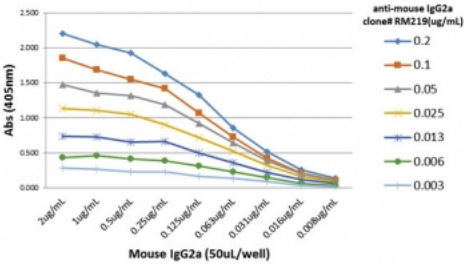
Availability	1-3 business days
Species Reactivity	Mouse
Format	Biotin Conjugate
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM219
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01863
Gene ID	380793
Applications	ELISA: 0.005ug/ml-0.2ug/ml Western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



Mouse IgG2a Antibody Biotin WB. Western blot analysis of non-reduced (-) and reduced (+) mouse IgG2a demonstrates that the parent clone RM219 antibody selectively detects intact IgG2a at approximately 150 kDa under non-reducing conditions, with minimal signal observed in the reduced sample. This binding pattern reflects Fc region-dependent recognition of native immunoglobulin structure and supports broad detection of IgG2a regardless of light chain composition. These results represent the intrinsic binding characteristics of clone RM219 and are retained in the biotinylated format of the Mouse IgG2a Antibody / Biotinylated Anti-Mouse IgG2a Detection Antibody.



Mouse IgG2a Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that the parent clone RM219 antibody 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. This binding profile reflects Fc region-directed specificity for mouse IgG2a and is retained in the biotinylated format of the Mouse IgG2a Antibody for ELISA / Biotinylated Anti-Mouse IgG2a ELISA Detection Antibody.



Mouse IgG2a Antibody Biotin ELISA Titration Curve. ELISA titration 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 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 RM219 antibody and is representative of the characteristics retained in the biotinylated format of the Mouse IgG2a Antibody for ELISA / Biotinylated Anti-Mouse IgG2a ELISA Detection Antibody.

Description

Mouse immunoglobulin gamma 2a (IgG2a) is a key IgG subclass associated with Th1-type immune responses and a major contributor to antibody-mediated effector function in murine systems. IgG2a exhibits strong Fc receptor binding and complement activation, making it an important indicator of inflammatory immune activation and cell-mediated immunity. Because IgG2a antibodies exist with either kappa or lambda light chains, accurate quantification requires detection strategies that recognize the subclass independent of light chain composition.

Mouse IgG2a Antibody for ELISA / Biotinylated Anti-Mouse IgG2a ELISA Detection Antibody is engineered for enhanced sensitivity and broad subclass detection in ELISA workflows utilizing streptavidin-based signal amplification systems. Mouse IgG2a antibody, also referred to as anti-IgG2a antibody or anti-mouse IgG2a subclass antibody, is widely used for detecting and quantifying total IgG2a with high specificity. This biotinylated recombinant rabbit monoclonal antibody clone RM219 recognizes the Fc region of mouse IgG2a, enabling comprehensive detection of IgG2a antibodies regardless of light chain type.

In sandwich ELISA configurations, biotinylated detection antibodies provide a significant advantage by increasing assay sensitivity and expanding dynamic range through streptavidin-mediated amplification. The Mouse IgG2a Antibody for ELISA / Biotinylated Anti-Mouse IgG2a ELISA Detection Antibody binds selectively to captured IgG2a, allowing accurate detection even at low analyte concentrations. Fc-directed recognition ensures consistent performance across heterogeneous antibody populations and supports reliable quantification in complex biological samples.

Clone RM219 antibody targets the Fc region of mouse IgG2a heavy chains, ensuring selective detection without cross-reactivity to other immunoglobulin subclasses including IgG1, IgG2b, IgG2c, and IgG3. The recombinant rabbit monoclonal format provides strong affinity, consistent binding characteristics, and reproducibility across assays. Biotin conjugation enhances assay flexibility by enabling compatibility with streptavidin-HRP and streptavidin-AP detection systems commonly used in ELISA platforms.

Measurement of IgG2a using biotinylated detection antibodies is widely applied in immunology research, vaccine development, and preclinical studies where Th1-driven immune responses are being evaluated. Because IgG2a levels reflect functional antibody-mediated immunity, accurate and sensitive detection is essential for interpreting immune responses. This antibody supports these applications by enabling sensitive and reliable detection of IgG2a 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 IgG2a Antibody for ELISA / Biotinylated 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 biotinylated recombinant Mouse IgG2a antibody.

Storage

Store the recombinant Mouse IgG2a antibody at -20oC.

Alternate Names

Biotin anti-mouse IgG2a antibody, Biotinylated IgG2a detection antibody, Mouse IgG2a biotin ELISA antibody, Immunoglobulin G2a biotin antibody, IgG2a Fc biotin antibody

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