Mouse IgA Antibody for ELISA / Anti-Mouse IgA Detection Antibody [clone RM220] (R20169)

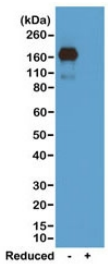
Catalog No.	Formulation	Size
R20169-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

Recombinant RABBIT MONOCLONAL

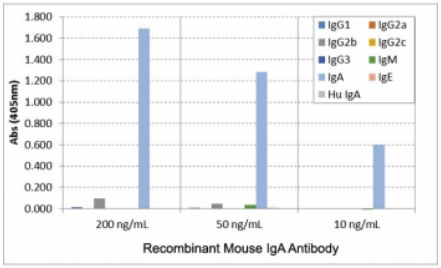
Citations (2)

Bulk quote request

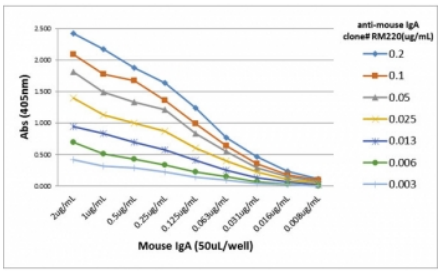
Availability	1-3 business days
Species Reactivity	Mouse
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM220
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01878
Gene ID	238447
RRID	AB_3755050
Applications	ELISA: 0.005ug/ml-0.2ug/ml Western Blot (non-reduced only): 0.5-2ug/ml
Limitations	This Mouse IgA Antibody for ELISA / Anti-Mouse IgA Detection Antibody is available for research use only.



Mouse IgA Antibody for Western Blot Reactivity Analysis. Western blot analysis of nonreduced (-) and reduced (+) mouse IgA demonstrates that clone RM220 selectively recognizes mouse IgA, with strong signal observed under nonreducing conditions, consistent with conformational epitope recognition. Signal is reduced under reducing conditions, indicating disruption of native IgA structure. These results support selective detection of mouse IgA and highlight the utility of this Mouse IgA Antibody / Anti-Mouse IgA Detection Antibody for IgA detection.



Mouse IgA Antibody for ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that clone RM220 selectively recognizes mouse IgA / Igha, with strong signal observed across tested concentrations. No cross-reactivity is detected with other mouse immunoglobulin classes including IgG1, IgG2a, IgG2b, IgG2c, IgG3, IgM, or IgE, and no reactivity is observed with human IgA. This binding profile supports highly specific detection of mouse IgA and highlights the utility of this Mouse IgA Antibody for ELISA / Anti-Mouse IgA Detection Antibody for selective IgA measurement in ELISA-based immunoassays.



Mouse IgA Antibody for ELISA Titration Curve. ELISA titration analysis using plates coated with serial dilutions of mouse IgA demonstrates strong, concentration-dependent binding of clone RM220 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 IgA / Igha in ELISA-based immunoassays.

Description

Mouse immunoglobulin alpha (Igha) encodes the heavy chain constant region of IgA, an immunoglobulin class that plays a central role in mucosal immunity in murine systems. While present at relatively low levels in circulation compared to IgG, IgA is the dominant antibody isotype at mucosal surfaces, including the gastrointestinal and respiratory tracts. In these environments, IgA is primarily produced as dimeric secretory IgA, associated with a joining chain and transported across epithelial cells via the polymeric immunoglobulin receptor, enabling immune protection at barrier surfaces without inducing excessive inflammation.

Mouse IgA Antibody for ELISA / Anti-Mouse IgA Detection Antibody is specifically optimized for sensitive and selective detection of mouse IgA in ELISA-based immunoassays. Mouse IgA antibody, also known as anti-Igha antibody or mouse IgA immunoglobulin antibody, enables accurate quantification of IgA in serum, plasma, and mucosal samples such as intestinal secretions, bronchoalveolar lavage fluid, and other barrier-associated matrices. This recombinant rabbit monoclonal antibody clone RM220 recognizes mouse IgA and provides a reliable tool for measuring IgA across diverse experimental contexts.

In ELISA workflows, detection of mouse IgA requires high sensitivity due to its lower abundance in systemic circulation and variable presentation between monomeric and secretory forms. The Mouse IgA Antibody for ELISA / Anti-Mouse IgA Detection Antibody supports consistent signal generation across these contexts, enabling accurate quantification in complex biological samples. This is particularly important in studies of host-microbiome interactions, mucosal infection, and barrier immunity where IgA serves as a primary mediator of immune exclusion and antigen neutralization.

Clone RM220 antibody recognizes mouse IgA while maintaining specificity against other immunoglobulin classes such as IgG, IgM, or IgE. The recombinant rabbit monoclonal format provides high affinity binding, strong reproducibility, and minimal lot-to-lot variability, ensuring consistent ELISA performance across experiments. This antibody is well suited for applications requiring reliable detection of IgA in both systemic and mucosal immune compartments in mouse models.

Detection of mouse IgA is widely applied in immunology research, microbiome studies, and preclinical disease models. Because IgA regulates microbial interactions at mucosal surfaces and contributes to immune homeostasis, accurate measurement provides insight into host-pathogen dynamics, barrier function, and immune regulation. This antibody supports these applications by enabling sensitive and specific detection of Igha-containing immunoglobulins in ELISA-based systems requiring high performance, reproducibility, and quantitative accuracy.

For an antibody developed for total human IgA detection, see our Human IgA Antibody for ELISA / Anti-IgA Detection Antibody page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Mouse IgA Antibody for ELISA / Anti-Mouse IgA Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

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

Storage

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

Alternate Names

Anti-mouse IgA ELISA antibody, Igha antibody mouse, Mouse IgA detection antibody, IgA immunoglobulin antibody mouse, pan-IgA antibody

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