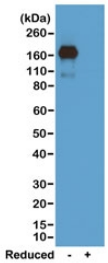
# Mouse IgA Antibody for ELISA / Biotinylated Anti-Mouse IgA Detection Antibody [clone RM220] (R20169BTN)

| Catalog No. | Formulation | Size |
|---|---|---|
| R20169BTN-50UG | 1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide | 50 ug |

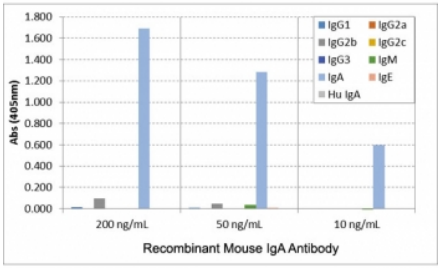
Recombinant RABBIT MONOCLONAL

**Bulk quote request**

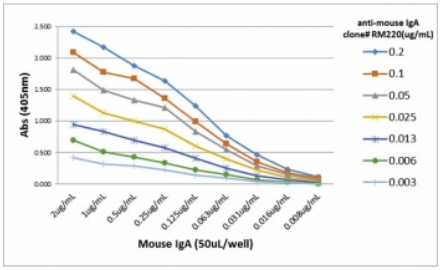
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Mouse |
| **Format** | Biotin Conjugate |
| **Host** | Rabbit |
| **Clonality** | Recombinant Rabbit Monoclonal |
| **Isotype** | Rabbit IgG |
| **Clone Name** | RM220 |
| **Purity** | Protein A purified from animal origin-free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




Mouse IgA Antibody Biotin Western Blot Reactivity Analysis. Western blot analysis of nonreduced (-) and reduced (+) mouse IgA demonstrates that the parent clone RM220 antibody selectively recognizes mouse IgA, with strong signal observed under nonreducing conditions, consistent with conformational epitope recognition. Signal is reduced under reducing conditions due to disruption of IgA structure. This binding profile reflects structure-dependent recognition and is representative of the characteristics retained in the biotinylated format of the Mouse IgA Antibody / Biotinylated Anti-Mouse IgA Detection Antibody.




Mouse IgA Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of mouse immunoglobulins demonstrates that the parent clone RM220 antibody 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 reflects selective recognition of mouse IgA and is representative of the performance retained in the biotinylated format of the Mouse IgA Antibody for ELISA / Biotinylated Anti-Mouse IgA Detection Antibody.




Mouse IgA Antibody Biotin ELISA Titration Curve. ELISA titration 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 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 RM220 antibody and is representative of the characteristics retained in the biotinylated format of the Mouse IgA Antibody for ELISA / Biotinylated Anti-Mouse IgA Detection Antibody.

## Description

Mouse immunoglobulin alpha (Igha) encodes the heavy chain constant region of IgA, a key immunoglobulin class involved in mucosal immunity and host defense at epithelial surfaces in murine systems. IgA is present at lower levels in serum but is the predominant antibody isotype at mucosal barriers, where it is primarily found as dimeric secretory IgA associated with a joining chain and transported across epithelial cells via the polymeric immunoglobulin receptor. This structure enables IgA to neutralize pathogens and regulate microbial communities while minimizing inflammatory responses.

Mouse IgA Antibody for ELISA / Biotinylated Anti-Mouse IgA Detection Antibody is engineered for enhanced sensitivity and selective detection of mouse IgA in ELISA workflows utilizing streptavidin-based signal amplification systems. Mouse IgA antibody, also referred to as anti-Igha antibody or mouse IgA immunoglobulin antibody, enables accurate detection of IgA in serum, plasma, and mucosal samples including intestinal and respiratory secretions. This biotinylated recombinant rabbit monoclonal antibody clone RM220 provides selective recognition of mouse IgA while enabling amplified signal generation for improved assay performance in low-abundance or complex sample types.

In sandwich ELISA configurations, biotinylated detection antibodies provide increased assay sensitivity and expanded dynamic range through streptavidin-mediated amplification. The Mouse IgA Antibody for ELISA / Biotinylated Anti-Mouse IgA Detection Antibody supports accurate detection across a wide concentration range while maintaining specificity against non-IgA immunoglobulin classes. This is particularly valuable in studies of mucosal immunity, infection models, and microbiome research where precise quantification of IgA is required.

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 strong affinity, consistent performance, and reproducibility across ELISA platforms. Biotin conjugation enhances assay flexibility by enabling compatibility with streptavidin-based detection systems commonly used in ELISA assays.

Measurement of mouse IgA using biotinylated detection antibodies is widely applied in immunology research, microbiome studies, and preclinical disease models. Because IgA is a primary regulator of mucosal immune defense and microbial homeostasis, accurate detection provides critical insight into immune function, host-microbiome interactions, and barrier integrity in murine systems. This antibody supports these applications by enabling sensitive and reliable detection of Igha-containing immunoglobulins in ELISA-based systems requiring enhanced signal amplification, high specificity, 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 IgA Antibody for ELISA / Biotinylated 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 biotinylated recombinant Mouse IgA antibody.

## Storage

Store the recombinant Mouse IgA antibody at -20oC.

## Alternate Names

Biotin anti-mouse IgA antibody, Biotinylated Igha antibody, Mouse IgA biotin ELISA antibody, IgA detection biotin antibody, pan-IgA antibody