

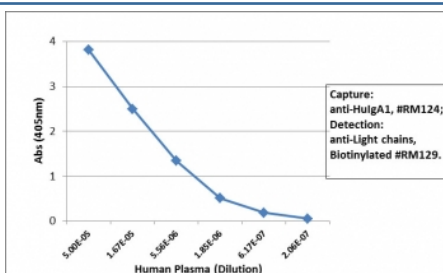
## Human IgA1 Antibody for ELISA / Anti-IgA1 Detection Antibody [clone RM124] (R20183)

| Catalog No.  | Formulation   | Size   |
|--------------|---|--------|
| R20183-100UG | 1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide | 100 ug |

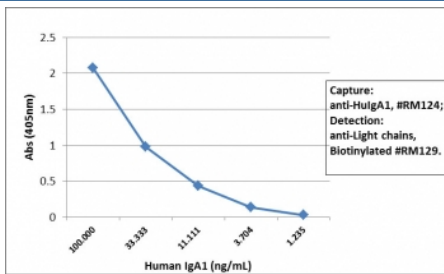
Recombinant **RABBIT MONOCLONAL**

[Bulk quote request](#)

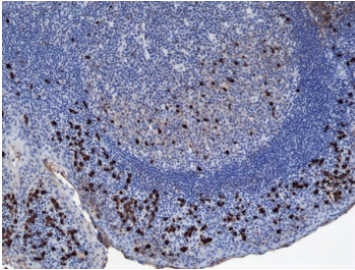
|                           |  |
|---------------------------|--|
| <b>Availability</b>       | 1-3 business days  |
| <b>Species Reactivity</b> | Human  |
| <b>Format</b>             | Purified   |
| <b>Host</b>               | Rabbit   |
| <b>Clonality</b>          | Recombinant Rabbit Monoclonal  |
| <b>Isotype</b>            | Rabbit IgG   |
| <b>Clone Name</b>         | RM124  |
| <b>Purity</b>             | Protein A purified from animal origin-free supernatant   |
| <b>UniProt</b>            | P01876   |
| <b>Gene ID</b>            | 3493   |
| <b>Applications</b>       | ELISA : 50ng/well-200ng/well (Capture); 0.05-0.2ug/ml (Detection)<br>Immunocytochemistry : 0.5-2ug/ml<br>Immunohistochemistry : 0.1-1ug/ml |
| <b>Limitations</b>        | This Human IgA1 Antibody for ELISA / Anti-IgA1 Detection Antibody is available for research use only.                                      |



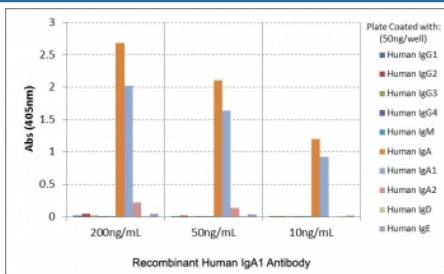
Human IgA1 Antibody for ELISA Sandwich ELISA Human Plasma. Sandwich ELISA analysis demonstrates that clone RM124 functions effectively as a capture antibody for Human IgA1 / IGHA1, with signal intensity decreasing proportionally with plasma dilution, indicating strong and concentration-dependent detection. Captured IgA1 was detected using a biotinylated anti-human light chains (kappa + lambda) antibody (clone RM129), followed by alkaline phosphatase-conjugated streptavidin for signal development. This assay supports reliable detection of IgA1 in plasma and highlights the utility of this Human IgA1 Antibody for ELISA / Anti-IgA1 Detection Antibody for subclass-specific ELISA-based immunoassays.



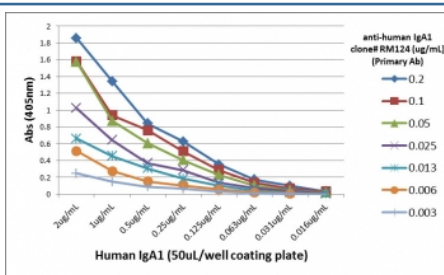
Human IgA1 Antibody for ELISA Sandwich ELISA Human IgA1. Sandwich ELISA analysis using purified human IgA1 demonstrates that clone RM124 functions effectively as a capture antibody for Human IgA1 / IGHA1, with signal intensity decreasing proportionally with antigen concentration, indicating strong and concentration-dependent detection. Captured IgA1 was detected using a biotinylated anti-human light chains (kappa + lambda) antibody (clone RM129), followed by alkaline phosphatase-conjugated streptavidin for signal development. This assay configuration supports accurate quantification of IgA1 and highlights the utility of this Human IgA1 Antibody for ELISA / Anti-IgA1 Detection Antibody in subclass-specific ELISA-based immunoassays.



Human IgA1 Antibody Immunohistochemistry Human Tonsil Tissue. Immunohistochemistry analysis of FFPE human tonsil tissue using Human IgA1 Antibody / Anti-IgA1 Detection Antibody (clone RM124) demonstrates cytoplasmic staining in plasma cells localized within germinal center and interfollicular regions, while surrounding lymphocytes show minimal staining. The staining pattern supports detection of IgA1 / IGHA1 in antibody-secreting cells and is consistent with systemic IgA1-producing populations in lymphoid tissue. Heat-induced epitope retrieval was performed using pH6 citrate buffer or pH9 Tris-EDTA buffer prior to antibody incubation.



Human IgA1 Antibody for ELISA Subclass Specificity Analysis. ELISA analysis of human immunoglobulins demonstrates that clone RM124 selectively recognizes Human IgA1 / IGHA1, with strong signal observed across tested concentrations, indicating specific binding to the alpha 1 heavy chain. Minimal cross-reactivity with IgA2 is observed, while no detectable binding occurs with other immunoglobulin classes including IgG, IgM, IgD, or IgE. This binding profile supports preferential IgA1 detection and highlights the utility of this Human IgA1 Antibody for ELISA / Anti-IgA1 Detection Antibody for subclass-specific ELISA-based immunoassays.



Human IgA1 Antibody for ELISA Titration Curve. ELISA titration analysis using plates coated with serial dilutions of human IgA1 demonstrates strong, concentration-dependent binding of clone RM124 across a broad dynamic range. Signal intensity decreases proportionally with antibody dilution and antigen concentration, confirming high sensitivity and consistent binding performance. Detection was performed using an alkaline phosphatase-conjugated anti-rabbit IgG secondary antibody, supporting reliable quantification of Human IgA1 / IGHA1 in ELISA-based immunoassays.

## Description

Human immunoglobulin alpha 1 (IGHA1) encodes the heavy chain constant region of IgA1, the predominant IgA subclass in human circulation and a major component of systemic humoral immunity. IgA1 accounts for the majority of serum IgA and differs structurally from IgA2 by the presence of an extended hinge region rich in proline, serine, and threonine residues. This hinge region provides increased flexibility for antigen binding but also introduces susceptibility to cleavage by bacterial proteases, making IgA1 a key target in host-pathogen interactions.

Human IgA1 Antibody for ELISA / Anti-IgA1 Detection Antibody is specifically optimized for sensitive and selective detection of IgA1 in ELISA-based immunoassays. Human IgA1 antibody, also known as anti-IGHA1 antibody or IgA1 immunoglobulin antibody, enables accurate quantification of IgA1 in serum, plasma, and other biological samples. This recombinant rabbit monoclonal antibody clone RM124 recognizes human IgA1 and provides a reliable tool for subclass-specific measurement of IgA in diverse assay formats.

In ELISA workflows, subclass-specific detection of IgA1 is critical for distinguishing systemic immune responses from mucosal-dominant IgA2 activity. Because IgA1 is the primary circulating IgA subclass, its measurement is widely used to assess immune status, antibody responses, and disease-associated immunoglobulin patterns. The Human IgA1 Antibody

for ELISA / Anti-IgA1 Detection Antibody supports precise quantification of IgA1, enabling detailed analysis of subclass distribution and immune dynamics in both research and clinical settings.

Clone RM124 antibody recognizes human IgA1 while maintaining specificity against other immunoglobulin classes and subclasses, including IgA2, IgG, IgM, IgD, and IgE. This subclass selectivity is essential for accurate interpretation of IgA biology, particularly in studies where IgA1 and IgA2 exhibit distinct functional roles. The recombinant rabbit monoclonal format provides high affinity binding, strong reproducibility, and minimal lot-to-lot variability, ensuring consistent ELISA performance across experiments.

Detection of IgA1 is widely applied in immunology research, infectious disease studies, and investigations of immune dysregulation. IgA1 is frequently involved in circulating immune complex formation and has been implicated in conditions such as IgA nephropathy and other IgA-associated disorders. Accurate measurement of IgA1 therefore provides important insight into systemic immune responses, antibody subclass balance, and disease-related immunoglobulin alterations. This antibody supports these applications by enabling sensitive and specific detection of IGHA1-containing immunoglobulins in ELISA-based systems requiring high specificity, reproducibility, and quantitative accuracy.

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 Human IgA1 Antibody for ELISA / Anti-IgA1 Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

Human IgA was used as the immunogen for this recombinant Human IgA1 antibody.

## Storage

Store the Human IgA1 antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).

## Alternate Names

Anti-IgA1 ELISA antibody, IGHA1 antibody, Human IgA1 detection antibody, IgA1 immunoglobulin antibody, IgA subclass 1 antibody