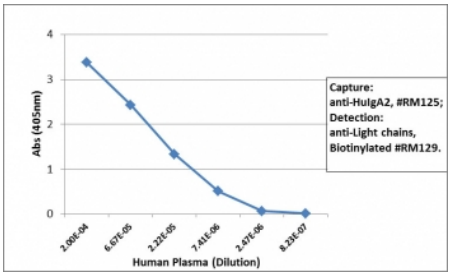
Human IgA2 Antibody for ELISA / Anti-IgA2 Detection Antibody [clone RM125] (R20184)

Catalog No.	Formulation	Size
R20184-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

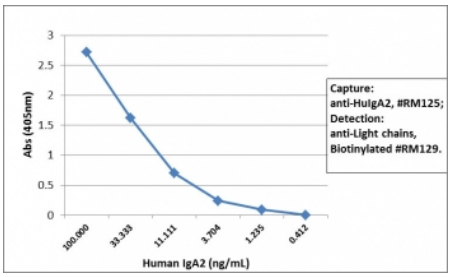
Recombinant RABBIT MONOCLONAL

Bulk quote request

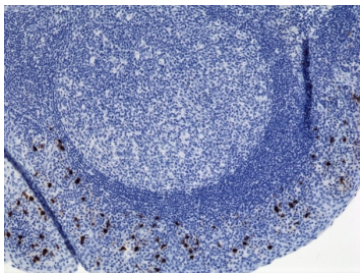
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM125
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01877
Gene ID	3494
Applications	ELISA: 50ng/well-200ng/well (Capture); 0.05-0.2ug/ml (Detection) Immunocytochemistry: 0.5-2ug/ml Immunohistochemistry: 0.1-1ug/ml
Limitations	This Human IgA2 Antibody for ELISA / Anti-IgA2 Detection Antibody is available for research use only.



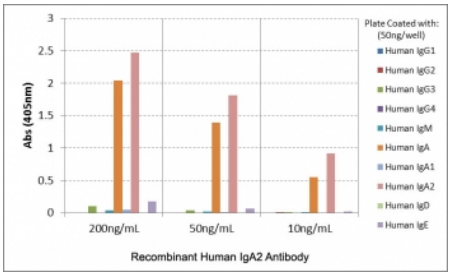
Human IgA2 Antibody for ELISA Sandwich ELISA Human Plasma. Sandwich ELISA analysis demonstrates that clone RM125 functions effectively as a capture antibody for Human IgA2 / IGHA2, with signal intensity decreasing proportionally with plasma dilution, indicating strong and concentration-dependent detection. Captured IgA2 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 IgA2 in plasma and highlights the utility of this Human IgA2 Antibody for ELISA / Anti-IgA2 Detection Antibody for subclass-specific ELISA-based immunoassays.



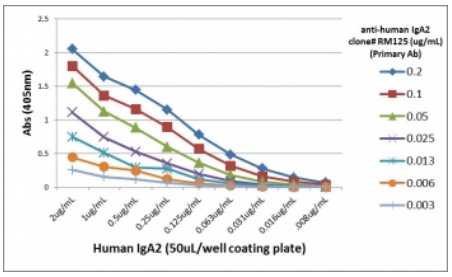
Human IgA2 Antibody for ELISA Sandwich ELISA Human IgA2. Sandwich ELISA analysis using purified human IgA2 demonstrates that clone RM125 functions effectively as a capture antibody for Human IgA2 / IGHA2, with signal intensity decreasing proportionally with antigen concentration, indicating strong and concentration-dependent detection. Captured IgA2 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 IgA2 and highlights the utility of this Human IgA2 Antibody for ELISA / Anti-IgA2 Detection Antibody in subclass-specific ELISA-based immunoassays.



Human IgA2 Antibody Immunohistochemistry Human Tonsil Tissue. Immunohistochemistry analysis of FFPE human tonsil tissue using Human IgA2 Antibody / Anti-IgA2 Detection Antibody (clone RM125) demonstrates cytoplasmic staining in plasma cells localized predominantly within interfollicular and subepithelial regions, while germinal center lymphocytes show minimal staining. The staining pattern supports detection of IgA2 / IGHA2 in mucosal-associated antibody-secreting cells and is consistent with IgA2 enrichment in barrier-associated immune compartments. Heat-induced epitope retrieval was performed using pH6 citrate buffer or pH9 Tris-EDTA buffer prior to antibody incubation.



Human IgA2 Antibody for ELISA Subclass Specificity Analysis. ELISA analysis of human immunoglobulins demonstrates that clone RM125 selectively recognizes Human IgA2 / IGHA2, with strong signal observed across tested concentrations, indicating specific binding to the alpha 2 heavy chain. No detectable cross-reactivity is observed with IgA1 or other immunoglobulin classes including IgG1, IgG2, IgG3, IgG4, IgM, IgD, or IgE. This binding profile supports highly selective IgA2 detection and highlights the utility of this Human IgA2 Antibody for ELISA / Anti-IgA2 Detection Antibody for subclass-specific ELISA-based immunoassays.



Human IgA2 Antibody for ELISA Titration Curve. ELISA titration analysis using plates coated with serial dilutions of human IgA2 demonstrates strong, concentration-dependent binding of clone RM125 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 IgA2 / IGHA2 in ELISA-based immunoassays.

Description

Human immunoglobulin alpha 2 (IGHA2) encodes the heavy chain constant region of IgA2, a subclass of IgA that is specialized for function at mucosal surfaces and plays a critical role in barrier immunity. While IgA1 predominates in circulation, IgA2 is enriched in mucosal secretions such as those of the gastrointestinal and respiratory tracts, where it contributes to immune exclusion and regulation of microbial communities. IgA2 is structurally distinguished by a shorter hinge region with altered glycosylation patterns, which confers increased resistance to proteolytic cleavage by bacterial enzymes commonly present in mucosal environments.

Human IgA2 Antibody for ELISA / Anti-IgA2 Detection Antibody is specifically optimized for sensitive and selective detection of IgA2 in ELISA-based immunoassays. Human IgA2 antibody, also known as anti-IGHA2 antibody or IgA2 immunoglobulin antibody, enables accurate quantification of IgA2 in mucosal secretions, serum, and other biological samples. This recombinant rabbit monoclonal antibody clone RM125 recognizes human IgA2 and provides a reliable tool for subclass-specific measurement of IgA in diverse assay formats.

In ELISA workflows, detection of IgA2 is particularly important for studying mucosal immune responses and distinguishing

barrier-associated immunity from systemic IgA1 activity. IgA2 is adapted to function in protease-rich environments and plays a key role in maintaining microbial homeostasis at epithelial surfaces. The Human IgA2 Antibody for ELISA / Anti-IgA2 Detection Antibody supports precise quantification of IgA2 in these contexts, enabling consistent signal generation in complex matrices such as intestinal fluid, respiratory secretions, and other mucosal samples.

Clone RM125 antibody recognizes human IgA2 while maintaining specificity against other immunoglobulin classes and subclasses, including IgA1, 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 localization and 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 IgA2 is widely applied in immunology research, microbiome studies, and investigations of mucosal immune function. Because IgA2 is adapted for stability and persistence in microbial environments, accurate measurement provides insight into host-microbiome interactions, barrier immunity, and immune regulation at epithelial surfaces. This antibody supports these applications by enabling sensitive and specific detection of IGHA2-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 IgA2 Antibody for ELISA / Anti-IgA2 Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human IgA2 was used as the immunogen for this recombinant Human IgA2 antibody.

Storage

Store the recombinant Human IgA2 antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).

Alternate Names

Anti-IgA2 ELISA antibody, IGHA2 antibody, Human IgA2 detection antibody, IgA2 immunoglobulin antibody, IgA subclass 2 antibody

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