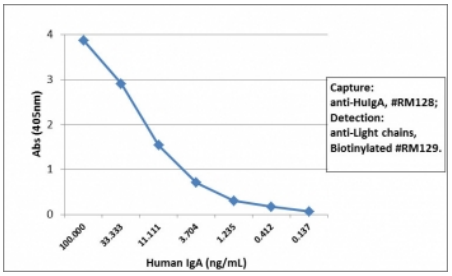
Human IgA Antibody for ELISA Biotin Conjugate / Biotinylated Anti-IgA Detection Antibody [clone RM128] (R20182BTN)

Catalog No.	Formulation	Size
R20182BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

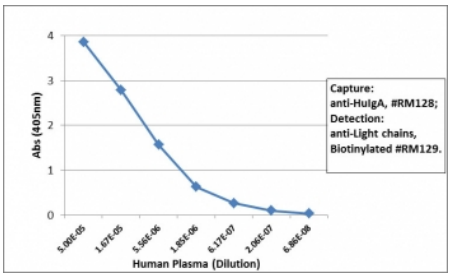
Recombinant RABBIT MONOCLONAL

Bulk quote request

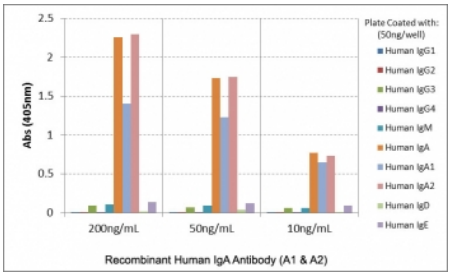
Availability	1-3 business days
Species Reactivity	Human
Format	Biotin Conjugate
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM128
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01876, P01877
Gene ID	3493, 3494
Applications	ELISA: 50ng/well-200ng/well (Capture); 0.05-0.2ug/ml (Detection)
Limitations	This Human IgA Antibody for ELISA Biotin Conjugate / Biotinylated Anti-IgA Detection Antibody is available for research use only.



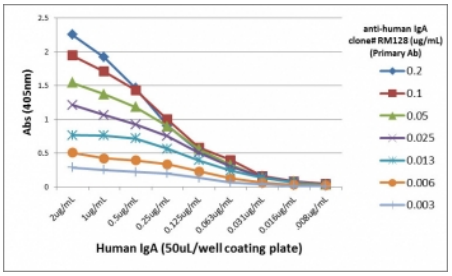
Human IgA Antibody Biotin Sandwich ELISA Human IgA. Sandwich ELISA analysis using purified human IgA demonstrates that the parent clone RM128 antibody functions effectively as a capture antibody for Human IgA / IGHA, with signal intensity decreasing proportionally with antigen concentration, indicating strong and concentration-dependent detection. Captured IgA was detected using a biotinylated anti-human light chains (kappa + lambda) antibody (clone RM129), followed by alkaline phosphatase-conjugated streptavidin for signal development. These results reflect the intrinsic binding performance of clone RM128 and are representative of the characteristics retained in the biotinylated format of the Human IgA Antibody for ELISA / Biotinylated Anti-IgA Detection Antibody.



Human IgA Antibody Biotin Sandwich ELISA Human Plasma. Sandwich ELISA analysis demonstrates that the parent clone RM128 antibody functions effectively as a capture antibody for Human IgA / IGHA, with signal intensity decreasing proportionally with plasma dilution, indicating strong and concentration-dependent detection. Captured IgA was detected using a biotinylated anti-human light chains (kappa + lambda) antibody (clone RM129), followed by alkaline phosphatase-conjugated streptavidin for signal development. This binding profile reflects the intrinsic performance of clone RM128 and is representative of the characteristics retained in the biotinylated format of the Human IgA Antibody for ELISA / Biotinylated Anti-IgA Detection Antibody.



Human IgA Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of human immunoglobulins demonstrates that the parent clone RM128 antibody selectively recognizes Human IgA / IGHA, with strong signal observed for both IgA1 and IgA2 across tested concentrations, indicating binding to the shared alpha heavy chain. No cross-reactivity is detected with other immunoglobulin classes including IgG1, IgG2, IgG3, IgG4, IgM, IgD, or IgE. This binding profile reflects selective recognition of IgA subclasses and is representative of the performance retained in the biotinylated format of the Human IgA Antibody for ELISA / Biotinylated Anti-IgA Detection Antibody.



Human IgA Antibody Biotin ELISA Titration Curve. ELISA titration using plates coated with serial dilutions of human IgA demonstrates strong, concentration-dependent binding of clone RM128 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 RM128 antibody and is representative of the characteristics retained in the biotinylated format of the Human IgA Antibody for ELISA / Biotinylated Anti-IgA Detection Antibody.

Description

Human immunoglobulin alpha (IGHA) encodes the heavy chain constant regions of IgA, a key immunoglobulin class involved in mucosal immunity and host defense at epithelial surfaces. IgA is the second most abundant immunoglobulin in serum and the predominant antibody isotype in mucosal secretions, where it is primarily present as dimeric secretory IgA associated with a joining chain and secretory component. This configuration allows IgA to be actively transported across epithelial barriers and function in pathogen neutralization at sites of environmental exposure.

Human IgA Antibody for ELISA / Biotinylated Anti-IgA Detection Antibody is engineered for enhanced sensitivity and selective detection of IgA in ELISA workflows utilizing streptavidin-based signal amplification systems. Human IgA antibody, also referred to as anti-IGHA antibody or IgA immunoglobulin antibody, enables accurate detection of IgA in serum, plasma, and mucosal samples. This biotinylated recombinant rabbit monoclonal antibody clone RM128 provides selective recognition of human IgA while enabling amplified signal generation for improved assay performance, particularly 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 Human IgA Antibody for ELISA / Biotinylated Anti-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 monitoring, and immune profiling where precise quantification of IgA is required.

Clone RM128 antibody recognizes human IgA, supporting detection of total IgA while maintaining specificity against other immunoglobulin classes such as IgG, IgM, IgD, and 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 IgA using biotinylated detection antibodies is widely applied in immunology research, infectious disease studies, and mucosal immune analysis. Because IgA is a primary mediator of immune defense at barrier sites, accurate detection provides critical insight into immune function, pathogen exposure, and mucosal immune responses. 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.

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

Immunogen

Human IgA was used as the immunogen for this biotinylated recombinant Human IgA Antibody for ELISA Biotin Conjugate.

Storage

Store the Human IgA Antibody for ELISA Biotin Conjugate at -20oC.

Alternate Names

Biotin anti-IgA antibody, Biotinylated IGHA antibody, Human IgA biotin ELISA antibody, IgA detection biotin antibody, pan-IgA antibody

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