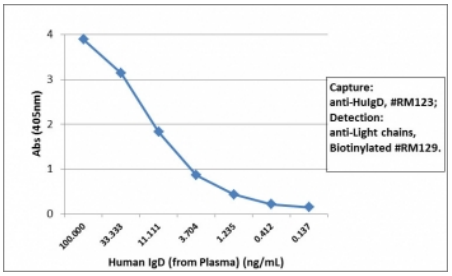
Human IgD Antibody for ELISA Biotin Conjugate / Biotinylated IgD B Cell Marker Detection Antibody [clone RM123] (R20185BTN)

Catalog No.	Formulation	Size
R20185BTN-50UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	50 ug

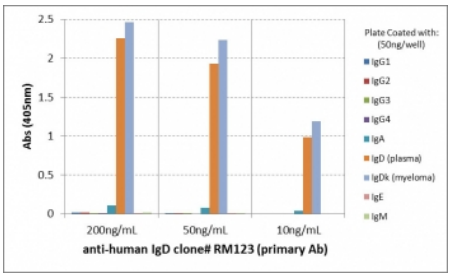
Recombinant RABBIT MONOCLONAL

Bulk quote request

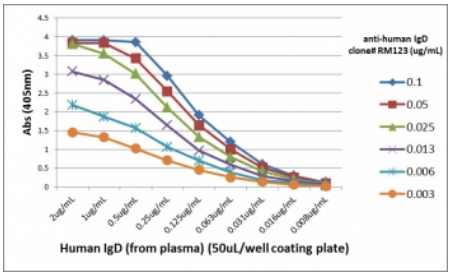
Availability	1-3 business days
Species Reactivity	Human
Format	Biotin Conjugate
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM123
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01880
Gene ID	3495
Applications	ELISA: 25ng/well-200ng/well (Capture); 0.01-0.1ug/ml (Detection)
Limitations	This Human IgD Antibody for ELISA Biotin Conjugate / Biotinylated IgD B Cell Marker Detection Antibody is available for research use only.



Human IgD Antibody Biotin Sandwich ELISA Human Plasma. Sandwich ELISA analysis demonstrates that the parent clone RM123 antibody functions effectively as a capture antibody for Human IgD / IGHD, with signal intensity decreasing proportionally with plasma dilution, indicating sensitive and concentration-dependent detection. Captured IgD 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 RM123 and is representative of the characteristics retained in the biotinylated format of the Human IgD Antibody for ELISA / Biotinylated IgD B Cell Marker Detection Antibody.



Human IgD Antibody Biotin ELISA Subclass Specificity Analysis. ELISA analysis of human immunoglobulins demonstrates that the parent clone RM123 antibody selectively recognizes Human IgD / IGHD, with strong signal observed for IgD derived from human plasma and IgD kappa from human myeloma samples across tested concentrations. No cross-reactivity is detected with other immunoglobulin classes including IgG, IgM, IgA, or IgE. This binding profile reflects selective recognition of IgD and is representative of the performance retained in the biotinylated format of the Human IgD Antibody for ELISA / Biotinylated IgD B Cell Marker Detection Antibody.



Human IgD Antibody Biotin ELISA Titration Curve. ELISA titration using plates coated with serial dilutions of human IgD derived from plasma demonstrates strong, concentration-dependent binding of clone RM123 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 RM123 antibody and is representative of the characteristics retained in the biotinylated format of the Human IgD Antibody for ELISA / Biotinylated IgD B Cell Marker Detection Antibody.

Description

Human immunoglobulin delta (IGHD) encodes the heavy chain constant region of IgD, an immunoglobulin isotype primarily expressed on the surface of naive B cells as part of the B cell receptor complex. IgD is co-expressed with IgM during early stages of B cell development and contributes to antigen recognition, signal transduction, and regulation of B cell activation. This co-expression defines the naive B cell phenotype and is critical for maintaining immune surveillance prior to class switching and differentiation into antibody-secreting cells.

Human IgD Antibody for ELISA Biotin Conjugate / Biotinylated IgD B Cell Marker Detection Antibody is engineered for enhanced sensitivity and selective detection of IgD in ELISA workflows utilizing streptavidin-based signal amplification systems. Human IgD antibody, also referred to as anti-IGHD antibody or IgD immunoglobulin antibody, enables detection of IgD in biological samples and supports analysis of B cell-associated immune responses. This biotinylated recombinant rabbit monoclonal antibody clone RM123 provides selective recognition of human IgD while enabling amplified signal generation for improved assay performance in low-abundance detection scenarios.

In sandwich ELISA configurations, biotinylated detection antibodies provide increased assay sensitivity and expanded dynamic range through streptavidin-mediated amplification. The Human IgD Antibody for ELISA / Biotinylated IgD B Cell Marker Detection Antibody binds selectively to IgD, allowing accurate detection even at low analyte concentrations where conventional detection approaches may be limited. This is particularly important in studies of B cell maturation, immune profiling, and early-stage immune responses where IgD levels are tightly regulated and relatively low.

Clone RM123 antibody recognizes human IgD, ensuring selective detection without cross-reactivity to other immunoglobulin classes such as IgG, IgA, 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 IgD using biotinylated detection antibodies is widely applied in immunology research, particularly in studies of naive B cell populations, immune regulation, and mucosal immune responses. IgD has also been implicated in interactions with innate immune cells, suggesting a broader role in immune modulation beyond its classical function as a B cell receptor component. Because IgD expression reflects early-stage immune activity and B cell biology, accurate detection provides valuable insight into immune function and antibody dynamics. This antibody supports these applications by enabling sensitive and reliable detection of IGHD-containing immunoglobulins in ELISA-based systems requiring enhanced signal amplification, high specificity, and consistent performance.

For detection of total human IgD, see our Recombinant Human IgD Antibody RM123 page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Human IgD Antibody for ELISA Biotin Conjugate / Biotinylated IgD B Cell Marker Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human IgD was used as the immunogen for this biotinylated recombinant Human IgD antibody.

Storage

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

Alternate Names

Biotin IgD antibody, Biotinylated IGHD antibody, Human IgD biotin ELISA antibody, IgD detection biotin antibody, IgD B cell marker biotin antibody

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