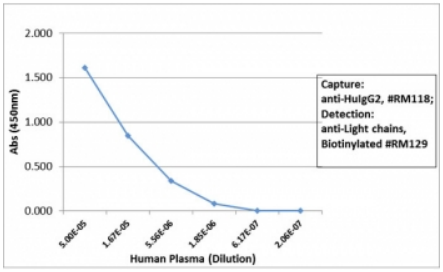
Human IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody [clone RM118] (R20188)

Catalog No.	Formulation	Size
R20188-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

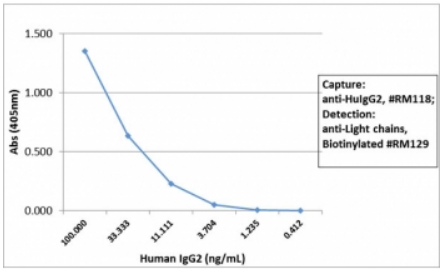
Recombinant RABBIT MONOCLONAL

Bulk quote request

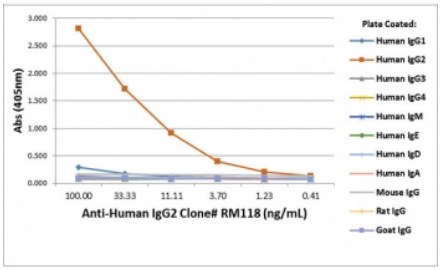
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM118
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01859
Gene ID	3501
Applications	ELISA: 50ng/well-200ng/well (Capture); 0.05-0.2ug/ml (Detection)
Limitations	This Human IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody is available for research use only.



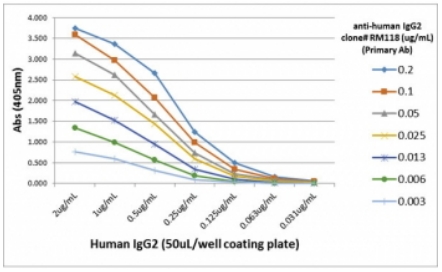
Human IgG2 Antibody for ELISA Sandwich ELISA Human Plasma. Sandwich ELISA using human plasma demonstrates that clone RM118 functions effectively as a capture antibody for Human IgG2 / IGHG2, with signal intensity decreasing proportionally with sample dilution, indicating robust and concentration-dependent detection. Captured IgG2 was detected using a biotinylated anti-human light chains (kappa + lambda) antibody (clone RM129), followed by alkaline phosphatase-conjugated streptavidin for signal development. The assay configuration supports reliable quantification of IgG2 in complex biological samples and highlights the utility of this Human IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody in sandwich ELISA-based immunoglobulin measurement.



Human IgG2 Antibody for ELISA Human IgG2 Standard Curve. Sandwich ELISA using purified human IgG2 demonstrates that clone RM118 functions as an effective capture antibody for Human IgG2 / IGHG2, with signal intensity decreasing in a concentration-dependent manner across the dilution series, supporting accurate quantification. Captured IgG2 was detected using a biotinylated anti-human light chains (kappa + lambda) antibody (clone RM129), followed by alkaline phosphatase-conjugated streptavidin for signal development. The resulting standard curve highlights the suitability of this Human IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody for quantitative ELISA-based measurement of IgG2.



Human IgG2 Antibody for ELISA Subclass Specificity Analysis. ELISA analysis of human immunoglobulin subclasses demonstrates that clone RM118 selectively recognizes Human IgG2 / IGHG2, with strong signal observed for IgG2 across tested concentrations, while no cross-reactivity is detected with IgG1, IgG3, IgG4, IgE, IgD, or IgA, or with non-human IgG from mouse, rat, or goat. The results confirm high subclass specificity and support the use of this Human IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody for precise IgG2 measurement in ELISA-based immunoassays.



Human IgG2 Antibody for ELISA Titration Curve. ELISA titration analysis using plates coated with serial dilutions of human IgG2 demonstrates strong, concentration-dependent binding of clone RM118 across a broad dynamic range. Signal intensity decreases proportionally with antibody dilution, 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 IgG2 / IGHG2 in ELISA-based immunoassays.

Description

Human immunoglobulin gamma 2 (IGHG2) encodes the heavy chain constant region of IgG2, one of the four major IgG subclasses in human serum with distinct structural and functional properties. IgG2 is the predominant subclass involved in immune responses to polysaccharide and carbohydrate antigens, particularly those derived from encapsulated bacteria such as Streptococcus pneumoniae and Haemophilus influenzae. In contrast to IgG1 and IgG3, which are highly active in Fc receptor engagement and complement activation, IgG2 exhibits reduced effector function, reflecting its specialized role in antigen neutralization rather than strong inflammatory signaling.

Human IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody is specifically optimized for high-sensitivity and subclass-specific detection of IgG2 in ELISA-based immunoassays. Human IgG2 antibody, also known as anti-IGHG2 antibody or anti-human IgG2 subclass antibody, is widely used to quantify IgG2 responses and to distinguish IgG2 from closely related subclasses such as IgG1, IgG3, and IgG4. This recombinant rabbit monoclonal antibody clone RM118 provides strong and selective recognition of the IgG2 constant region, enabling accurate subclass discrimination across complex biological samples.

In ELISA workflows, IgG2 detection antibodies are essential for evaluating immune responses to carbohydrate antigens, assessing polysaccharide vaccine efficacy, and monitoring subclass-specific antibody production. The Human IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody functions effectively as a detection reagent in sandwich ELISA formats, binding specifically to IgG2 captured on assay plates while minimizing background from other immunoglobulin subclasses. This specificity is particularly important in applications where subclass distribution reflects immune competency, such as vaccine response studies and clinical immunology research.

Clone RM118 antibody recognizes the constant region of human IgG2 heavy chains, allowing selective detection without cross-reactivity to other IgG subclasses. The recombinant rabbit monoclonal format ensures high affinity binding,

excellent reproducibility, and minimal lot-to-lot variability, supporting consistent ELISA performance across experiments. The Human IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody is uniquely suited for quantitative immunoassays requiring precise subclass resolution and reliable signal generation.

Detection of IgG2 is widely applied in infectious disease research, vaccine development, and immune profiling studies, where IgG2 responses serve as an important indicator of immunity against polysaccharide-rich pathogens. Reduced IgG2 levels are also associated with increased susceptibility to certain bacterial infections, further emphasizing the importance of accurate measurement. This antibody supports these applications by enabling robust and reproducible detection of IGHG2-containing immunoglobulins in ELISA-based systems requiring high specificity and sensitivity.

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 IgG2 Antibody for ELISA / Anti-Human IgG2 ELISA Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human IgG2 was used as the immunogen for this recombinant Human IgG2 antibody.

Storage

Store the recombinant Human IgG2 antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).

Alternate Names

Anti-Human IgG2 ELISA antibody, Human IgG2 detection antibody, IgG2 ELISA detection antibody, Immunoglobulin G2 ELISA antibody, IgG subclass 2 antibody

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