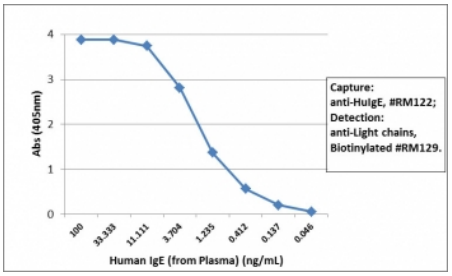
Human IgE Antibody for ELISA / Anti-IgE Detection Antibody [clone RM122] (R20186)

Catalog No.	Formulation	Size
R20186-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

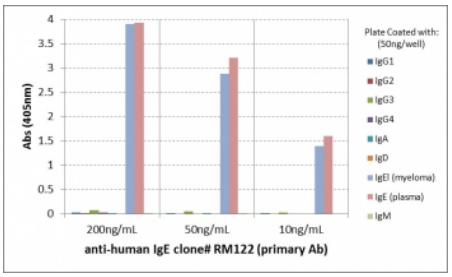
Recombinant RABBIT MONOCLONAL

Bulk quote request

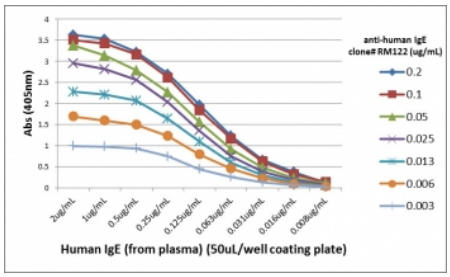
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM122
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01854
Gene ID	3497
Applications	ELISA: 10ng/well-100ng/well (Capture); 0.01-0.1ug/ml (Detection)
Limitations	This Human IgE Antibody for ELISA / Anti-IgE Detection Antibody is available for research use only.



Human IgE Antibody for ELISA Sandwich ELISA with Human Plasma. Sandwich ELISA analysis demonstrates that clone RM122 functions effectively as a capture antibody for Human IgE / IGHE, with signal intensity decreasing proportionally with plasma dilution, indicating sensitive and concentration-dependent detection. Captured IgE 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 supports reliable detection of low-abundance IgE in plasma and highlights the utility of this Human IgE Antibody for ELISA / Anti-IgE Detection Antibody in ELISA-based immunoassays.



Human IgE Antibody for ELISA Subclass Specificity Analysis. ELISA analysis of human immunoglobulins demonstrates that clone RM122 selectively recognizes Human IgE / IGHE, with strong signal observed for IgE lambda from human myeloma and IgE derived from human plasma across tested concentrations. No cross-reactivity is detected with other immunoglobulin classes including IgG, IgM, IgD, or IgA. This binding profile supports highly specific detection of IgE and highlights the utility of this Human IgE Antibody for ELISA / Anti-IgE Detection Antibody for subclass-specific ELISA-based immunoassays.



Human IgE Antibody for ELISA Titration Curve. ELISA titration analysis using plates coated with serial dilutions of human IgE derived from plasma demonstrates strong, concentration-dependent binding of clone RM122 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 IgE / IGHE in ELISA-based immunoassays.

Description

Human immunoglobulin epsilon (IGHE) encodes the heavy chain constant region of IgE, an immunoglobulin class that plays a central role in allergic responses and immediate hypersensitivity reactions. IgE is the least abundant immunoglobulin in circulation, typically present at concentrations several orders of magnitude lower than IgG, yet it exerts potent biological effects through high-affinity binding to Fc epsilon receptors on mast cells and basophils. Cross-linking of receptor-bound IgE by allergen triggers rapid cellular activation and release of inflammatory mediators, making IgE a key biomarker of allergic disease and immune activation.

Human IgE Antibody for ELISA / Anti-IgE Detection Antibody is specifically optimized for sensitive and selective detection of IgE in ELISA-based immunoassays. Human IgE antibody, also known as anti-IGHE antibody or IgE immunoglobulin antibody, enables accurate quantification of IgE in serum, plasma, and cell culture samples where concentrations are typically low. This recombinant rabbit monoclonal antibody clone RM122 recognizes human IgE and provides a reliable tool for detecting low-abundance IgE with high specificity.

In ELISA workflows, detection of IgE requires high analytical sensitivity and minimal background due to the presence of significantly higher levels of other immunoglobulin classes. The Human IgE Antibody for ELISA / Anti-IgE Detection Antibody functions effectively in ELISA formats to support precise quantification of IgE while minimizing cross-reactivity and non-specific signal. This is particularly important in studies of allergy, asthma, and immune profiling, where small changes in IgE concentration can reflect meaningful differences in immune status.

Clone RM122 antibody recognizes human IgE, ensuring selective detection without cross-reactivity to other immunoglobulin classes such as IgG, IgA, IgM, or IgD. The recombinant rabbit monoclonal format provides high affinity binding, strong reproducibility, and minimal lot-to-lot variability, supporting consistent ELISA performance across experiments. This antibody is well suited for applications requiring precise detection of IgE in complex biological matrices including serum and plasma.

Detection of IgE is widely applied in immunology research, allergy studies, and biomarker analysis. Because IgE levels are closely associated with hypersensitivity reactions, atopic disease, and immune activation, accurate measurement provides valuable insight into disease mechanisms and immune dynamics. This antibody supports these applications by enabling reliable detection of IGHE-containing immunoglobulins in ELISA-based systems requiring high sensitivity, specificity, and consistent performance.

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

Immunogen

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

Storage

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

Alternate Names

Anti-IgE ELISA antibody, IGHE detection antibody, Human IgE detection antibody, IgE immunoglobulin antibody, IgE ELISA detection antibody

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