

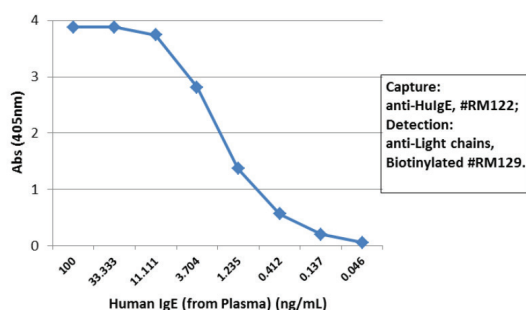
PRODUCT INFORMATION

IgE (human) Rabbit Monoclonal Antibody - Biotinylated (Clone RM122) Item No. 32372

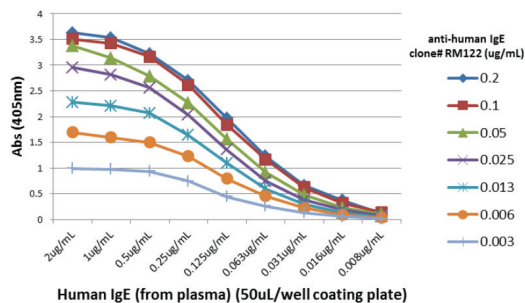
Overview and Properties

Contents:	This vial contains 50 µg of protein A-affinity purified monoclonal antibody.
Synonym:	Immunoglobulin E
Immunogen:	Human IgE
Cross Reactivity:	(+) IgE; (-) Human IgG, IgM, IgD, IgA
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Concentration:	1 mg/ml
Clone:	RM122
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA; the recommended starting concentration is 10-100 ng/well (for capture) and 0.01-0.1 µg/ml (for detection). Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

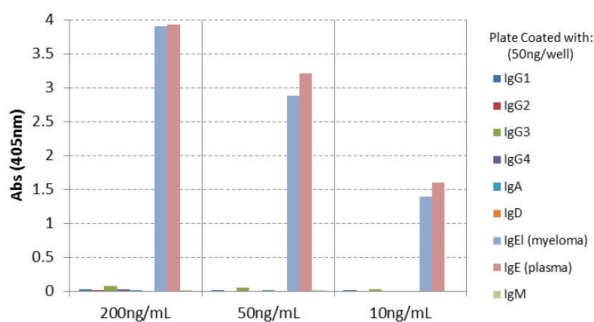
Images



Sandwich ELISA using IgE (human) Rabbit Monoclonal Antibody - Biotinylated (Clone RM122) as the capture antibody (25ng/well) and Ig Light Chain (human) Rabbit Monoclonal Antibody - Biotinylated (Item No. 32112) as the detection antibody, followed by an alkaline phosphatase-conjugated streptavidin.



A Titer ELISA using IgE (human) Rabbit Monoclonal Antibody - Biotinylated (Clone RM122). The plate was coated with different amounts of human IgE. A serial dilution of IgE (human) Rabbit Monoclonal Antibody - Biotinylated (Clone RM122) was used as the primary antibody and an alkaline phosphatase-conjugated anti-rabbit IgG was used as the secondary antibody.



IgE (human) Rabbit Monoclonal Antibody - Biotinylated (Clone RM122)

ELISA of human immunoglobulins. IgE (human) Rabbit Monoclonal Antibody - Biotinylated (Clone RM122) reacts only to human IgEλ from human myeloma plasma and the IgE from human plasma and not to human IgG, IgM, IgD, or IgA. The plate was coated with 50 ng/well of different immunoglobulins. IgE (human) Rabbit Monoclonal Antibody - Biotinylated (Clone RM122) was used as the primary antibody and an alkaline phosphatase-conjugated anti-rabbit IgG was used as the secondary antibody.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Immunoglobulin E (IgE) is a member of the immunoglobulin superfamily of glycoproteins that plays a central role in type I hypersensitivity reactions and the immune response to parasites.¹⁻³ It is synthesized by B cells and later secreted by plasma cells and is the least abundant circulating immunoglobulin in human serum.^{1,2} IgE consists of two light chains and two heavy chains, or ϵ chains, that contain one variable region and four Ig-like constant domains C ϵ 1-C ϵ 4, but lacks the flexible hinge region seen in IgD, IgG, and IgA.^{3,4} The heavy chains are linked together by disulfide bonds to form an Fc region and also combine with the light chains to form the Fab region, which mediate receptor and antigen binding, respectively.⁵ IgE binds to type I Fc ϵ receptors (Fc ϵ RI) on the surface of mast cells, basophils, and antigen-presenting dendritic cells.² Multivalent antigen binding to IgE on the surface of mast cells induces IgE crosslinking and mast cell degranulation to initiate type I hypersensitivity reactions, including, but not limited to, systemic anaphylaxis, wheal and flare responses, allergic rhinitis, bronchial asthma, and food allergies. Serum levels of IgE are elevated in response to parasitic infection and IgE directly binds parasites to target the parasite for eosinophil degranulation-induced destruction. Cayman's IgE (human) Rabbit Monoclonal Antibody - Biotinylated (Clone RM122) can be used for ELISA.

References

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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM