PRODUCT INFORMATION

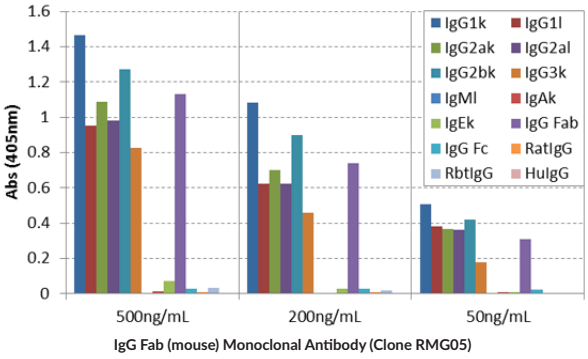
IgG Fab (mouse) Monoclonal Antibody (Clone RMG05)

Item No. 21780

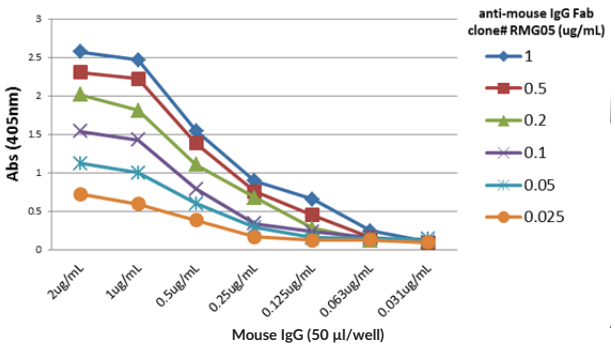
Overview and Properties

Contents:	This vial contains 100 µg of protein G affinity-purified monoclonal antibody.
Synonym:	Immunoglobulin G
Immunogen:	Mouse IgG
Cross Reactivity:	(+) Mouse IgG1, IgG2a, IgG2b, IgG3; (-) Mouse IgM, IgA, IgE; (-) Human, rabbit, rat IgG
Species Reactivity:	(+) Mouse
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS, with 50% glycerol, 1% BSA, and 0.09% sodium azide
Concentration:	1.0 mg/ml
Clone:	RMG05
Host:	Goat
Isotype:	IgG
Applications:	ELISA; the recommended starting concentration is 0.05-1 µg/ml. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



ELISA of Mouse Immunoglobulins (Igs). IgG Fab (mouse) Monoclonal Antibody (Clone RMG05) reacts to the Fab region of mouse IgG1, IgG2a, IgG2b, and IgG3. No cross reactivity with IgM, IgA, IgE, human IgG, rat IgG, and rabbit IgG. The plate was coated with 50 ng/well of different Igs. 500, 200, or 50 ng/ml of IgG Fab (mouse) Monoclonal Antibody (Clone RMG05) was used as the primary antibody. An alkaline phosphatase-conjugated anti-goat IgG was used as the secondary antibody.



A Titer ELISA of Mouse IgG. The plate was coated with different amounts of mouse IgG. A serial dilution of IgG Fab (mouse) Monoclonal Antibody (Clone RMG05) was used as the primary antibody. An alkaline phosphatase-conjugated anti-goat IgG was used as the secondary antibody.

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Description

Immunoglobulin G (IgG) is a member of the immunoglobulin superfamily of glycoproteins that plays a central role in the adaptive immune response.[1] It is produced by B cells and later secreted by plasma cells and is the most abundant circulating antibody in human and mouse serum.[1-3] IgG consists of two heavy chains of approximately 50 kDa each and two light chains of approximately 25 kDa each.[1] 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.[4] IgG is produced following IgM class-switching in response to infection and is involved in numerous humoral host defense responses, including antibody-dependent cell-mediated cytotoxicity (ADCC), toxin neutralization, and pathogen opsonization.[2] IgG exists as four isotypes in mice: IgG1, IgG2b, IgG3, and, in a strain-specific manner, IgG2a or IgG2c.[5,6] Formulations containing humanized, chimeric, or murine IgG monoclonal antibodies have been used in the treatment of inflammatory diseases, such as ulcerative colitis, rheumatoid arthritis, and asthma, as well as cancer.[7] Cayman's IgG Fab (mouse) Monoclonal Antibody (Clone RMG05) can be used for ELISA applications. The antibody recognizes the Fab region of IgG from mouse samples.

References

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