

# PRODUCT INFORMATION



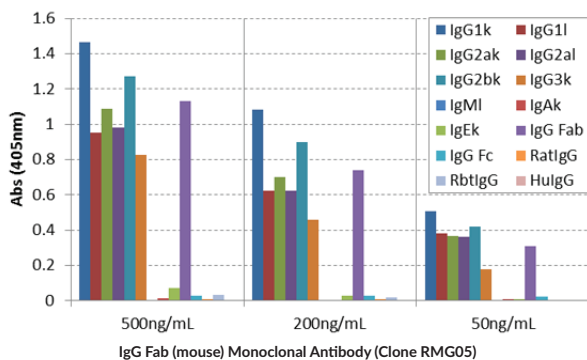
## IgG Fab (mouse) Monoclonal Antibody (Clone RMG05)

Item No. 21780

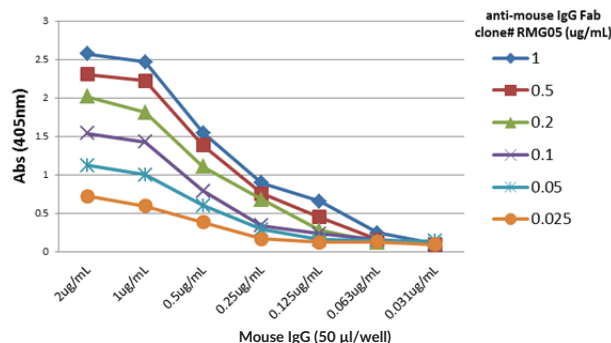
### Overview and Properties

<b>Contents:</b>	This vial contains 100 µg of protein G affinity-purified monoclonal antibody.
<b>Synonym:</b>	Immunoglobulin G
<b>Immunogen:</b>	Mouse IgG
<b>Cross Reactivity:</b>	(+) Mouse IgG1, IgG2a, IgG2b, IgG3; (-) Mouse IgM, IgA, IgE; (-) Human, rabbit, rat IgG
<b>Species Reactivity:</b>	(+) Mouse
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS, with 50% glycerol, 1% BSA, and 0.09% sodium azide
<b>Concentration:</b>	1.0 mg/ml
<b>Clone:</b>	RMG05
<b>Host:</b>	Goat
<b>Isotype:</b>	IgG
<b>Applications:</b>	ELISA, Flow cytometry (FC), and Immunoprecipitation (IP); the recommended starting concentration is 0.05-1 µg/ml for ELISA. 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.

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  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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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

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## Description

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Immunoglobulin G (IgG) is a member of the immunoglobulin superfamily of glycoproteins that plays a central role in the adaptive immune response.<sup>1</sup> It is produced by B cells and later secreted by plasma cells and is the most abundant circulating antibody in human and mouse serum.<sup>1-3</sup> IgG consists of two heavy chains of approximately 50 kDa each and two light chains of approximately 25 kDa each.<sup>1</sup> 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.<sup>4</sup> 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.<sup>2</sup> IgG exists as four isotypes in mice: IgG1, IgG2b, IgG3, and, in a strain-specific manner, IgG2a or IgG2c.<sup>5,6</sup> 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.<sup>7</sup> Cayman's IgG Fab (mouse) Monoclonal Antibody (Clone RMG05) can be used for ELISA, flow cytometry (FC), and immunoprecipitation (IP) applications. The antibody recognizes the Fab region of IgG from mouse samples.

## 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