

# PRODUCT INFORMATION

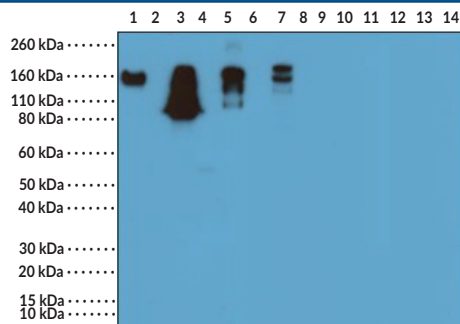


## IgG (mouse) Rabbit Monoclonal Antibody - Biotinylated (RM104) Item No. 32348

### Overview and Properties

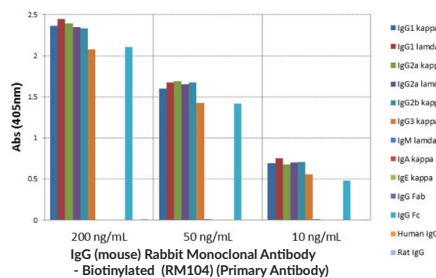
<b>Contents:</b>	This vial contains 50 µg of protein A-affinity purified monoclonal antibody.
<b>Synonym:</b>	Immunoglobulin G
<b>Immunogen:</b>	Mouse IgG
<b>Cross Reactivity:</b>	(+) IgG1, IgG2a, IgG2b, IgG3; (+) Goat IgG; (-) Mouse IgM, IgA, IgE; (-) Human, rat IgG
<b>Species Reactivity:</b>	(+) Mouse
<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>	RM104
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	ELISA and Western blot (WB; non-reducing conditions); the recommended starting concentration is 0.005-0.2 µg/ml for ELISA and 0.1-0.5 µg/ml for WB (non-reducing conditions). Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images

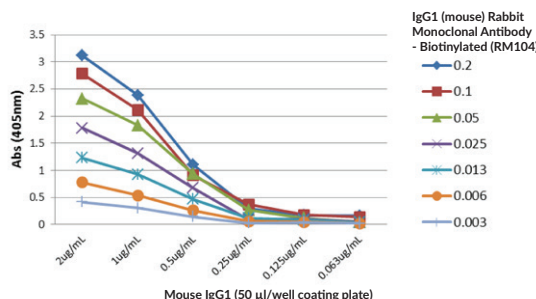


Lane 1: Non-reduced mouse IgG1 (20 ng)  
Lane 2: Reduced mouse IgG1 (20 ng)  
Lane 3: Non-reduced mouse IgG2a (20 ng)  
Lane 4: Reduced mouse IgG2a (20 ng)  
Lane 5: Non-reduced mouse IgG2b (20 ng)  
Lane 6: Reduced mouse IgG2b (20 ng)  
Lane 7: Non-reduced mouse IgG3 (20 ng)  
Lane 8: Reduced mouse IgG3 (20 ng)  
Lane 9: Non-reduced mouse IgM (20 ng)  
Lane 10: Reduced mouse IgM (20 ng)  
Lane 11: Non-reduced mouse IgA (20 ng)  
Lane 12: Reduced mouse IgA (20 ng)  
Lane 13: Non-reduced mouse IgE (20 ng)  
Lane 14: Reduced mouse IgE (20 ng)

WB of non-reduced and reduced mouse IgG1, IgG2a, IgG2b, IgG3, IgM, IgA, and IgE using IgG (mouse) Rabbit Monoclonal Antibody - Biotinylated (RM104).



ELISA of mouse immunoglobulins (Igs). IgG (mouse) Rabbit Monoclonal Antibody - Biotinylated (RM104) reacts to the Fc region of mouse IgG1, IgG2a, IgG2b, and IgG3. No cross reactivity with IgM, IgA, IgE, human IgG, or rat IgG. The plate was coated with 50 ng/well of different immunoglobulins. 200 ng/ml, 50 ng/ml, or 10 ng/ml of IgG (mouse) Rabbit Monoclonal Antibody - Biotinylated (RM104) was used as the primary antibody. An alkaline phosphatase-conjugated anti-rabbit IgG was used as the secondary antibody.



A titer ELISA using IgG1 (mouse) Rabbit Monoclonal Antibody - Biotinylated (RM104). The plate was coated with different amount of mouse IgG1. A serial dilution of IgG1 (mouse) Rabbit Monoclonal Antibody - Biotinylated (RM104) was used as the primary antibody. 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**  
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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# PRODUCT INFORMATION



## 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 (mouse) Rabbit Monoclonal Antibody - Biotinylated (RM104) can be used for ELISA and Western blot (WB; non-reducing conditions) applications. The antibody recognizes the Fc region of IgG from mouse samples and may cross react to goat IgG.

## References

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