

PRODUCT INFORMATION



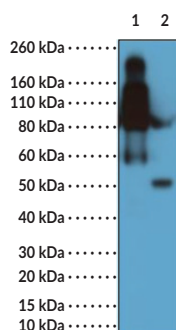
IgG2b (mouse) Rabbit Monoclonal Antibody (Clone RM108)

Item No. 32089

Overview and Properties

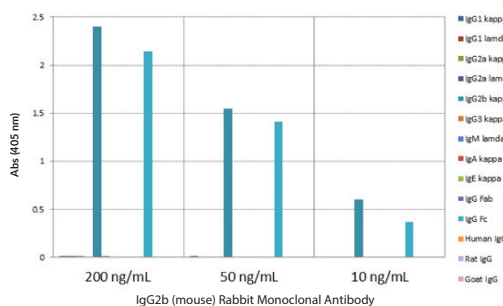
Contents:	This vial contains 100 µg of protein A-affinity purified monoclonal antibody.
Synonym:	Immunoglobulin G2b
Immunogen:	Mouse IgG2b
Cross Reactivity:	(-) Mouse IgG1, IgG2a, IgG3, IgM, IgA, IgE; (-) Human, rat, goat IgG
Species Reactivity:	(+) Mouse
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Concentration:	1 mg/ml
Clone:	RM108
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA and Western blot (WB); the recommended starting concentration for ELISA is 0.005–0.2 µg/ml and is 0.1–0.5 µg/ml for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images

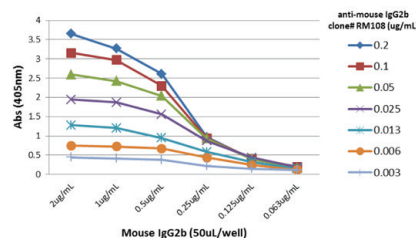


Lane 1: Mouse IgG2b non-reduced (20 ng)
Lane 2: Mouse IgG2b reduced (20 ng)

WB of mouse IgG2b non-reduced or reduced using IgG2b (mouse) Rabbit Monoclonal Antibody (Clone RM108) at a concentration of 0.2 µg/ml.



ELISA of mouse immunoglobulins. IgG2b (mouse) Rabbit Monoclonal Antibody (Clone RM108) reacts only to the Fc region of mouse IgG2b and not to mouse IgG1, IgG2a, IgG3, IgM, IgA, IgE, human IgG, rat IgG, or goat IgG. The plate was coated with 50 ng/well of different immunoglobulins. IgG2b (mouse) Rabbit Monoclonal Antibody (Clone RM108) was used as the primary antibody and an alkaline phosphatase conjugated anti-rabbit IgG was used as the secondary antibody.



A Titer ELISA using IgG2b (mouse) Rabbit Monoclonal Antibody (Clone RM108). The plate was coated with different amounts of mouse IgG2b. A serial dilution of IgG2b (mouse) Rabbit Monoclonal Antibody (Clone RM108) 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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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} Class switching to the IgG2b isotype occurs *via* TGF- β stimulation during the early immune response.⁷ IgG2b binds to activating Fc γ receptors (Fc γ Rs) and is involved in complement fixation.⁵ Cayman's IgG2b (mouse) Rabbit Monoclonal Antibody (Clone RM108) can be used for ELISA, flow cytometry (FC), immunoprecipitation (IP), and Western blot (WB) applications. The antibody recognizes the Fc region of non-reduced and reduced IgG2b at approximately 150 and 50 kDa, respectively, from mouse samples.

References

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