

PRODUCT INFORMATION



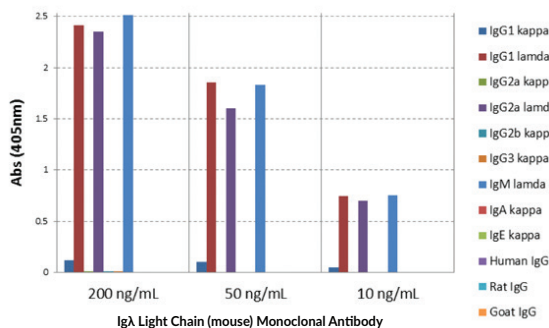
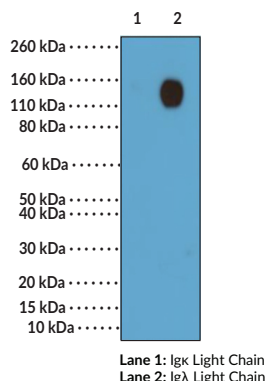
Igλ Light Chain (mouse) Rabbit Monoclonal Antibody

Item No. 32000

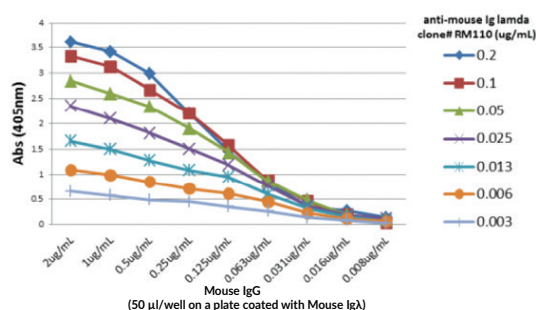
Overview and Properties

Contents:	This vial contains 100 µg of protein A-affinity purified monoclonal antibody.
Synonym:	Immunoglobulin λ Light Chain
Immunogen:	Mouse IgMλ
Cross Reactivity:	(-) Igk light chain, 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:	RM110
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA, Western Blot (WB; non-reducing conditions); the recommended starting concentration for ELISA is 0.005-0.2 µg/ml and 0.1-0.5 µg/ml for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



ELISA of Mouse Immunoglobulins (Igs). Igλ Light Chain (mouse) Rabbit Monoclonal Antibody reacts only to λ light chain of all mouse Igs and not human, rat, or goat IgG.



A Titer ELISA of Igλ Light Chain (mouse) Rabbit Monoclonal Antibody. The plate was coated with different amounts of mouse Igλ. A serial dilution of RM110 was used as the primary antibody. An alkaline phosphatase conjugated anti-rabbit IgG as the second 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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Description

Ig λ light chain is one type of light chain found in immunoglobulins, which are part of the immunoglobulin superfamily of glycoproteins that plays a central role in the adaptive immune response.¹ Immunoglobulins are produced by B cells and later secreted by plasma cells as antibodies.² They are composed 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.³ Mammalian immunoglobulins contain either Ig κ or Ig λ light chains each of which are composed of a constant and variable domain.^{2,4} The ratio of Ig κ to Ig λ light chain containing antibodies varies between species, with ratios of 20:1, 2:1, and 1:20 in mice, humans, and cattle, respectively. In systemic amyloidosis, a clonal population of plasma cells produces light chains that form amyloid fibrils, and the type of free light chains (FLCs) produced is predominantly Ig λ with an Ig κ to Ig λ ratio of 1:3 or, in amyloidosis patients with nephrotic-range proteinuria, 1:5.⁵ Cayman's Ig λ Light Chain (mouse) Rabbit Monoclonal Antibody can be used for ELISA and Western blot (WB; non-reducing conditions) applications. The antibody recognizes the Ig λ light chain from mouse samples.

References

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