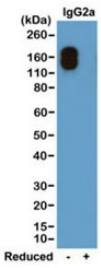
Recombinant Mouse IgG2a-Kappa Antibody [clone RM107] (R20165)

Catalog No.	Formulation	Size
R20165-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

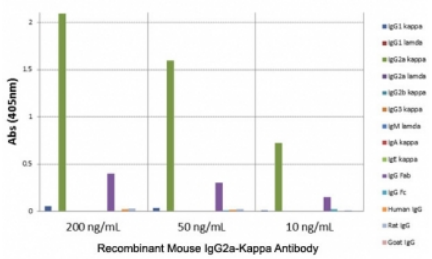
Recombinant RABBIT MONOCLONAL

Bulk quote request

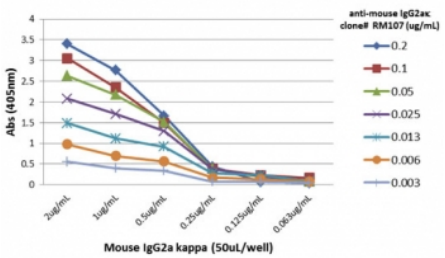
Availability	1-3 business days
Species Reactivity	Mouse
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM107
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01863
Gene ID	380793
Applications	ELISA : 0.005ug/ml-0.2ug/ml Western Blot (non-reduced Only) : 0.1-0.5ug/ml
Limitations	This recombinant Mouse IgG2a-Kappa antibody is available for research use only.



Western blot of nonreduced(-) and reduced(+) mouse IgG2a-Îº (20 ng/lane), using 0.2ug/ml of recombinant Mouse IgG2a-Kappa antibody. This antibody only reacts to nonreduced Mouse IgG2a-Îº.



ELISA of mouse immunoglobulins shows the recombinant Mouse IgG2a-Kappa antibody reacts to the Fab region of mIgG2a-Îº; no cross reactivity with IgG2a-lambda, IgG1, IgG3, IgM, IgA, IgE, human/rat/goat IgG.



ELISA titer: the plate was coated with different amounts of mouse IgG2a-Îº. A serial dilution of recombinant Mouse IgG2a-Kappa antibody was used as the primary and an alkaline phosphatase conjugated anti-rabbit IgG as the secondary.

Description

The Recombinant Mouse IgG2a Kappa antibody is designed for the detection and study of the Fab region of mouse IgG2a kappa immunoglobulins. Mouse IgG2a is a potent IgG subclass that engages Fc gamma receptors with high affinity and strongly activates complement, while the kappa light chain is the most common light chain type in mouse immunoglobulins. Together, these structural elements define a prevalent antibody configuration in mouse immune responses. The Recombinant Mouse IgG2a Kappa antibody recognizes the Fab portion, which contains the variable regions that mediate antigen binding, making it a valuable reagent for monitoring antibody expression and for use in assay development.

The Fab region of IgG2a kappa antibodies consists of one constant and one variable domain from each heavy and light chain. This fragment carries the specificity for antigen recognition, while the Fc region determines effector function. By focusing on the Fab portion, the Recombinant Mouse IgG2a Kappa antibody allows researchers to study binding events independently of Fc mediated interactions. This is particularly important in experimental systems where Fc receptor binding or complement activation could obscure measurements of antigen recognition.

Applications of the Recombinant Mouse IgG2a Kappa antibody include ELISA, western blotting, and flow cytometry. In ELISA, the antibody can serve as a secondary reagent for detecting IgG2a kappa antibodies in hybridoma screening or immune profiling studies. In western blotting, it identifies IgG2a kappa heavy and light chains under reducing or non reducing conditions. In flow cytometry, the Recombinant Mouse IgG2a Kappa antibody helps monitor expression of IgG2a kappa antibodies on engineered B cells or in recombinant antibody production systems. Its specificity for the Fab region makes it suitable for analyzing antigen binding capacity without interference from Fc mediated binding.

The recombinant origin of this reagent ensures batch to batch consistency, reducing variability common to polyclonal or hybridoma derived preparations. Synonym phrases such as recombinant mouse immunoglobulin G2a kappa antibody and recombinant IgG2a kappa Fab reactive antibody expand product discoverability for users searching under alternate terminology. By focusing on the Fab region, this antibody provides a targeted tool for assays that require precise measurement of antigen specific interactions.

By delivering validated and reproducible performance, the Recombinant Mouse IgG2a Kappa antibody supports reliable analysis of antibody production, specificity, and structure. NSJ Bioreagents ensures strict quality standards for this reagent, giving scientists confidence in applications ranging from hybridoma characterization to antibody engineering. The Recombinant Mouse IgG2a Kappa antibody is an essential tool for dissecting Fab mediated recognition in mouse IgG2a kappa immunoglobulins.

This recombinant Mouse IgG2a-Kappa antibody reacts to the Fab region of mouse IgG2a-k. No cross reactivity with IgG2al, IgG1, IgG3, IgM, IgA, IgE, human/rat/goat IgG.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant Mouse IgG2a-Kappa antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Mouse IgG was used as the immunogen for this recombinant Mouse IgG2a-Kappa antibody.

Storage

Store the recombinant Mouse IgG2a-Kappa antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).