

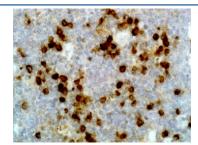
Recombinant Human Lambda Light Chain Antibody [clone RM127] (R20179)

Catalog No.	Formulation	Size
R20179-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

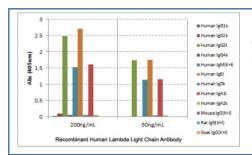
Recombinant RABBIT MONOCLONAL

Bulk quote request

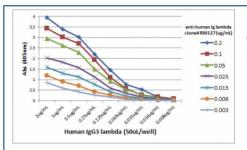
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	RM127
Purity	Protein A purified from animal origin-free supernatant
UniProt	P0CG04
Gene ID	3537
Applications	ELISA: 0.05-0.2ug/ml Immunocytochemistry: 0.5-2ug/ml Immunohistochemistry: 0.5-2ug/ml
Limitations	This recombinant Human Lambda Light Chain antibody is available for research use only.



IHC testing of FFPE human tonsil tissue with recombinant Human Lambda Light Chain antibody. A pH6 Citrate buffer or pH9 Tris/EDTA buffer HIER step is recommended for testing of FFPE tissue sections.



ELISA of human immunoglobulins shows the recombinant Human Lambda Light Chain antibody reacts to the lambda light chain. No cross reactivity with the kappa light chain, mouse/rat/goat IgG.



ELISA Titration: the plate was coated with different amounts of human IgG3λ. A serial dilution of the recombinant Human Lambda Light Chain antibody was used as the primary and an alkaline phosphatase conjugated anti-rabbit IgG as the secondary.

Description

The Recombinant Human Lambda Light Chain antibody is designed as a recombinant reagent for detecting and analyzing human lambda immunoglobulin light chains in research and diagnostic assays. Human antibodies contain either kappa or lambda light chains paired with heavy chains, with lambda chains representing a significant minority of circulating immunoglobulins. The ratio of kappa to lambda expression provides important information in both normal immunology and disease states. The Recombinant Human Lambda Light Chain antibody targets the constant region of lambda chains, offering a dependable tool for distinguishing lambda bearing antibodies and monitoring antibody expression patterns.

Structurally, each light chain includes one variable and one constant domain. When assembled with heavy chains, the variable domain contributes to antigen recognition, while the constant domain supports structural integrity. The Recombinant Human Lambda Light Chain antibody specifically recognizes the lambda constant region, enabling broad detection of lambda positive antibodies regardless of their antigen specificity. Recombinant expression ensures consistent production, eliminating variability associated with polyclonal sources or patient derived antisera.

In laboratory applications, the Recombinant Human Lambda Light Chain antibody is used in ELISA to measure antibody light chain composition in serum, culture supernatants, or hybridoma screening. In western blotting, it detects lambda light chains in reducing and non reducing conditions, distinguishing them from kappa chains. In immunohistochemistry, the antibody visualizes lambda restricted plasma cells within tissues, a critical step in evaluating clonality in suspected lymphoid malignancies. The Recombinant Human Lambda Light Chain antibody is also valuable in flow cytometry for identifying populations of B cells or plasma cells that preferentially express lambda light chains.

Clinically, the ratio of kappa to lambda light chains provides diagnostic and prognostic information in disorders such as multiple myeloma, chronic lymphocytic leukemia, and other B cell neoplasms. Overrepresentation of either chain suggests clonal expansion and supports the diagnosis of malignancy. By providing a standardized recombinant reagent, the Recombinant Human Lambda Light Chain antibody ensures reproducibility across laboratories and minimizes lot to lot variation. Synonym terms such as recombinant lambda constant region antibody and recombinant human lambda immunoglobulin light chain antibody increase accessibility for users seeking equivalent reagents.

By delivering validated and reproducible detection, the Recombinant Human Lambda Light Chain antibody enhances confidence in immunoassay results and clinical research applications. NSJ Bioreagents provides the Recombinant Human Lambda Light Chain antibody with rigorous quality standards, enabling researchers and clinicians to rely on its consistent performance. This reagent is an essential tool for exploring the role of lambda chains in antibody biology and for diagnosing disorders involving clonal B cell populations.

This recombinant Human Lambda Light Chain antibody reacts to the lambda light chain of human immunoglobulins. No cross reactivity with the kappa light chain or mouse/rat/goat IgG.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant Human Lambda Light Chain antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human IgG was used as the immunogen for this recombinant Human Lambda Light Chain antibody.

Storage

Store the recombinant Human Lambda Light Chain antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).