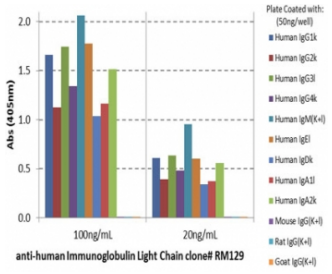
Human Immunoglobulin Light Chains Antibody for ELISA / Anti-Human Kappa and Lambda ELISA Antibody [clone RM129] (R20180)

Catalog No.	Formulation	Size
R20180-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

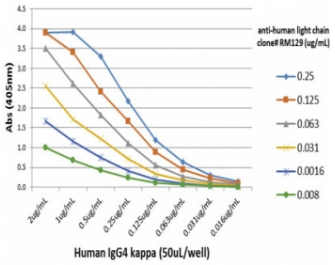
Recombinant RABBIT MONOCLONAL

Bulk quote request

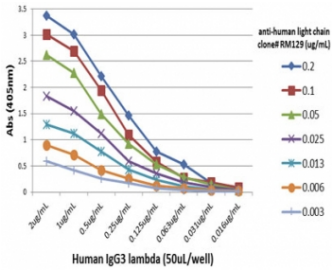
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM129
Purity	Protein A purified from animal origin-free supernatant
UniProt	P01834
Applications	ELISA : 0.1 ug/ml-0.5 ug/ml Immunocytochemistry : 0.5ug/ml-2ug/ml Immunohistochemistry : (FFPE)
Limitations	This Human Immunoglobulin Light Chains Antibody for ELISA / Anti-Human Kappa and Lambda ELISA Antibody is available for research use only.



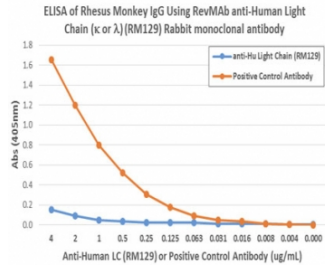
Human Immunoglobulin Light Chains Antibody for ELISA Human Immunoglobulin Panel Reactivity. ELISA analysis of human immunoglobulins using Human Immunoglobulin Light Chains Antibody for ELISA clone RM129 demonstrates strong reactivity to both kappa and lambda light chains across multiple human immunoglobulin classes. The antibody shows robust signal across IgG subclasses, IgM, IgA, and IgE, supporting broad detection of human antibody populations. No cross-reactivity is observed with mouse, rat, or goat immunoglobulin light chains, confirming species specificity and suitability for ELISA-based detection and quantification assays.



Human Immunoglobulin Light Chains Antibody for ELISA Human IgG4 Kappa Detection Curve. ELISA analysis using Human Immunoglobulin Light Chains Antibody for ELISA clone RM129 demonstrates concentration-dependent detection of the kappa light chain in human IgG4-coated wells. The antibody produces a strong and proportional signal across a range of antibody concentrations, supporting sensitive detection of kappa-containing immunoglobulins. This performance highlights its suitability for ELISA-based quantification of human immunoglobulin light chains in research applications.



Human Immunoglobulin Light Chains Antibody for ELISA Human IgG3 Lambda Detection Curve. ELISA analysis using Human Immunoglobulin Light Chains Antibody for ELISA clone RM129 demonstrates concentration-dependent detection of the lambda light chain in human IgG3-coated wells. The antibody produces a strong and proportional signal across a range of concentrations, supporting sensitive detection of lambda-containing immunoglobulins. These results confirm its suitability for ELISA-based quantification of human immunoglobulin light chains in research applications.



Human Immunoglobulin Light Chains Antibody for ELISA Rhesus Monkey IgG Cross-Reactivity Analysis. ELISA analysis using Human Immunoglobulin Light Chains Antibody for ELISA clone RM129 demonstrates no detectable reactivity with rhesus monkey IgG-coated wells, indicating lack of cross-reactivity with non-human primate immunoglobulin light chains. In contrast, the positive control antibody shows strong signal, confirming assay performance. These results support the specificity of this antibody for human immunoglobulin light chains in ELISA-based detection systems.

Description

Human immunoglobulin light chains are essential components of antibodies, consisting of kappa and lambda isotypes that pair with heavy chains to form functional immunoglobulins. These light chains are present in both membrane-bound and secreted antibody forms and play a central role in antigen recognition and humoral immune responses. Human Immunoglobulin Light Chains Antibody for ELISA is designed to detect both kappa and lambda chains, enabling comprehensive measurement of total immunoglobulin light chain content in biological samples. This broad detection capability makes it particularly valuable in ELISA-based assays requiring accurate quantification of total antibody levels across multiple immunoglobulin classes.

Human immunoglobulin light chains antibody, also referred to as anti-human kappa and lambda antibody or Ig light chains antibody in the literature, recognizes conserved regions of immunoglobulin light chains present in IgG, IgM, IgA, and other antibody classes. This wide reactivity profile makes it highly effective as a detection antibody in sandwich ELISA formats, where consistent binding to captured immunoglobulins is critical for reliable signal generation. The Human Immunoglobulin Light Chains Antibody for ELISA supports both indirect and sandwich ELISA assay configurations, providing flexibility for assay development and optimization in research settings.

In ELISA applications, targeting both kappa and lambda light chains provides a significant advantage over heavy chain-specific detection by ensuring complete representation of antibody populations. This reduces assay bias and improves accuracy when measuring total immunoglobulin levels in serum, plasma, or cell culture supernatants. The antibody is particularly useful in studies of immune response profiling, hybridoma screening, recombinant antibody production, and immunoassay development, where consistent and unbiased detection of human antibodies is required. Its ability to detect Ig light chains across multiple isotypes ensures robust performance in diverse experimental conditions.

Clone RM129 is a rabbit monoclonal antibody engineered for high affinity and reproducibility in ELISA-based detection systems. Its recombinant design supports consistent batch-to-batch performance, which is essential for quantitative immunoassays. This antibody targets human immunoglobulin light chains in research applications requiring sensitive and

reliable ELISA detection, making it well suited for antibody quantification, biomarker analysis, and assay standardization workflows.

This antibody is part of the light chains antibody collection, where additional kappa and lambda light chain antibodies can be explored.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Human Immunoglobulin Light Chains Antibody for ELISA / Anti-Human Kappa and Lambda ELISA Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human IgG was used as the immunogen for the recombinant Human Ig Light Chains antibody.

Storage

Store the recombinant Human Ig Light Chains antibody at -20oC.

Alternate Names

Human kappa lambda antibody, immunoglobulin light chain ELISA antibody, anti-human kappa and lambda antibody, human Ig light chains antibody, kappa lambda detection antibody