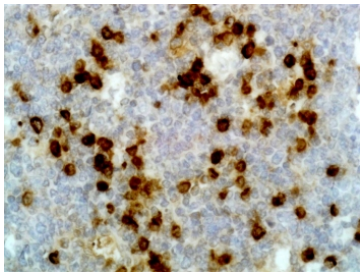
Human Lambda Light Chain Antibody for ELISA / Anti-Human Lambda ELISA Antibody [clone RM127] (R20179)

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

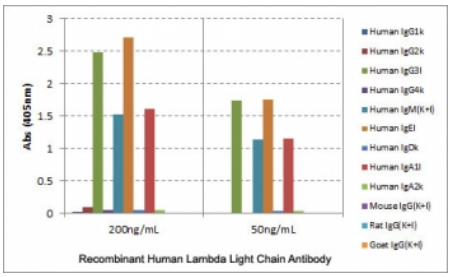
Recombinant RABBIT MONOCLONAL

Bulk quote request

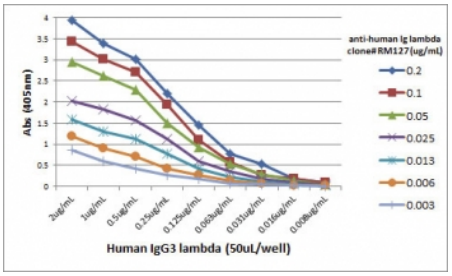
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	RM127
Purity	Protein A purified from animal origin-free supernatant
UniProt	P0CG04
Gene ID	3537
Applications	ELISA : 0.05-0.2ug/ml Immunocytochemistry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



Human Lambda Light Chain Antibody for IHC Human Tonsil Tissue Staining. Immunohistochemistry analysis of Human Lambda Light Chain expression in FFPE human tonsil tissue using Human Lambda Light Chain Antibody clone RM127 demonstrates strong cytoplasmic HRP-DAB brown staining in scattered plasma cells within lymphoid regions, consistent with lambda light chain expression in antibody-producing cells. Surrounding lymphocytes and stromal elements show minimal to no staining. Heat-induced epitope retrieval was performed using either pH 6 citrate buffer or pH 9 Tris-EDTA buffer, supporting reliable detection in FFPE tissue sections.



Human Lambda Light Chain Antibody for ELISA Human Immunoglobulin Lambda Specificity Analysis. ELISA analysis using Human Lambda Light Chain Antibody for ELISA clone RM127 demonstrates selective reactivity to lambda light chains across multiple human immunoglobulin classes, including IgG subclasses, IgM, and IgA. No cross-reactivity is observed with kappa light chains or with mouse, rat, or goat IgG, confirming strong specificity for human lambda light chain detection. These results support reliable use of this antibody for ELISA-based quantification of lambda-containing immunoglobulins.



Human Lambda Light Chain Antibody for ELISA Human IgG3 Lambda Titration Curve. ELISA titration analysis using Human Lambda Light Chain Antibody for ELISA clone RM127 demonstrates concentration-dependent detection of human IgG3 lambda-coated wells. Plates were coated with varying amounts of human IgG3 lambda, followed by incubation with serial dilutions of the antibody and detection using an alkaline phosphatase-conjugated anti-rabbit IgG secondary antibody. The resulting signal shows a clear dose-response relationship, supporting reliable ELISA-based detection of lambda light chain-containing immunoglobulins.

Description

Human immunoglobulin lambda light chains are key structural components of antibodies, pairing with heavy chains to form complete immunoglobulin molecules that mediate antigen recognition and immune defense. Lambda light chains are present across multiple antibody classes, including IgG, IgM, IgA, and IgE, and represent a distinct subset of total immunoglobulin populations alongside kappa chains. Human Lambda Light Chain Antibody for ELISA is designed for selective detection of lambda light chains, enabling targeted analysis of lambda-containing immunoglobulins in biological samples such as serum, plasma, and cell culture supernatants. This selective detection supports detailed characterization of antibody composition and immune responses in ELISA-based assays.

Human lambda light chain antibody, also referred to as anti-human lambda antibody or Ig lambda antibody in the literature, recognizes conserved regions within lambda light chains across multiple immunoglobulin isotypes. This allows consistent binding to lambda-containing antibodies regardless of heavy chain class, supporting reliable detection in indirect and sandwich ELISA formats. The Human Lambda Light Chain Antibody for ELISA is well suited for standard ELISA detection workflows, where stable and reproducible signal generation is required without reliance on signal amplification systems. This makes it particularly useful for routine antibody quantification, assay development, and comparative studies across samples.

Selective detection of lambda light chains provides an important analytical advantage in studies requiring differentiation between lambda and kappa antibody populations. This distinction is critical in applications such as monoclonal antibody development, hybridoma screening, and immunoglobulin profiling, where understanding light chain distribution can inform antibody selection and characterization. In ELISA-based assays, lambda-specific detection enables precise measurement of lambda-bearing antibodies without interference from kappa-containing immunoglobulins, improving assay specificity and interpretability.

In addition to its use in basic antibody quantification, this antibody supports applications involving immune monitoring and antibody production workflows, where consistent detection of lambda light chains across different immunoglobulin classes is required. Its performance in ELISA systems allows accurate comparison of antibody levels across experimental conditions, supporting studies of immune activation, antibody secretion, and protein expression.

Clone RM127 is a rabbit monoclonal antibody engineered for high affinity and consistent performance in ELISA-based detection systems. Its recombinant design ensures reliable batch-to-batch reproducibility, which is essential for quantitative immunoassays. This antibody targets human lambda light chains in research applications requiring specific, stable, and reproducible ELISA detection, making it well suited for antibody characterization, immune response studies,

and assay development.

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

Application Notes

The stated application concentrations are suggested starting points. Titration of the Human Lambda Light Chain Antibody for ELISA / Anti-Human Lambda ELISA 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).

Alternate Names

Human lambda antibody, lambda light chain ELISA antibody, anti-human lambda chain antibody, human Ig lambda antibody, lambda chain detection antibody