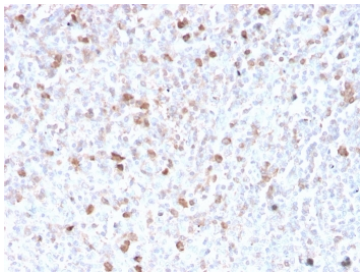
Lambda Antibody LLC/3778R / Immunoglobulin Lambda Locus Antibody [clone LLC/3778R] (V7879)

Catalog No.	Formulation	Size
V7879-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7879-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7879SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

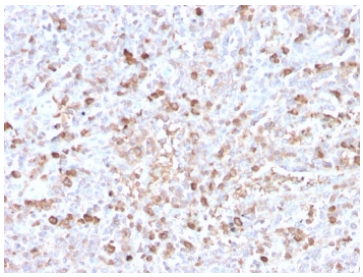
Recombinant RABBIT MONOCLONAL

Bulk quote request

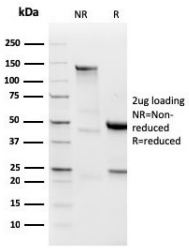
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	LLC/3778R
Purity	Protein A affinity chromatography
UniProt	P01701, P01842
Localization	Cell surface, cytoplasmic, secreted
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This Lambda Antibody LLC/3778R / Immunoglobulin Lambda Locus Antibody is available for research use only.



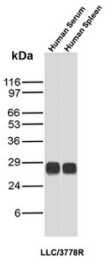
Lambda Antibody LLC/3778R in Human Spleen Tissue IHC. Immunohistochemistry staining of FFPE human spleen tissue with Lambda Antibody clone LLC/3778R demonstrates heterogeneous brown cellular staining, with scattered strongly positive cells distributed throughout the splenic parenchyma. HIER was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling before testing. The cellular distribution is consistent with detection of lambda light chain-expressing cells by the Immunoglobulin Lambda Locus Antibody.



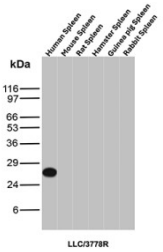
Lambda Antibody LLC/3778R Detects Lambda-Positive Cells in Human Spleen IHC. Immunohistochemistry staining of FFPE human spleen tissue with Lambda Antibody clone LLC/3778R shows heterogeneous brown staining, including numerous strongly positive individual cells among more weakly stained and unstained cells. HIER was performed using pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling before testing. The distinct cellular staining demonstrates recognition by the Immunoglobulin Lambda Locus Antibody in human spleen.



Purified Lambda Antibody LLC/3778R Reducing and Non-Reducing SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Lambda Antibody clone LLC/3778R shows a predominant intact antibody species at approximately 150 kDa under non-reducing conditions. Under reducing conditions, prominent heavy and light antibody chains are visible at approximately 50 and 25 kDa, respectively. The gel provides an assessment of the integrity and composition of the purified Immunoglobulin Lambda Locus Antibody preparation.



Recombinant Lambda Antibody LLC/3778R in Human Serum and Spleen WB. Western blot testing of human serum and spleen tissue lysates with Recombinant Lambda Antibody clone LLC/3778R detects a strong, discrete band at approximately 26-28 kDa in both samples, with minimal additional reactivity. The observed molecular weight is consistent with the expected migration of human immunoglobulin lambda light chain. The comparable signal in serum and spleen demonstrates recognition by this recombinant rabbit monoclonal antibody across soluble and tissue-derived human samples.



Recombinant Lambda Antibody LLC/3778R Species Specificity in Spleen Lysates WB. Western blot testing of human, mouse, rat, hamster, guinea pig, and rabbit spleen tissue lysates with Recombinant Lambda Antibody clone LLC/3778R detects a strong, discrete band at approximately 26-28 kDa in human spleen, with no corresponding signal detected in the other species tested. The observed band is consistent with the expected migration of human immunoglobulin lambda light chain and demonstrates human-specific recognition by this recombinant rabbit monoclonal antibody under the tested conditions.

Description

Lambda Antibody reagents are used to detect immunoglobulins containing lambda light chains. Immunoglobulin molecules consist of two identical heavy chains and two identical light chains, with the light chains belonging to either the kappa or lambda class. Lambda light chains contribute to the antigen-binding portion of immunoglobulins and are expressed by a subset of mature B cells and antibody-secreting plasma cells.

The human immunoglobulin lambda locus, designated IGL, is located on chromosome 22 and contains variable, joining, and constant gene segments involved in lambda light-chain production. Rearrangement of these gene segments contributes to immunoglobulin diversity and generates lambda chains that pair with immunoglobulin heavy chains. The term Immunoglobulin Lambda Locus Antibody therefore provides an established nomenclature connection between IGL and detection of lambda light-chain proteins.

Kappa and lambda expression is commonly examined when studying B-cell populations and immunoglobulin production. Individual mature B cells generally produce immunoglobulins containing one light-chain type, while a polyclonal population contains cells expressing either kappa or lambda chains. Restricted light-chain expression can therefore provide useful information in research examining B-cell clonality, plasma-cell populations, and lymphoid biology.

Lambda light chains occur within intact immunoglobulin molecules and may also be present as free light chains. Their expression is studied in immunology, B-cell and plasma-cell biology, antibody production, and research involving lymphoid and plasma-cell disorders. Comparison of lambda and kappa expression can further support investigation of immunoglobulin light-chain distribution and clonal cell populations.

A Lambda Antibody such as clone LLC/3778R provides a recombinant rabbit monoclonal reagent generated against full-length human IGL protein. The antibody is specific for human lambda light chain and shows no cross-reaction with kappa light chain or the five immunoglobulin heavy-chain classes, supporting selective investigation of lambda light-chain expression. NSJ Bioreagents offers LLC/3778R for research examining immunoglobulin expression, B-cell biology, and related immune processes.

For a recombinant mouse monoclonal targeting the same immunoglobulin light-chain class, see our Lambda Light Chain Antibody rLLC/1738 / IGL Antibody page.

Application Notes

Optimal dilution of the Lambda Antibody LLC/3778R / Immunoglobulin Lambda Locus Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human IGL protein was used as the immunogen for the recombinant Lambda Antibody LLC/3778R.

Storage

Store the Lambda Antibody LLC/3778R at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

IGL antibody, Immunoglobulin lambda locus antibody, Immunoglobulin lambda light chain antibody, Lambda light chain antibody, Lambda chain antibody, Ig lambda antibody

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