

Lambda light chain Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM1972a

Specification

Lambda light chain Antibody - Product Information

Application	WB, IHC-P,E
Primary Accession	P01701
Other Accession	POCG04
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a ,k
Calculated MW	12249

Lambda light chain Antibody - Additional Information

Other Names

Ig lambda chain V-I region NEW, LV103

Target/Specificity

This Lambda light chain monoclonal antibody is generated from mouse immunized with Lambda light chain recombinant protein.

Dilution

WB~~1:500~16000

IHC-P~~1:10~50

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Lambda light chain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Lambda light chain Antibody - Protein Information

Name IGLV1-51 {ECO:0000303|PubMed:11872955, ECO:0000303|Ref.7}

Function V region of the variable domain of immunoglobulin light chains that participates in the antigen recognition (PubMed:[24600447](#)). Immunoglobulins, also known as antibodies, are membrane-bound or secreted glycoproteins produced by B lymphocytes. In the recognition phase of humoral immunity, the membrane-bound immunoglobulins serve as receptors which, upon

binding of a specific antigen, trigger the clonal expansion and differentiation of B lymphocytes into immunoglobulins- secreting plasma cells. Secreted immunoglobulins mediate the effector phase of humoral immunity, which results in the elimination of bound antigens (PubMed:[20176268](#), PubMed:[22158414](#)). The antigen binding site is formed by the variable domain of one heavy chain, together with that of its associated light chain. Thus, each immunoglobulin has two antigen binding sites with remarkable affinity for a particular antigen. The variable domains are assembled by a process called V-(D)-J rearrangement and can then be subjected to somatic hypermutations which, after exposure to antigen and selection, allow affinity maturation for a particular antigen (PubMed:[17576170](#), PubMed:[20176268](#)).

Cellular Location

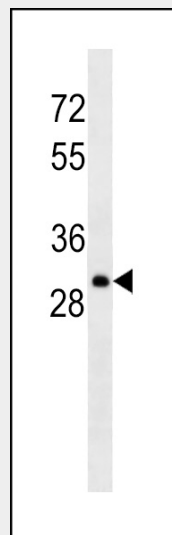
Secreted. Cell membrane

Lambda light chain Antibody - Protocols

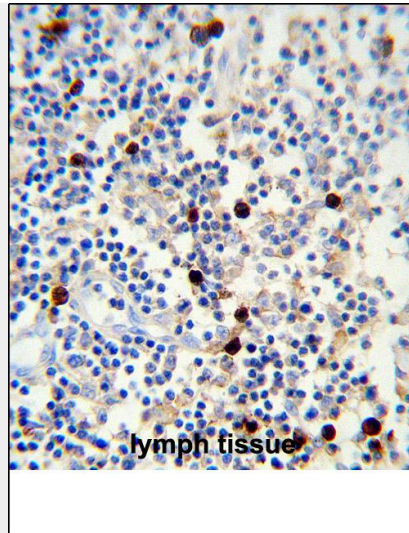
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Lambda light chain Antibody - Images



Lambda light chain Antibody western blot analysis in Ramos cell line lysates (35µg/lane). This demonstrates the Lambda light chain antibody detected the Lambda light chain protein (arrow).



Lambda light chain Antibody (Cat. #AM1972a) immunohistochemistry analysis in formalin fixed and paraffin embedded human lymph tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Lambda light chain Antibody for immunohistochemistry. Clinical relevance has not been evaluated.

Lambda light chain Antibody - Background

Immunoglobulins recognize foreign antigens and initiate immune responses such as phagocytosis and the complement system. Each immunoglobulin molecule consists of two identical heavy chains and two identical light chains. There are two types of light chains designated as kappa and lambda (1). Light chain types are based on differences in the amino acid sequence in the constant region of the light chain. If a cell is unsuccessful in rearranging both of its kappa light chain genes, it then attempts to make a lambda light chain. If a cell successfully rearranges a lambda light chain gene, it will be a B cell that makes an immunoglobulin with a lambda light chain (2).

Lambda light chain Antibody - References

- 58066: Reimer CB, et al. Evaluation of thirty-one mouse monoclonal antibodies to human IgG epitopes. *Hybridoma* 3: 263-275, 1984. PubMed: 6209201
- 58067: Jefferis R, et al. Evaluation of monoclonal antibodies having specificity for human IgG sub-classes: Results of an IUIS/WHO collaborative study. *Immunol. Lett.* 10: 223-252, 1985. PubMed: 3899923