10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Lambda light chain Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1972a

Product Information

Application	WB
Primary Accession	P01701
Other Accession	P0CG04
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a ,k
Clone Names	HP6054
Calculated MW	12249

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 E~~Use at an assay dependent concentration.
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.

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

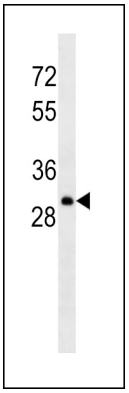
Background

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).

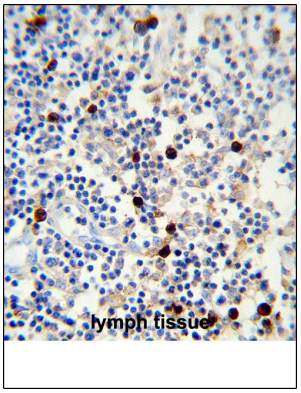
References

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

Images



Lambda light chain Antibody western blot analysis in Ramos cell line lysates (35 µg/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 conj µgation 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.