

Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone Lamb14 ] Catalog # AH11553

### Specification

# Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC, IF, FC <u>P01701</u> <u>3535</u>, <u>3546</u>, <u>449585</u>, <u>P01842</u> Human Mouse Monoclonal Mouse / IgG2a, kappa ~22.5kDa KDa

## Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide - Additional Information

Other Names Ig lambda chain V-I region NEW, LV103

Application Note <span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC">IHC~~1:100~500</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

## Storage

Store at 2 to 8°C.Antibody is stable for 24 months.

#### **Precautions**

Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide - 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:<a href="http://www.uniprot.org/citations/24600447" target="\_blank">24600447</a>). 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:<a href="http://www.uniprot.org/citations/20176268" target="\_blank">20176268</a>, PubMed:<a



href="http://www.uniprot.org/citations/22158414" target="\_blank">22158414</a>). 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:<a href="http://www.uniprot.org/citations/17576170" target="\_blank">17576170</a>, PubMed:<a href="http://www.uniprot.org/citations/20176268" target=" blank">20176268</a>).

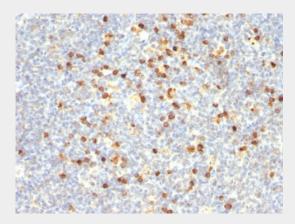
Cellular Location Secreted. Cell membrane

## Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with Lambda Light Chain Monoclonal Antibody (Lamb14).

Western Blot of human Intestinal Lysate using Lambda Light Chain Monoclonal Antibody (Lamb14).



## Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide - Background

This MAb is specific to lambda light chain of immunoglobulin and shows no cross-reaction with lambda light chain or any of the five heavy chains. In mammals, the two light chains in an antibody are always identical, with only one type of light chain, kappa or lambda. The ratio of Kappa to Lambda is 70:30. However, with the occurrence of multiple myeloma or other B-cell malignancies this ratio is disturbed. Antibody to the lambda light chain is reportedly useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is malignant.

## Lambda Light Chain (B-Cell Marker) Antibody - With BSA and Azide - References

Leung N et. al. Leuk Lymphoma doi:10.3109/10428194.2012.673229 (2012). | Villaverde et al. .Clin Kidney J 5:59-62 (2012)