

Anti-Kappa Light Chain (B-Cell Marker) Antibody
Mouse Monoclonal Antibody
Catalog # AH13321**Specification****Anti-Kappa Light Chain (B-Cell Marker) Antibody - Product Information**

Application	IHC-P, FC
Primary Accession	P01601
Other Accession	449609 , P01834
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	12730

Anti-Kappa Light Chain (B-Cell Marker) Antibody - Additional Information**Other Names**

HCAK1; Ig Kappa Chain C Region; IGKC; Immunoglobulin KM

Application Note

IHC-P~N/A
FC~1:10~50

Format

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage

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

Precautions

Anti-Kappa Light Chain (B-Cell Marker) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-Kappa Light Chain (B-Cell Marker) Antibody - Protein Information

Name IGKV1D-16 {ECO:0000303|PubMed:11549845, ECO:0000303|Ref.5}

Function

V region of the variable domain of immunoglobulin light chains that participates in the antigen recognition (PubMed: <http://www.uniprot.org/citations/24600447> target="_blank">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

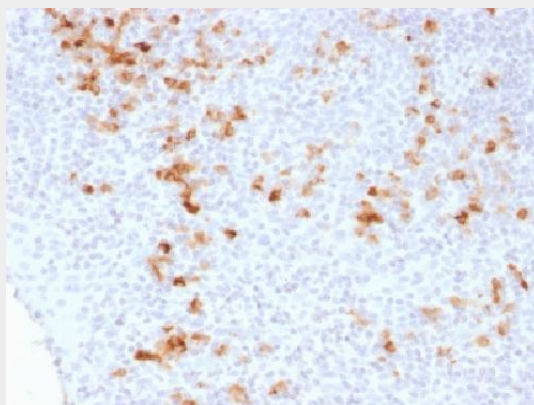
Secreted. Cell membrane

Anti-Kappa Light Chain (B-Cell Marker) 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](#)

Anti-Kappa Light Chain (B-Cell Marker) Antibody - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with Kappa Light Chain Monoclonal Antibody (KLC1278).

Anti-Kappa Light Chain (B-Cell Marker) Antibody - Background

This MAbs is specific to kappa light chain of immunoglobulin and shows no cross-reaction with lambda light chain or any of the five heavy chains. It recognizes human Ig kappa light chains of both secreted and cell surface immunoglobulin. It detects also free kappa light 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 kappa 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.