

# Recombinant Kappa Light Chain / IGKC (B-Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone rKLC709]

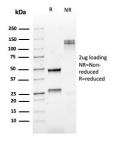
Catalog No	Format	Size
3514-MSM10-P0	Purified Ab with BSA and Azide	200ug/ml
3514-MSM10-P1	Purified Ab with BSA and Azide	200ug/ml
3514-MSM10-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Immunohistochemistry (IHC)	1-2ug/ml

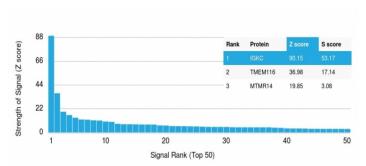
Product Details		
Clone	rKLC709	
Gene Name	IGKV1D-16	
Immunogen	Recombinant full-length human Ig kappa chain	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG1 / Kappa	
Mol. Weight of Antigen	~22.5kDa	
Cellular Localization	Cell membrane, Secreted	
Species Reactivity	Human	
Positive Control	293T, Raji or hPBL cells. Tonsil or Spleen.	

<sup>\*</sup>Optimal dilution for a specific application should be determined.

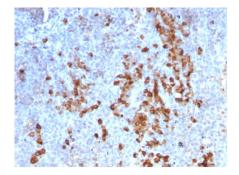
# Product Images for Recombinant Kappa Light Chain / IGKC (B-Cell Marker) Antibody



SDS-PAGE Analysis of Purified Kappa Light Chain Mouse Recombinant Monoclonal Ab (rKLC709). Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing >19,000 full-length human proteins using Kappa Light Chain Recombinant Mouse Monoclonal Antibody (rKLC709) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human Tonsil stained with Kappa Light Chain Mouse Recombinant Monoclonal Ab (rKLC709).

## **Specificity & Comments**

This MAb 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.

#### **Research Areas**

**B Cell Markers** 

# **Known Applications & Suggested Dilutions**

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes) | Optimal dilution for a specific application should be determined.

# **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

## **Supplied As**

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 and Stability

Antibody with azide - store at 2 to  $8^{\circ}$ C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

