

Human Kappa Light Chain Monoclonal Mouse Antibody (KLC1278)

Product Description

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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1278, Anti-Human Kappa Light Chain (KLC1278)

Call us : 800-304-5357 Email: techsupport@biotium.com

Product attributes

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Antibody number	#1278			
Antibody reactivity (target)	Human Kappa Light Chain			
Antibody type	Primary, Anti-Human Immunoglobulin			
Host species	Mouse			
Clonality	Monoclonal			
Clone	KLC1278			
Isotype	lgG1, kappa			
Molecular weight	~22.5 kDa			
Synonyms	HCAK1; Ig Kappa Chain C Region; IGKC; Immunoglobulin KM			
Human gene symbol	IGKC			
Entrez gene ID	3514			
SwissProt	P01601 & P01834			
Unigene	449609			
Immunogen	Recombinant human full-length Ig kappa chain			
Antibody target cellular localization	Plasma membrane, Secreted (extracellular)			
Verified antibody applications	IHC (FFPE) (verified)			
Species reactivity	Human			
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunohistology (formalin) 1-2 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA pH 8.0 for 10-20 min followed by cooling at RT for 20 min, Flow Cytometry 0.5-1 ug/mIllion cells/0.1 mL, Optimal dilution for a specific application should be determined by user			
Positive control	293T, Raji or hPBL cells. Tonsil or Spleen			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ C			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/m in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL PBS without azide			
Cell/tissue expression	B-cells			
Antibody research areas	Cancer, Immunology, Inflammation			
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.			
Tumor expression	Leukemia/lymphoma			

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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