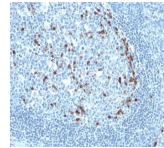


# Human Kappa Light Chain Monoclonal Mouse Antibody (KLC709)



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.

## 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 [CF® Dye Brochure](#) 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 [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0709, Anti-Human Kappa Light Chain (KLC709)**

Antibody #	prefix	Conjugation	Ex/Em	Concentration	Storage Buffer
BNC04	CF®405S		404/431 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC05	CF®405M		408/452 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC88	CF®488A		490/515 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC43	CF®543		541/560 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC55	CF®555		555/565 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC68	CF®568		562/583 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC94	CF®594		593/614 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC40	CF®640R		642/662 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC47	CF®647		650/665 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC61	CF®660R		663/682 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC80	CF®680		681/698 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC81	CF®680R		680/701 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC70	CF®770		770/797 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCR	R-PE (PE)		496, 546, 565/578 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCA	APC		650/660 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCP	PerCP		482/677 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCB	Biotin	N/A		0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCAP	Alkaline Phosphatase	N/A		0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCH	Horse radish Peroxidase	N/A		0.1 mg/mL	PBS, 0.05% BSA, no azide
BNUB	Purified, with BSA	N/A		0.2 mg/mL	PBS, 0.05% BSA, 0.05% azide
BNUM	Purified, BSA-free	N/A		1 mg/mL	PBS, no BSA, no azide

## References

Kiyotaki M et. al. J Immunol. 1987;138(12):4150-8. | Nakamura T et. al. Proc Natl Acad Sci U S A. 1992;89(18):8522-6

Product attributes	
Antibody number	0709
Reactivity (target)	Human Kappa Light Chain
Antibody type	Anti-Human Immunoglobulin, Primary
Host species	Mouse
Clonality	Monoclonal
Clone	KLC709
Isotype	IgG1, 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 Ig kappa chain
Cellular localization	Cytoplasmic, Membrane/cell surface, Secreted (extracellular)
Species reactivity	Human
Applications	Immunohistochemistry (formalin), Flow cytometry
Application notes	Immunohistochemistry formalin-fixed 0.5-1.0 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. 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 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Research areas	Immunology

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