Human Kappa Light Chain / IGKC Monoclonal Mouse Antibody (rKLC709)



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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2050, Anti-Kappa Light Chain / IGKC (rKLC709)

Product attributes

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| Fioduct attributes | | | | | | |
|--|---|--|--|--|--|--|
| Antibody number | #2050 | | | | | |
| Antibody reactivity (target) | Human Kappa Light Chain | | | | | |
| Antibody type | Primary | | | | | |
| Host species | Mouse | | | | | |
| Clonality | Monoclonal | | | | | |
| Clone | rKLC709 | | | | | |
| 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 full-length human Ig kappa chain | | | | | |
| Verified antibody applications | IHC (FFPE) (verified) | | | | | |
| Antibody target cellular localization | Plasma membrane, Secreted (extracellular) | | | | | |
| 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, Flow cytometry: 0.5-1 ug/mlllion cells, Immunohistology (formalin): 0.5-1.0 ug/mL for 30 minutes at RT Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes, 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) | | | | | |
| 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/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL i PBS without azide | | | | | |
| Validated in protein array | Monospecific | | | | | |
| 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 | ession 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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