

CD7 Monoclonal Mouse Antibody (C7/511)

Product Description

Recognizes a protein of 40 kDa, identified as CD7, a member of the immunoglobulin gene superfamily. Its N-terminal amino acids 1-107 are highly homologous to Ig kappa-L chains whereas the carboxyl-terminal region of the extracellular domain is proline-rich and has been postulated to form a stalk from which the Ig domain projects. CD7 is expressed on the majority of immature and mature T-lymphocytes, and T cell leukemia. It is also found on natural killer cells, a small subpopulation of normal B cells and on malignant B cells. Cross-linking surface CD7 positively modulates T cell and NK cell activity as measured by calcium fluxes, expression of adhesion molecules, cytokine secretion and proliferation. CD7 associates directly with phosphoinositol 3'-kinase. CD7 ligation induces production of D-3 phosphoinositides and tyrosine phosphorylation.

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 0511, Anti-CD7 (C7/511)

Product attributes

| | |
|---------------------------------------|---|
| Antibody number | #0511 |
| Antibody reactivity (target) | CD7 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | C7/511 |
| Isotype | IgG2a |
| Molecular weight | 40 kDa |
| Synonyms | GP40; Leu9; p41; T-cell leukemia antigen; T-cell surface antigen Leu-9; Tp40; TP41 |
| Human gene symbol | CD7 |
| Entrez gene ID | 924 |
| SwissProt | P09564 |
| Unigene | 186820 |
| Immunogen | Recombinant human CD7 protein |
| Antibody target cellular localization | Plasma membrane |
| Species reactivity | Human |
| Antibody application notes | For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user. Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry |
| Positive control | Jurkat, HUT-78, Molt-4, CEM cells, or human peripheral blood lymphocytes. Lymph node and tonsil. |
| 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 in PBS without azide |
| Antibody research areas | Immunology, Signal transduction |
| 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. |
| Cell/tissue expression | NK cells, T-cells |
| 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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