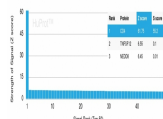


CD4 Monoclonal Mouse Antibody (CD4/3027)



Product Description

The immunogen for this Mab is derived from the extracellular domain of CD4, a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens and is also a receptor for the human immunodeficiency virus. This protein is expressed not only in T lymphocytes, but also in B cells, macrophages, and granulocytes. It is also expressed in specific regions of the brain. The protein functions to initiate or augment the early phase of T-cell activation, and may function as an important mediator of indirect neuronal damage in infectious and immune-mediated diseases of the central nervous system. The majority of peripheral T-cell lymphomas are derived from the T-helper/regulatory cell subset so that most mature T-cell neoplasms are CD4⁺/CD8⁻. Anti-CD4 is used in the immunohistochemical staining of lymphoproliferative disorders to evaluate tumors with CD4 aberrant expression. 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 3027, CD4 Monoclonal Mouse Antibody (CD4/3027)**

Product attributes

| | |
|---------------------------------------|---|
| Antibody number | #3027 |
| Antibody reactivity (target) | CD4 |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | CD4/3027 |
| Isotype | IgG2b, kappa |
| Molecular weight | 55 kDa |
| Synonyms | L3T4; Leu3; Ly-4; Lymphocyte antigen CD4; p55; T cell antigen T4/LEU3; T cell differentiation antigen L3T4; T-cell surface antigen T4/Leu-3; T-cell surface glycoprotein CD4 |
| Human gene symbol | CD4 |
| Entrez gene ID | 920 |
| SwissProt | P01730 |
| Unigene | 631659 |
| Immunogen | Recombinant human CD4 protein extracellular domain fragment (around aa 245-392) (exact sequence is proprietary) |
| 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 | Human peripheral blood mononuclear cells (PBMCs), CCRF-CEM or HL-60. Lymph node or 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 |
| 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 |
| Validated in protein array | Monospecific |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| Cell/tissue expression | Lymphocytes, Myeloid 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 |
| 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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