

# CD10 Monoclonal Mouse Antibody (FR4D11)

## Product Description

CD10 (also known as Common Acute Lymphocytic Leukemia Antigen (CALLA)) is a type II transmembrane protein. It is a cell surface enzyme with neutral metalloendopeptidase activity, which inactivates a variety of biologically active peptides. CD10 is expressed on the cells of lymphoblastic, Burkitt's, and follicular germinal center lymphomas, and on cells from patients with chronic myelocytic leukemia (CML). It is also expressed on the surface of normal early lymphoid progenitor cells, immature B cells within adult bone marrow and germinal center B cells within lymphoid tissue.

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 0248, Anti-CD10 (FR4D11)**

## Product attributes

|                                       |  |
|---------------------------------------|--|
| Antibody number                       | #0248  |
| Antibody reactivity (target)          | CD10   |
| Antibody type                         | Primary  |
| Host species                          | Mouse  |
| Clonality                             | Monoclonal   |
| Clone                                 | FR4D11   |
| Isotype                               | IgG1, kappa  |
| Molecular weight                      | 100 kDa  |
| Synonyms                              | CD10; Neprilysin; Atriopeptidase; Common acute lymphocytic leukemia antigen (CALLA); Enkephalinase; gp100; Membrane metalloendopeptidase; Neutral endopeptidase  |
| Human gene symbol                     | MME  |
| Entrez gene ID                        | 4311   |
| SwissProt                             | P08473   |
| Unigene                               | 307734   |
| Immunogen                             | Raji cells   |
| Antibody target cellular localization | Plasma membrane  |
| Verified antibody applications        | Flow (verified), IF (verified)   |
| Species reactivity                    | Human  |
| Expected antibody applications        | Flow, surface (published for clone), IF (published for clone)  |
| Antibody application notes            | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user |
| Positive control                      | Tonsil, small intestine, kidney  |
| 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, Proteases  |
| 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                | B-cells, Epithelial 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 | <a href="#">CF®405S Features</a> |
| BNC88             | CF®488A            | 490/515    | 488        | GFP, FITC                | <a href="#">CF®488A Features</a> |
| BNC68             | CF®568             | 562/583    | 532, 561   | RFP, TRITC               | <a href="#">CF®568 Features</a>  |
| BNC94             | CF®594             | 593/614    | 561        | Texas Red®               | <a href="#">CF®594 Features</a>  |
| BNC40             | CF®640R            | 642/662    | 633-640    | Cy®5                     | <a href="#">CF®640R Features</a> |
| BNC47             | CF®647             | 650/665    | 633-640    | Cy®5                     | <a href="#">CF®647 Features</a>  |
| BNC74             | CF®740             | 742/767    | 633-685    | 775/50                   | <a href="#">CF®740 Features</a>  |
| 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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## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Oncotarget (2015) 6(4): 2315-2330. (Flow, surface)
2. Oncotarget (2016) 7(34): 54157-54173. (IF)