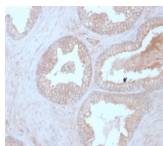


# Calcineurin B / PPP3R1 Monoclonal Mouse Antibody (CALNB/2342)



## Product Description

This antibody recognizes the Calcineurin B alpha protein, encoded by the PPP3R1 (Protein Phosphatase 3 Regulatory Subunit B Alpha) gene. Calcineurin is an enzyme that dephosphorylates serine and threonine residues in proteins. It is a heterodimer of a 59 kDa catalytic A subunit and a 19 kDa regulatory B subunit that is activated by the binding of calcium ions and calmodulin. Calcineurin is expressed in many tissues, but its levels are highest in the brain, where it may play a role in learning and memory. It has many substrates, including NFAT, a transcription factor that is activated by dephosphorylation. Complexes of the immuno-suppressants cyclosporine and FK506 with immunophilin proteins such as cyclophilin and FKBP12 are potent and specific inhibitors of Calcineurin activity. Alterations in Calcineurin activity are suspected to play a role in cardiac hypertrophy and graft versus host disease in organ transplantation.

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 2342, Calcineurin B / PPP3R1 Monoclonal Mouse Antibody (CALNB/2342)**

## Product attributes

|                                       |   |
|---------------------------------------|---|
| Antibody number                       | #2342   |
| Antibody reactivity (target)          | Calcineurin B, PPP3R1   |
| Antibody type                         | Primary   |
| Host species                          | Mouse   |
| Clonality                             | Monoclonal  |
| Clone                                 | CALNB/2342  |
| Isotype                               | IgG1, kappa   |
| Molecular weight                      | 19 kDa  |
| Synonyms                              | Calcineurin B; Calcineurin subunit B type 1; Protein Phosphatase 3 Regulatory Subunit B Alpha; CALNB1; Cna2; CNB; CNB1; PPP3R1  |
| Human gene symbol                     | PPP3R1  |
| Entrez gene ID                        | 5534  |
| SwissProt                             | P63098  |
| Unigene                               | 280604  |
| Immunogen                             | Recombinant full-length Calcineurin B protein   |
| Antibody target cellular localization | Nucleus & cytoplasm   |
| Verified antibody applications        | IHC (FFPE) (verified)   |
| Species reactivity                    | Human   |
| Positive control                      | HeLa, MCF-7 or A431 cells. Prostate, Thyroid or Pancreas.   |
| 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 |
| Shelf life                            | Guaranteed for at least 24 months from date of receipt when stored as recommended   |
| Antibody research areas               | Ion channels  |
| Product origin                        | Product may contain either bovine serum albumin (BSA) from bovine serum ( <i>Bos taurus</i> ), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.          |
| Cell/tissue expression                | Brain, T-cells  |

| 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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