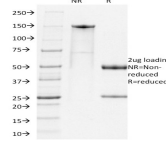


# PD1 / PDCD1 / CD279 Mouse Monoclonal Rat Antibody (RMP1-14)



## Product Description

PD-1 is expressed on a subset of CD4-CD8-thymocytes, and on activated T and B cells. PD-1 is thought to be involved in lymphocyte clonal selection and peripheral tolerance. The PD-1 ligands, PD-L1 (also known as B7-H1) and PD-L2 (B7-DC), are members of the B7 immunoglobulin superfamily. PD-1 is transiently expressed on CD4 and CD8 thymocytes as well as activated T and B-lymphocytes and myeloid cells. Additionally, Pdc1 mRNA is expressed in developing B-lymphocytes during the pro-B-cell stage. The RMP1-14 antibody has been reported to block the binding of PD-1 to its ligands (B7-H1 and B7-DC) and to inhibit T cell proliferation and cytokine production co-stimulated by macrophages (but not by dendritic cells and B cells).

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.

## References

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

1. J Immunol (2005) 175:1586-1592. (Flow; functional studies)
2. Cancer Res (2014) 74(14): 3652-8. (functional studies)
3. Cancer Discov (2017) 7(7): 694-703. (functional studies)

## Product attributes

|                                       |   |
|---------------------------------------|---|
| Antibody number                       | #2002   |
| Antibody reactivity (target)          | PD1   |
| Antibody type                         | Primary   |
| Host species                          | Rat   |
| Clonality                             | Monoclonal  |
| Clone                                 | RMP1-14   |
| Isotype                               | IgG2a, kappa  |
| Molecular weight                      | ~50-55 kDa  |
| Synonyms                              | CD279; CD279 antigen; PD1; PDCD1; Programmed cell death 1; Programmed cell death protein 1; Systemic lupus erythematosus susceptibility 2 (SLEB2)   |
| Entrez gene ID                        | 18566   |
| SwissProt                             | Q02242  |
| Unigene                               | 5024  |
| Immunogen                             | PDCD1 transfected BHK cells   |
| Antibody target cellular localization | Plasma membrane   |
| Expected antibody applications        | Flow, surface (published for clone), Functional studies (published for clone)   |
| Species reactivity                    | Mouse   |
| Positive control                      | Spleen, Thymus or Lymph Node.   |
| Shipping condition                    | Room temperature  |
| Storage Conditions                    | Note: store BSA-free antibodies at -10 to -35°C, Store at 2 to 8 °C, Protect fluorescent conjugates from light  |
| 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   |
| Cell/tissue expression                | B-cells, Myeloid 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 | <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>  |
| 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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