



Anti-Mouse PD-1 (Clone RMP1-30) – Dylight® 650

Product No.: C3452

Clone

RMP1-30

Target

PD-1

Formats Available

[View All](#)

Product Type

Monoclonal Antibody

Alternate Names

Programmed Death-1, CD279

Isotype

IgG2b κ

Applications

FC

Select Product Size

25 µg — \$105.00

100 µg — \$285.00

Antibody Details

Reactive Species

Mouse

Host Species

Rat

Immunogen

Mouse PD-1 transfected BHK cells

Product Concentration

0.2 mg/ml

Formulation

This DyLight® 650 conjugate is formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.4, 1% BSA and 0.09% sodium azide as a preservative.

Storage and Handling

This DyLight® 650 conjugate is stable when stored at 2-8°C. **Do not freeze.**

Country of Origin

USA

Shipping

Next Day 2-8°C

Excitation Laser

Red Laser (652 nm)

Applications and Recommended Usage[?]

Quality Tested by Leinco

FC

Additional Applications Reported In Literature[?]

FC

Each investigator should determine their own optimal working dilution for specific applications. See directions on lot specific datasheets, as information may periodically change.

Description

Specificity

RMP1-30 activity is directed against mouse PD-1 (CD279).

Background

PD-1, a member of the CD28/CTLA-4 subfamily of the Ig superfamily, is a transmembrane protein expressed on activated T cells, B cells, a subset of thymocytes, macrophages, dendritic cells, and some tumor cells^{1,2}. PD-1 is also retained in the intracellular compartments of human and mouse regulatory T cells (Tregs) and is co-expressed with CD25 on activated CD4+ T cells³. When stimulated via the T cell receptor (TCR), Tregs translocate PD-1 to the cell surface³. PD-1 is absent on naïve T cells and is inducibly expressed on T cells by T cell antigen receptor (TCR). B7-H1 (PD-L1; CD274) and B7-DC (PD-L2; CD273) have been identified as PD-1 ligands¹. PD-1 is co-expressed with PD-L1 on tumor cells and tumor-infiltrating antigen-presenting cells (APCs)².

PD-1 acts as a T cell inhibitory receptor and plays a critical role in peripheral tolerance induction and autoimmune disease prevention as well as important roles in the survival of dendritic cells, macrophage phagocytosis, and tumor cell glycolysis². PD-1 prevents uncontrolled T cell activity, leading to attenuation of T cell proliferation, cytokine production, and cytolytic activities. Additionally, the PD-1 pathway, consisting of PD-1 on T cells and PD-L1 on APCs, is a major mechanism of tumor immune evasion, and, as such, PD-1 is a target of cancer immunotherapy².

RMP1-30 does not block the binding of B7-H1 or B7-DC to PD-11.

Antigen Distribution

PD-1 is expressed on activated T cells, B cells, a subset of thymocytes, macrophages, dendritic cells, and some tumor cells.

Ligand/Receptor

PD-L1 (B7-H1), PD-L2

NCBI Gene Bank ID

[18566](#)

UniProt.org

[Information on Uniprot.org](#)

References & Citations

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