

# Cardinal Red™ Anti-Human PD-1/CD279 (EH12.2H7)

Catalog Number: **CR-65168**

## Basic Information

**Catalog Number:**

CR-65168

**Size:**

100 tests, 5 ul/test

**Source:**

Mouse

**Isotype:**

IgG1, kappa

**GenBank Accession Number:**

BC074740

**GeneID (NCBI):**

5133

**UNIPROT ID:**

Q15116

**Full Name:**

programmed cell death 1

**Calculated MW:**

288 aa, 32 kDa

**Purification Method:**

Affinity purification

**CloneNo.:**

EH12.2H7

**Excitation/Emission maxima wavelengths:**

592 nm / 611 nm

## Applications

**Tested Applications:**

FC

**Species Specificity:**

Non-human primates, Human

## Background Information

Programmed cell death 1 (PD-1, also known as CD279) is an immunoinhibitory receptor that belongs to the CD28/CTLA-4 subfamily of the Ig superfamily. It is a 288 amino acid (aa) type I transmembrane protein composed of one Ig superfamily domain, a stalk, a transmembrane domain, and an intracellular domain containing an immunoreceptor tyrosine-based inhibitory motif (ITIM) as well as an immunoreceptor tyrosine-based switch motif (ITSM) (PMID: 18173375). PD-1 is expressed during thymic development and is induced in a variety of hematopoietic cells in the periphery by antigen receptor signaling and cytokines (PMID: 20636820). Engagement of PD-1 by its ligands PD-L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function (PMID: 19426218). It is critical for the regulation of T cell function during immunity and tolerance. Blockade of PD-1 can overcome immune resistance and also has been shown to have antitumor activity (PMID: 22658127; 23169436).

## Storage

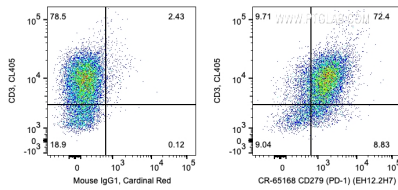
**Storage:**

Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.

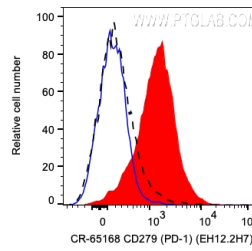
**Storage Buffer:**

PBS with 0.09% sodium azide and 0.5% BSA.

## Selected Validation Data



1X10<sup>6</sup> day 3 PHA treated human PBMCs were co-surface stained with CL405 Anti-Human CD3 and 5 ul Cardinal Red™ Anti-Human PD-1/CD279 (CR-65168, Clone:EH12.2H7) or Mouse IgG1 Isotype Control. Cells were not fixed. Lymphocytes were gated.



1X10<sup>6</sup> day 3 PHA treated human PBMCs were surface stained with 5 ul Cardinal Red™ Anti-Human PD-1/CD279 (CR-65168, Clone: EH12.2H7) (red) or Mouse IgG1 Isotype Control (blue). Unactivated human PBMCs were surface stained with 5 ul Cardinal Red™ Anti-Human PD-1/CD279 (black). Cells were not fixed. Lymphocytes were gated.