

For Research Use Only

# CoraLite® Plus 647 Anti-Mouse CD279 (PD-1) (RMP1-30)



Catalog Number:CL647-65142

## Basic Information

<b>Catalog Number:</b> CL647-65142	<b>GenBank Accession Number:</b> BC119179	<b>Purification Method:</b> Affinity purification
<b>Size:</b> 100ug , 500 µg/ml	<b>GeneID (NCBI):</b> 18566	<b>CloneNo.:</b> RMP1-30
<b>Source:</b> Rat	<b>Full Name:</b> programmed cell death 1	<b>Excitation/Emission maxima wavelengths:</b> 654 nm / 674 nm
<b>Isotype:</b> IgG2b, kappa		

## Applications

**Tested Applications:**  
FC

**Species Specificity:**  
Mouse

## 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 0.1% sodium azide and 0.5% BSA, pH 7.3.

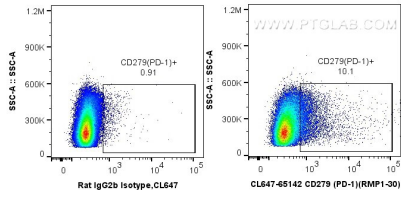
For technical support and original validation data for this product please contact:

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## Selected Validation Data



1X10<sup>6</sup> Con-A stimulated BALB/c mouse splenocytes were surface stained with 0.5 ug CoraLite® Plus 647 Anti-Mouse CD279 (PD-1) (CL647-65142, Clone: RMP1-30) or isotype control antibody. Cells were not fixed.