For Research Use Only

## CoraLite® Plus 647 Anti-Human PD-1/CD279 (EH12.2H7) Mouse IgG2a Recombinant Antibody



Catalog Number: CL647-65586

**Basic Information** 

Catalog Number: CL647-65586

Size:

100tests, 5 ul/test

Source: Mouse

Isotype: IgG2a

GenBank Accession Number: BC074740

GeneID (NCBI):

5133 Full Name:

programmed cell death 1

Calculated MW: 288 aa, 32 kDa

**Purification Method:** Protein A purification

CloneNo.:

EH12.2H7

Excitation/Emission maxima wavelengths: 654 nm / 674 nm

**Applications** 

**Tested Applications:** 

Species Specificity:

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).

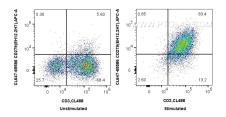
Storage

Storage:

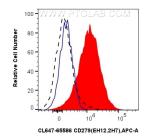
Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 0.09% sodium azide and 0.5% BSA.

## **Selected Validation Data**



1x10^6 untreated or PHA treated human PBMCs were surface stained with CoraLite® Plus 488 Anti-Human CD3 and 5 ul CoraLite® Plus 647 Anti-Human PD-1 (CD279) Mouse IgG2a Recombinant Antibody (CL647-65586, Clone:EH12.2H7). Cells were not fixed.



1x10^6 PHA treated human PBMCs were surface stained with 5 ul CoraLite® Plus 647 Anti-Human PD-1 (CD279) Mouse IgG2a Recombinant Antibody (CL647-65586, Clone:EH12.2H7) (red) or CoraLite® Plus 647 Mouse IgG2a Isotype Control (CL647-65208, Clone: C1.18.4) (blue). 1x10^6 untreated human PBMCs were surface stained with 5 ul CoraLite® Plus 647 Anti-Human PD-1 (CD279) Mouse IgG2a Recombinant Antibody (CL647-65586, Clone:EH12.2H7) (black,