For Research Use Only

## CoraLite®594 Anti-Human PD-1/CD279 Rabbit Recombinant Antibody

Catalog Number: CL594-98068



**Basic Information** 

Catalog Number: GenBank Accession Number: BC074740

CL594-98068 GeneID (NCBI): Size:

100tests, 5 ul/test **UNIPROT ID:** Source:

Rabbit Q15116 Full Name: Isotype:

programmed cell death 1

Calculated MW: Immunogen Catalog Number: 288 aa, 32 kDa

**Purification Method:** Protein A purification

CloneNo.: 240724G11

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

**Applications** 

**Tested Applications:** 

Species Specificity:

human

Positive Controls:

FC: PHA treated human PBMCs,

## **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). It has been reported that PD-1 is heavily glycosylated and migrates with an apparent molecular mass of 47-55 kDa on SDS-PAGE, which is larger than its predicted mass of 32 kDa (PMID: 8671665; 17640856; 17003438).

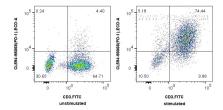
Storage

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, pH7.3

## Selected Validation Data



1x10^6 PHA-treated (right) or untreated (left) human PBMCs were surface stained with 5 ul FITC Plus Anti-Human CD3 (OKT3) (FITC-65133, Clone: OKT3) and 5 ul CoraLite®594 Anti-Human PD-1/CD279 Rabbit RecAb (CL594-98068, Clone: 240724G11). Cells were not fixed.