For Research Use Only

CoraLite® Plus 594 Anti-Human PD-1/CD279 (J110)

www.ptglab.com

Catalog Number: CL594-65119

Basic Information

Catalog Number:

GenBank Accession Number: BC074740

Purification Method:

CL594-65119

GeneID (NCBI):

Affinity purification

Size:

Source:

5133

CloneNo.: J110

100tests, 5 ul/test

Full Name:

Excitation/Emission maxima

Mouse Isotype: lgG1

Calculated MW:

288 aa, 32 kDa

programmed cell death 1

wavelengths: 594 nm / 615 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).

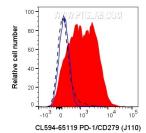
Storage

Storage:

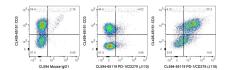
Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 0.09% sodium azide and 0.5% BSA.

Selected Validation Data



1x10^6 PHA treated (3 day) human PBMCs were surface stained with 5 ul CoraLite® Plus 594 Anti-Human PD-1/CD279 (CL594-65119, Clone: J110) (red) or CoraLite®594 Mouse IgG1 Isotype Control (CL594-65124, Clone: MOPC-21) (blue). 1x10^6 untreated human PBMCs were surface stained with 5 ul CoraLite® Plus 594 Anti-Human PD-1/CD279 (CL594-65119, Clone:J110) (black, dashed). Cells were incubated with FC Receptor Block prior to staining. Cells were not fixed.



1x10^6 PHA treated (3 day) human PBMCs were surface stained with CL405 Anti-Human CD3 (CL405-65151, Clone: UCHT1) and 5 ul CoraLite® Plus 594 Anti-Human PD-1/CD279 (CL594-65119, Clone: J110) (right) or CoraLite®594 Mouse IgG1 Isotype Control (CL594-65124, Clone: MOPC-21) (left). 1x10^6 untreated human PBMCs were surface stained with CL405 Anti-Human CD3 (CL405-65151, Clone:UCHT1) and 5 ul CoraLite® Plus 594 Anti-Human PD-1/CD279 (CL594-65119,