For Research Use Only

CoraLite® Plus 488 Anti-Mouse PD-1/CD279 (J43.1)



Catalog Number: CL488-65120

Basic Information

Catalog Number:

CL488-65120

Size:

100ug, $500 \mu g/ml$ Source:

Armenian Hamster

Isotype:

IgG

GenBank Accession Number:

GeneID (NCBI):

18566

UNIPROT ID: Q02242 Full Name:

programmed cell death 1

Purification Method:

Affinity purification CloneNo.:

J43.1

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

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

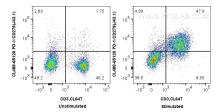
Storage:

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

Storage Buffer

PBS with 0.09% sodium azide and 0.5% BSA, pH 7.3.

Selected Validation Data



1x10^6 untreated or anti-CD3/CD28 treated (2 days) mouse splenocytes were surface stained with 0.5 ug CoraLite® Plus 488 Anti-Mouse PD-1/CD279 (J43.1) (CL488-65120, Clone: J43.1) and 0.5 ug CoraLite® Plus 647 Anti-Mouse CD3 (17A2) (CL647-65077, Clone: 17A2). Cells were not fixed.