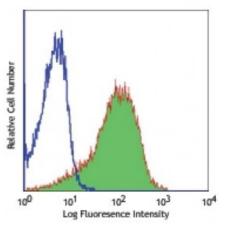
## **Product Data Sheet**

## APC anti-human CD279 (PD-1)

Catalog # / Size:	2249535 / 25 tests 2249540 / 100 tests
Clone:	EH12.2H7
Isotype:	Mouse IgG1, к
<b>Reactivity:</b>	Human
Preparation:	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
Concentration:	Lot-specific

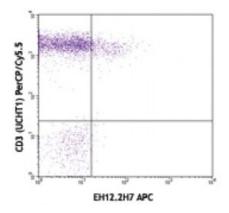


PHA-stimulated (day-3) human peripheral blood lymphocytes were stained with CD279 (clone EH12.2H7) APC (filled histogram) or mouse IgG1, κ APC (open histogram).

## **Applications:**

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. <b>Test size products are transitioning</b> <b>from 20 microL to 5 microL per test</b> . Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Additional reported applications (for the relevant formats) include: blocking of Notes: <sup>3</sup> and bindina<sup>1</sup> ligand immunohistochemical staining of paraformaldehyde fixed frozen sections<sup>13</sup>. The LEAF<sup>™</sup> purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 329911 and 329912). For highly sensitive assays, we purified recommend Ultra-LEAF™ antibody (Cat. No. 329926) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).



Human peripheral blood lymphocytes were stained with CD279 (clone EH12.2H7) APC and CD3 (clone UCHT1) PerCP/Cy5.5.

 Application
 1. Dorfman DM, et al. 2006 Am. J. Surg. Pathol. 30:802. (FA)

 References:
 2. Radziewicz H, et al. 2007. J. Virol. 81:2545. (FA)

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products. Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com Velu V, *et al.* 2007. *J. Virol.* 81:5819. (FA)
 Zahn RC, *et al.* 2008. *J. Virol.* 82:11577. PubMed
 Chang WS, *et al.* 2008. *J. Immunol.* 181:6707. (FC) PubMed
 Nakamoto N, *et al.* 2009. *PLoS Pathog.* 5:e1000313. (FA)
 Jones RB, *et al.* 2009. *J. Virol.* 83:8722. (FC) PubMed
 Vojnov L, *et al.* 2010. *J. Virol.* 84:753. (FC) PubMed
 Radziewicz H, *et al.* 2010. *J. Immunol.* 184:2410. (FC) PubMed
 Monteriro P, *et al.* 2011. *J. Immunol.* 186:4618. PubMed
 Conrad J, *et al.* 2011. *J. Immunol.* 186:6871. PubMed
 Salisch NC, *et al.* 2010. *J. Immunol.* 184:476. (Rhesus reactivity)
 Li H and Pauza CD. 2015. *Eur. J. Immunol.* 45:298. (IHC)

**Description:** Programmed cell death 1 (PD-1), also known as CD279, is a 55 kD member of the immunoglobulin superfamily. CD279 contains the immunoreceptor tyrosine-based inhibitory motif (ITIM) in the cytoplasmic region and plays a key role in peripheral tolerance and autoimmune disease. CD279 is expressed predominantly on activated T cells, B cells, and myeloid cells. PD-L1 (B7-H1) and PD-L2 (B7-DC) are ligands of CD279 (PD-1) and are members of the B7 gene family. Evidence suggests overlapping functions for these two PD-1 ligands and their constitutive expression on some normal tissues and upregulation on activated antigen-presenting cells. Interaction of CD279 ligands results in inhibition of T cell proliferation and cytokine secretion.