

**PE/Cy7 anti-human CD279 (PD-1)**

**Catalog # / Size:** 2249585 / 25 tests  
2249590 / 100 tests

**Clone:** EH12.2H7

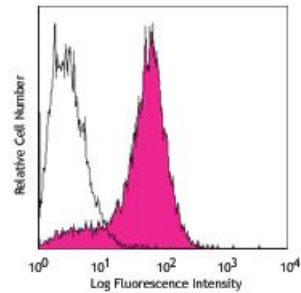
**Isotype:** Mouse IgG1, κ

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 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



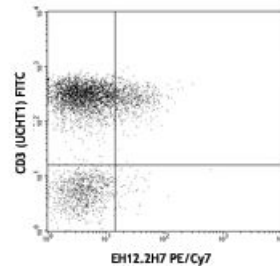
PHA-stimulated (day-3) human peripheral blood lymphocytes were stained with CD279 (clone EH12.2H7) PE/Cy7 (filled histogram) or mouse IgG1, κ PE/Cy7 (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** 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 Notes:** Additional reported applications (for the relevant formats) include: blocking of ligand binding<sup>1-3</sup> and immunohistochemical staining of paraformaldehyde fixed frozen sections<sup>13</sup>. The LEAF™ 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 recommend Ultra-LEAF™ purified 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) PE/Cy7 and CD3 (clone UCHT1) FITC.

**Application****References:**

1. Dorfman DM, *et al.* 2006 *Am. J. Surg. Pathol.* 30:802. (FA)
  2. Radziewicz H, *et al.* 2007. *J. Virol.* 81:2545. (FA)
  3. Velu V, *et al.* 2007. *J. Virol.* 81:5819. (FA)
  4. Zahn RC, *et al.* 2008. *J. Virol.* 82:11577. [PubMed](#)
  5. Chang WS, *et al.* 2008. *J. Immunol.* 181:6707. (FC) [PubMed](#)
  6. Nakamoto N, *et al.* 2009. *PLoS Pathog.* 5:e1000313. (FA)
  7. Jones RB, *et al.* 2009. *J. Virol.* 83:8722. (FC) [PubMed](#)
  8. Vojnov L, *et al.* 2010. *J. Virol.* 84:753. (FC) [PubMed](#)
  9. Radziewicz H, *et al.* 2010. *J. Immunol.* 184:2410. (FC) [PubMed](#)
  10. Monteriro P, *et al.* 2011. *J. Immunol.* 186:4618. [PubMed](#)
  11. Conrad J, *et al.* 2011. *J. Immunol.* 186:6871. [PubMed](#)
  12. Salisch NC, *et al.* 2010. *J. Immunol.* 184:476. (Rhesus reactivity)
  13. Li H and Pauza CD. 2015. *Eur. J. Immunol.* 45:298. (IHC)
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**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.