

**Biotin anti-human CD279 (PD-1)**

**Catalog # / Size:** 2249665 / 25 µg  
2249670 / 100 µg

**Clone:** EH12.2H7

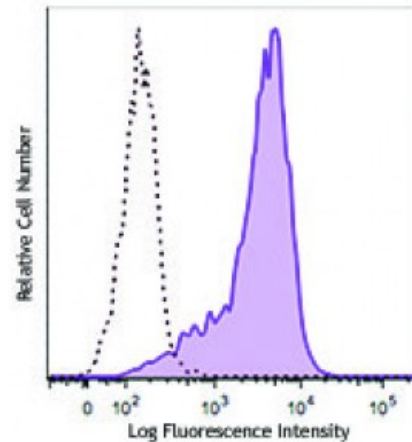
**Isotype:** Mouse IgG1, κ

**Reactivity:** Human

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

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** Lot-specific



PHA-stimulated (3 days) human peripheral blood lymphocytes were stained with biotinylated CD279 (clone EH12.2H7, filled histogram), or mouse IgG1, κ (open histogram), followed by Sav-PE.

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

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**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).

**Application References:**

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3. Velu V, *et al.* 2007. *J. Virol.* 81:5819. (FA)
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5. Chang WS, *et al.* 2008. *J. Immunol.* 181:6707. (FC) [PubMed](#)
6. Nakamoto N, *et al.* 2009. *PLoS Pathog.* 5:e1000313. (FA)
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  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.