

**Brilliant Violet 750™ anti-human CD279 (PD-1)**

**Catalog # /** 2249825 / 25 tests  
**Size:** 2249830 / 100 tests

**Clone:** EH12.2H7

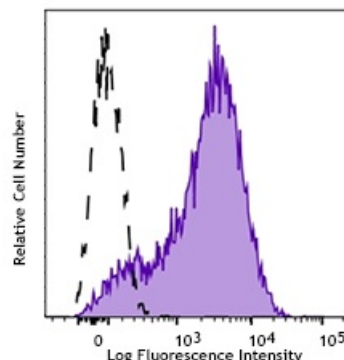
**Isotype:** Mouse IgG1,  $\kappa$

**Reactivity:** Human, Non-human primate, Other

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 750™ and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

**Concentration:** Lot-specific



PHA-stimulated (day 3) human peripheral blood lymphocytes were stained with CD279 (PD-1) (clone EH12.2H7) Brilliant Violet 750™ (filled histogram) or mouse IgG1,  $\kappa$  Brilliant Violet 750™ isotype control (open histogram).

**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 5  $\mu$ l per million cells in 100  $\mu$ l staining volume or 5  $\mu$ l per 100  $\mu$ l of whole blood.

**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>.

**Application  
References:**

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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)
14. Peterson VM, *et al.* 2017. *Nat. Biotechnol.* 35:936. (PG)

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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.