

Brilliant Violet 510™ anti-human CD279 (PD-1)

Catalog # / Size: 2249655 / 25 tests
2249660 / 100 tests

Clone: EH12.2H7

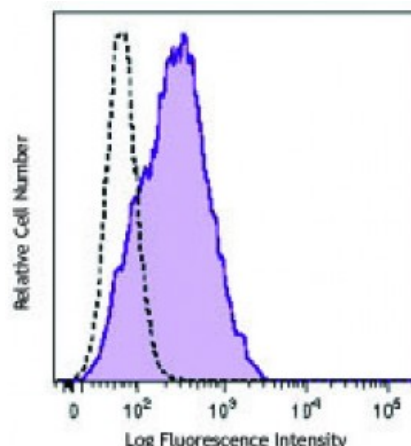
Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ 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 (clone EH12.2H7) Brilliant Violet 510™ (filled histogram) or mouse IgG1, κ Brilliant Violet 510™ 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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.

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Application Notes: Additional reported applications (for the relevant formats) include: blocking of ligand binding¹⁻³ and immunohistochemical staining of paraformaldehyde fixed frozen sections¹³. The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m 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 1. Dorfman DM, *et al.* 2006 *Am. J. Surg. Pathol.* 30:802. (FA)

- References:**
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 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](#)
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 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.