SONY

Product Data Sheet

APC/Cy7 anti-human CD279 (PD-1)

Catalog # / Size: 2249605 / 25 tests
2249610 / 100 tests

Clone: EH12.2H7

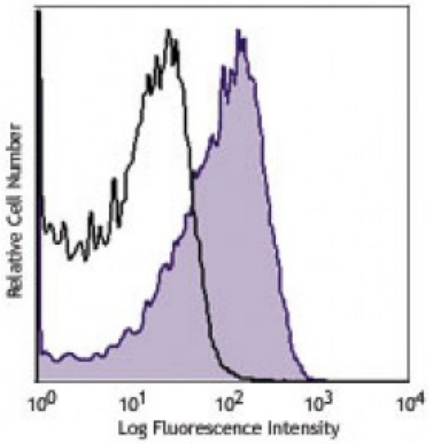
Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/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 stained with CD279 (clone EH12.2H7) APC/Cy7 (filled histogram) or mouse IgG1, APC/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[1-3] and immunohistochemical staining of paraformaldehyde fixed frozen sections[13]. 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:

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)

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

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.