

Spark PLUS B574™ anti-human CD279 (PD-1) Antibody

Catalog# / Size	621635 / 25 tests 621636 / 100 tests
Clone	A17188B
Regulatory Status	RUO
Other Names	PD1, PDCD1
Isotype	Mouse IgG2b, κ
Description	Programmed cell death protein 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, CD274) and PD-L2 (B7-DC, CD273) 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.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant human CD279 protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark PLUS B574™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool).
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Spark PLUS B574™ has a maximum excitation of 506 nm and a maximum emission of 574 nm.
Excitation Laser	Blue Laser (488 nm)
Application Notes	A17188B antibody can block the binding of NAT105 and EH12.2H7 antibodies to the target.
RRID	AB_3720578 (BioLegend Cat. No. 621635) AB_3720578 (BioLegend Cat. No. 621636)

Antigen Details

Structure	55 kD type I transmembrane protein
Distribution	Transiently expressed on CD4- and CD8- thymocytes, upregulated in thymocytes and splenic T and B lymphocytes, and is expressed on activated myeloid cells.
Function	Signaling and co-stimulation (co-inhibition)
Interaction	SHP-1 and SHP-2
Ligand/Receptor	PD-L1 (CD274) and PD-L2 (CD273)
Cell Type	Lymphocytes, T cells
Biology Area	Cell Biology, Immuno-Oncology, Inhibitory Molecules
Molecular Family	CD Molecules
Antigen References	1. Ishida Y, <i>et al.</i> 1992. <i>EMBO J.</i> 11:3887 2. Francisco LM, <i>et al.</i> 2010. <i>Immunol Rev.</i> 236:219

Gene ID [5133](#)

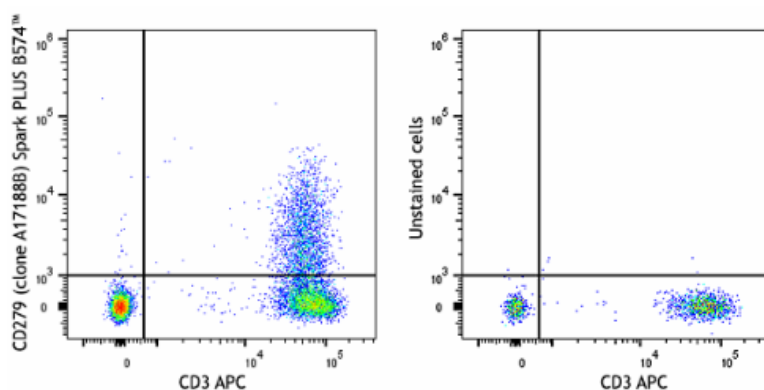
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE/Fire™ 700 anti-human CD279 (PD-1), APC/Fire™ 810 anti-human CD279 (PD-1), PE/Fire™ 640 anti-human CD279 (PD-1), TotalSeq™-D1169 anti-human CD279 (PD-1), KIRAVIA Blue 520™ anti-human CD279 (PD-1), Biotin anti-human CD279 (PD-1), PE/Dazzle™ 594 anti-human CD279 (PD-1), Spark Red™ 718 anti-human CD279 (PD-1), PE/Fire™ 810 anti-human CD279 (PD-1), PE/Fire™ 744 anti-human CD279 (PD-1), PerCP/Fire™ 780 anti-human CD279 (PD-1), Purified anti-human CD279 (PD-1), APC anti-human CD279 (PD-1), Spark PLUS B574™ anti-human CD279 (PD-1) Antibody, PE anti-human CD279 (PD-1), FITC anti-human CD279 (PD-1), Ultra-LEAF™ Purified anti-human CD279 (PD-1), PerCP/Cyanine5.5 anti-human CD279 (PD-1), PE/Cyanine7 anti-human CD279 (PD-1)

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) APC and anti-human CD279 (PD-1) (clone A17188B) Spark PLUS B574™ (left) or stained with anti-human CD3 (clone UCHT1) APC only (right). Data shown are gated on the lymphocyte population.

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