

PE/Fire™ 744 anti-human CD279 (PD-1) Antibody

Catalog# / Size	621637 / 25 tests 621638 / 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 PE/Fire™ 744 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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. True-Stain Monocyte Blocker™ (Cat No. 426102) is recommended to minimize non-specific staining of PE/Fire™ 744 on monocytes and macrophages. * PE/Fire™ 744 has a maximum excitation of 565 nm and a maximum emission of 744 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	A17188B antibody can block the binding of NAT105 and EH12.2H7 antibodies to the target.

Antigen Details

Structure	55 kD type I transmembrane protein
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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

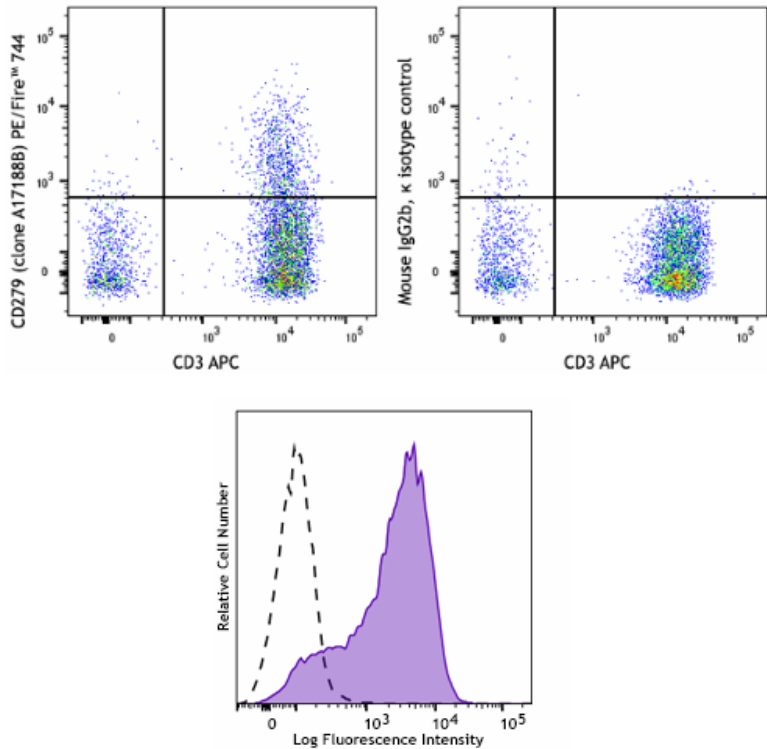
Related Protocols

- [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) PE/Fire™ 744 (left) or mouse IgG2b, κ PE/Fire™ 744 isotype control (right).

PHA-stimulated (3 days) human peripheral blood lymphocytes were stained with anti-human CD279 (PD-1) (clone A17188B) PE/Fire™ 744 (filled histogram) or mouse IgG2b, κ PE/Fire™ 744 isotype control (open histogram).

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