SONY

Product Data Sheet

Brilliant Violet 421™ anti-mouse CD279 (PD-1)

Catalog # / Size: 1276090 / 500 µl
1276085 / 125 µl

1276105 / 50 µg

Clone: 29F.1A12

Isotype: Rat IgG2a, κ

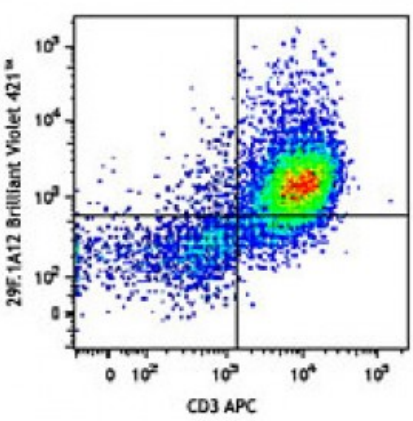
Immunogen: PD-1 cDNA followed by PD-1-Ig fusion protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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

Concentration: microg sizes: 0.2 mg/ml
microL sizes: lot-specific



Con-A stimulated C57BL/6 splenocytes (3 days) were stained with CD3 APC and CD279 (clone 29F.1A12) Brilliant Violet 421™ (top), or rat IgG2a, κ Brilliant Violet 421™ isotype control (bottom).

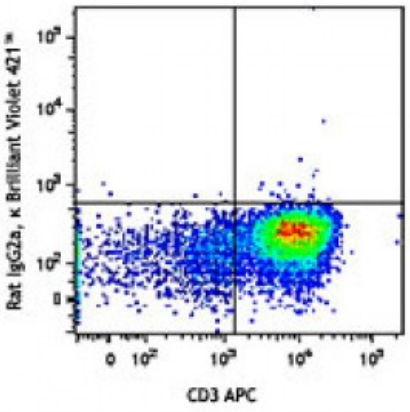
Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining using the microg size, the suggested use of this reagent is ≤0.125 microg per million cells in 100 microL volume. For immunofluorescent staining using microL sizes, 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 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be



resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue3 and *in vivo* blocking of PD-1 binding to its ligands[2,3].

Application References:

1. Good-Jacobson KL, *et al.* 2010. *Nat. Immunol.* 11:535. (FC) PubMed
2. Lázár-Molnár E, *et al.* 2008. *Proc. Natl. Acad. Sci. USA* 105:2658. (Block)
3. Liang SC, *et al.* 2003. *Eur. J. Immunol.* 33:2706. (FC, IHC, Block)

Description: CD279, also known as programmed death-1 (PD-1), is a 50-55 kD glycoprotein belonging to the CD28 family of the Ig superfamily. PD-1 is expressed on activated splenic T and B cells and thymocytes. It is induced on activated myeloid cells as well. PD-1 is involved in lymphocyte clonal selection and peripheral tolerance through binding its ligands, B7-H1 (PD-L1) and B7-DC (PD-L2). It has been reported that PD-1 and PD-L1 interactions are critical to positive selection and play a role in shaping the T cell repertoire. PD-L1 negative costimulation is essential for prolonged survival of intratesticular islet allografts.

Antigen References:

1. Nishimura H, *et al.* 2001. *Science* 291:319
2. Agata Y, *et al.* 1996. *Int. Immunol.* 8:765
3. Liang SC, *et al.* 2003. *Eur. J. Immunol.* 33:2706
4. Barber DL, *et al.* 2006. *Na*