

Brilliant Violet 570™ anti-human CD127 (IL-7Rα)

Catalog # / 2356540 / 100 tests

Size: 2356535 / 25 tests

Clone: A019D5

Isotype: Mouse IgG1, κ

Immunogen: Recombinant human CD127

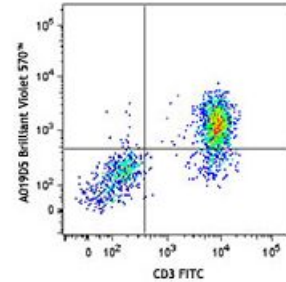
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 570™

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

Workshop Number: under optimal conditions.

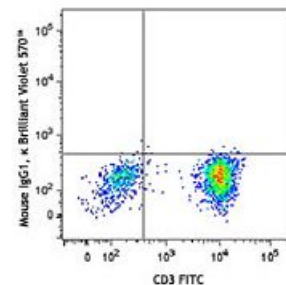
Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD3 FITC and CD127 (clone A019D5) Brilliant Violet 570™ (top) or mouse IgG1, κ Brilliant Violet 570™ 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 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.

Brilliant Violet 570™ excites at 405 nm and emits at 570 nm. The bandpass filter 585/42 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 570™ 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 (for the relevant formats) application: proteogenomics¹.

Application References: 1. Peterson VM, *et al.* 2017. *Nat. Biotechnol.* 35:936. (PG)

Description: CD127 is a 60-90 kD type I transmembrane glycoprotein also known as IL-7 receptor α chain or IL-7Rα. It forms a heterodimer with the common γ chain (γc or CD132) which is shared with the receptors for IL-2, IL-4, IL-9, IL-13, IL-15, and IL-21. CD127 is expressed on immature B cells through early pre-B stage cells, thymocytes (except CD4/CD8 double positive thymocytes), peripheral T cells, and bone marrow stromal cells. CD127 has been reported to be a useful marker for identifying memory and effector T cells. Studies have shown that CD127 expression is down-modulated on Treg cells. It can be used as a marker for differentiation of Treg and conventional T cells. The ligation of IL-7 with its receptor is important for stimulation of mature and immature T cells as well as immature B cell proliferation and development.

Antigen References:

1. Sudo T, *et al.* 1993. *P. Natl. Acad. Sci. USA* 90:9125.
2. He YW and Malek TR. 1998. *Crit. Rev. Immunol.* 18:503.
3. Huster KM, *et al.* 2004. *P. Natl. Acad. Sci. USA* 101:5610.
4. Pillai M, *et al.* 2004. *Leukemia Lymphoma* 45:2403.
5. Morrissey PJ, *et al.* 1989. *J. Exp. Med.* 169:707.
6. Liu W, *et al.* 2006. *J. Exp. Med.* 203:1701.