

## Brilliant Violet 421™ anti-human CD127 (IL-7Rα)

**Catalog # /** 2356545 / 25 tests  
**Size:** 2356550 / 100 tests

**Clone:** A019D5

**Isotype:** Mouse IgG1, κ

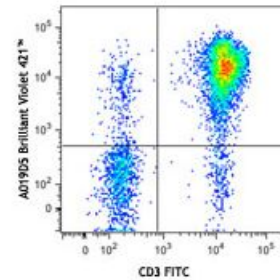
**Immunogen:** Recombinant human CD127

**Reactivity:** Human

**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).

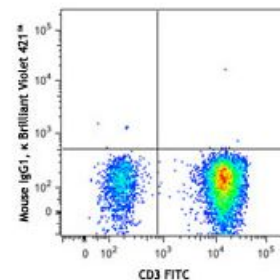
**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with CD3 FITC and CD127 (clone A019D5) Brilliant Violet 421™ (top) or mouse IgG1, 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 flow cytometric staining, the suggested use of this reagent is  $\leq 5$  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.

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**Application References:** 1. Willmann KL, *et al.* 2014. *Nat Commun.* 5:5360. [PubMed](#)

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**Description:** CD127 is a 60-90 kD type I transmembrane glycoprotein also known as IL-7 receptor  $\alpha$  chain or IL-7R $\alpha$ . It forms a heterodimer with the common  $\gamma$  chain ( $\gamma_c$  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, <