## Brilliant Violet 711™ anti-human CD127 (IL-7Rα)

Catalog # / Size: 2356640 / 100 tests

2356635 / 25 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 711™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 711™ and

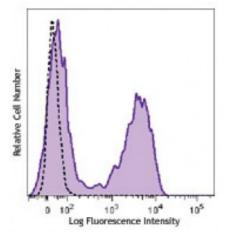
unconjugated antibody.

**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 CD127 (clone A019D5) Brilliant Violet 711™.

## **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 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  $711^{\text{TM}}$  excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 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  $711^{\text{TM}}$  is a trademark of Sirigen Group Ltd.

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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, <