

Spark NIR™ 685 anti-human CD127 (IL-7Rα)

Catalog # / 2356810 / 100 tests
Size: 2356805 / 25 tests

Clone: A019D5

Isotype: Mouse IgG1, κ

Immunogen: Recombinant human CD127

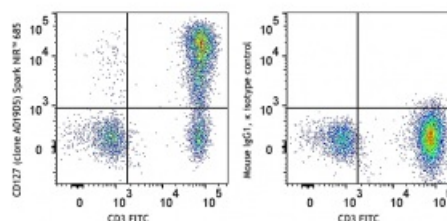
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Spark NIR™ 685 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

Workshop Number: V MA199

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with CD3 FITC and CD127 (IL-7Rα) (clone A019D5) Spark NIR™ 685 (left) or CD3 FITC only (right).

Applications:

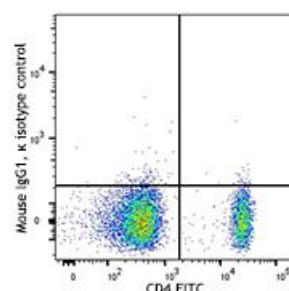
Applications: Flow Cytometry

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. It is recommended that the reagent be titrated for optimal performance for each application.

* Spark NIR™ 685 has a maximum excitation of 665 nm and a maximum emission of 685 nm.

Application Notes: Additional reported (for the relevant formats) application: proteogenomics¹.

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



Human peripheral blood lymphocytes were stained with PE anti-human CD3 and APC/Fire™ 750 anti-human CD11c (clone 3.9) (left) or mouse IgG1, κ APC/Fire™ 750 isotype control (right).

Description: CD127 is a 60-90 kD type I transmembrane glycoprotein also known as IL-7 receptor α chain or IL-7R α . It forms a heterodimer with the common γ chain (γ 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, 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.