

**PerCP/Cy5.5 anti-human CD127 (IL-7R $\alpha$ )**

**Catalog # / Size:** 2356605 / 25 tests  
2356610 / 100 tests

**Clone:** A019D5

**Isotype:** Mouse IgG1,  $\kappa$

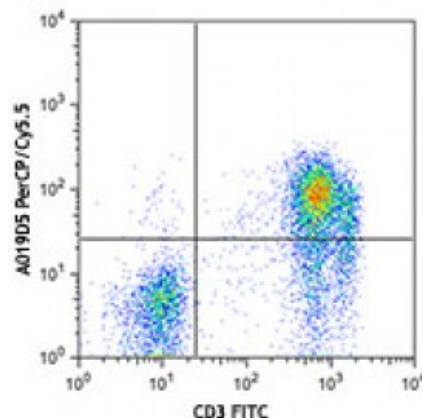
**Immunogen:** Recombinant human CD127

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

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

**Concentration:** Lot-specific

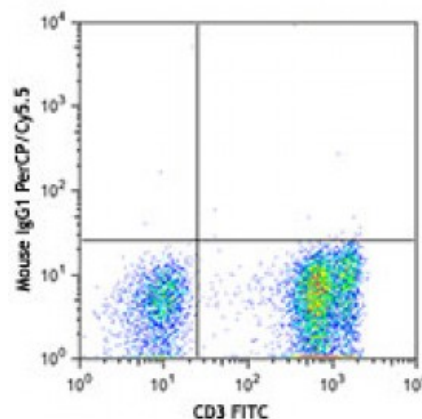


Human peripheral blood lymphocytes were stained with CD3 FITC and CD127 (clone A019D5) PerCP/Cy5.5 (top) or mouse IgG1 PerCP/Cy5.5 isotype control (bottom).

**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 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.



\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

**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, <