

## Anti-Human CD127 PE

Catalog Number :19321-60

RUO: For Research Use Only. Not for use in diagnostic procedures.

### Product Information

**Clone:** RDR5

**Format/Conjugate:** PE

**Concentration:** 5 uL (0.06 ug)/test

**Reactivity:** Human

**Laser:** Blue (488nm), Yellow/Green (532-561nm)

**Peak Emission:** 578nm

**Peak Excitation:** 496nm

**Filter:** 585/40

**Brightness (1=dim,5=brightest):** 5

**Isotype:** Mouse IgG1, kappa

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

### Description

The RDR5 monoclonal antibody specifically reacts with human CD127, a 60-90 kDA type I transmembrane glycoprotein also known as the IL-7 receptor alpha chain. CD127 binds with CD132 (gamma c) to form the IL-7 receptor that is expressed on mature T cells and immature B cells. Since CD127 expression is downregulated in Treg cells, it can be used as a marker for differentiating them from common T cells. The binding of the RDR5 antibody can be blocked by pre-incubating the cells with human IL-7.

### Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. The antibody can be used at less than or equal to 5 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

### References

1. Corcoran, A. E., Smart, F. M., Cowling, R. J., Crompton, T., Owen, M. J., Venkitaraman, A. R. (1996). The interleukin-7 receptor alpha chain transmits distinct signals for proliferation and differentiation during B lymphopoiesis. *The EMBO journal*, 15(8), 1924.
2. Lim, H. W., Kim, C. H. (2007). Loss of IL-7 receptor  $\alpha$  on CD4+ T cells defines terminally differentiated B cell-helping effector T cells in a B cell-rich lymphoid tissue. *The Journal of Immunology*, 179(11), 7448-7456.
3. Goodwin, R. G., Friend, D., Ziegler, S. F., Jerzy, R., Falk, B. A., Gimpel, S., ... Park, L. S. (1990). Cloning of the human and murine interleukin-7 receptors: demonstration of a soluble form and homology to a new receptor superfamily. *Cell*, 60(6), 941-951.