

**APC anti-human CD126 (IL-6R $\alpha$ )**

**Catalog # / Size:** 2364030 / 100 tests  
2364025 / 25 tests

**Clone:** UV4

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

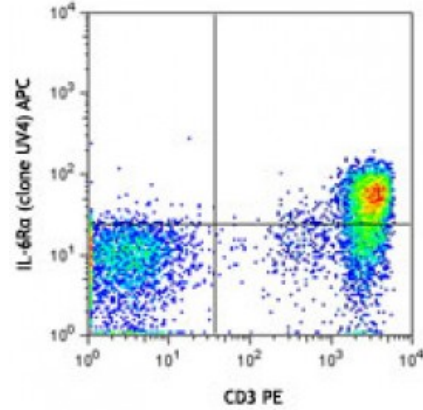
**Immunogen:** Human myeloma cell line U266

**Reactivity:** Human

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



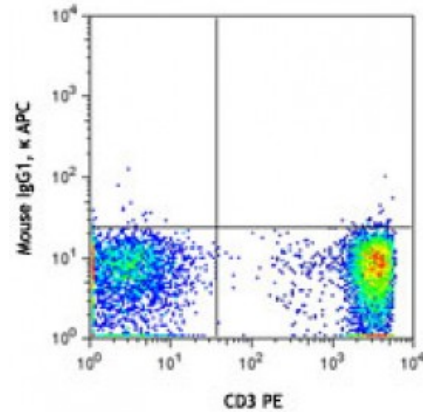
Human peripheral blood lymphocytes were stained with CD3 PE and IL-6R $\alpha$  (clone UV4) APC (top) or mouse IgG1,  $\kappa$  APC isotype control (bottom).

**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.

**Application Notes:** Additional reported applications (for the relevant formats) include: blocking of IL-6 binding to IL-6R.



**Application References:**

- Huang YW and Vitetta ES. 1993. *Hybridoma* 12:621.
- Krow-Lucal ER, *et al.* 2014. *Blood*. 123:1897. [PubMed](#)

**Description:** CD126 is an 80 kD IL-6 receptor  $\alpha$  chain also known as IL-6R. It is a member of the immunoglobulin superfamily that is expressed on plasma cells, T cells, activated B cells, monocytes, granulocytes, hepatocytes, epithelial cells, and fibroblasts. Functional IL-6 receptors are formed by the non-covalent association of CD126 and the IL-6 receptor  $\beta$  chain (CD130 or gp130). CD126 binds IL-6 with low affinity but does not signal. The  $\beta$  chain (gp130, CD130) does not bind IL-6 by itself but associates with the  $\alpha$ -chain/IL-6 complex to initiate signal transduction. IL-6 binding to the receptor complex results in the stimulation of B and T cells, and hematopoietic precursor proliferation and differentiation. A soluble form of CD126 has been found in human serum.

**Antigen References:**

- Taga T, *et al.* 1997. *Annu. Rev. Immunol.* 15:797.
- Fitzgerald K, *et al.* 2001. *The Cytokine FactsBook*. Academic Press London.

3. Boulanger MJ, *et al.* 2003. *Science* 300:2101.
4. Gaillard