

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

**Catalog # / Size:** 2364005 / 25  $\mu$ g  
 2364010 / 100  $\mu$ g

**Clone:** UV4

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

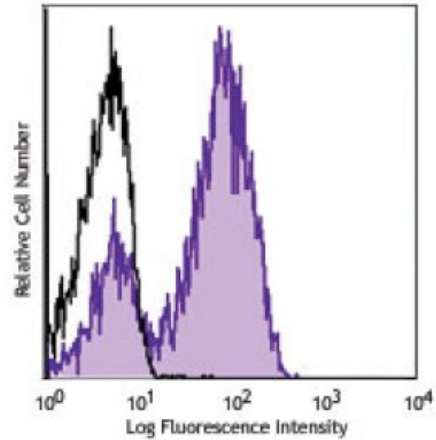
**Immunogen:** Human myeloma cell line U266

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 1



Human peripheral blood lymphocytes were stained with purified IL-6R $\alpha$  (clone UV4, filled histogram) or mouse IgG1,  $\kappa$  isotype control (open histogram), followed by anti-mouse IgG PE.

**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  $\leq 1.0$  microg per million cells in 100 microL volume. 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:** 1. Huang YW and Vitetta ES. 1993. *Hybridoma* 12:621.

**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:** 1. Taga T, *et al.* 1997. *Annu. Rev. Immunol.* 15:797.  
 2. Fitzgerald K, *et al.* 2001. *The Cytokine FactsBook.* Academic Press London.  
 3. Boulanger MJ, *et al.* 2003. *Science* 300:2101.  
 4. Gaillard