# PE anti-human CD126 (IL-6Rα) Antibody

| | |
|---|---|
| **Catalog# / Size** | 352803 / 25 tests<br>352804 / 100 tests |
| **Clone** | UV4 |
| **Other Names** | IL-6R1, gp80, IL-6 receptor alpha, IL-6R |
| **Isotype** | Mouse IgG1, κ |
| **Description** | CD126 is an 80 kD IL-6 receptor α 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 β chain (CD130 or gp130). CD126 binds IL-6 with low affinity but does not signal. The β chain (gp130, CD130) does not bind IL-6 by itself but associates with the α-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. |

## Product Details

| | |
|---|---|
| **Reactivity** | Human, African Green, Baboon, Cynomolgus, Rhesus |
| **Antibody Type** | Monoclonal |
| **Host Species** | Mouse |
| **Immunogen** | Human myeloma cell line U266 |
| **Formulation** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA). |
| **Preparation** | The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. |
| **Concentration** | Lot-specific (please contact technical support for concentration and total µg amount, or use our Lookup tool if you have a lot number.) |
| **Storage & Handling** | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.** |
| **Application** | FC - Quality tested |
| **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. |
| **Excitation Laser** | Blue Laser (488 nm)<br>Green Laser (532 nm)/Yellow-Green Laser (561 nm) |
| **Application Notes** | Additional reported applications (for the relevant formats) include: blocking of IL-6 binding to IL-6R. |
| **Application References**<br>**(PubMed link indicates BioLegend citation)** | 1. Huang YW and Vitetta ES. 1993. Hybridoma 12:621. |

**Product Citations** **RRID**

1. Ferreira R, et al. 2013. PLoS Genet. 9:1003444. PubMed
2. Perrigue P, et al. 2015. Mol Cancer Res. 13:636. PubMed
3. Eriksson E, et al. 2016. Gene Ther. 10.1038/gt.2016.80. PubMed
4. Saga R, et al. 2019. Oncol Lett. 17:3555. PubMed

AB_10897103 (BioLegend Cat. No. 352803)
AB_10900066 (BioLegend Cat. No. 352804)

## Antigen Details

| | |
|---|---|
| **Structure** | Ig superfamily, associates with IL-6Rβ chain (CD130, gp130), 80 kD |
| **Distribution** | Plasma cells, T cells, monocytes, hepatocytes, activated B cells, granulocytes, epithelial cells, and fibroblasts |
| **Function** | Stimulates T cells, B cells, and hematopoietic precursor proliferation and differentiation |
| **Interaction** | CD130, c-Src, STAT3, WWP1, WWP2 |
| **Ligand/Receptor** | IL-6 |
| **Cell Type** | B cells, Epithelial cells, Fibroblasts, Granulocytes, Monocytes, Plasma cells, T cells |
| **Biology Area** | Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience, Signal Transduction |
| **Molecular Family** | CD Molecules, Cytokine/Chemokine Receptors |
| **Antigen References** | 1. Taga T, et al. 1997. Annu. Rev. Immunol. 15:797.<br>2. Fitzgerald K, et al. 2001. The Cytokine FactsBook. Academic Press London.<br>3. Boulanger MJ, et al. 2003. Science 300:2101.<br>4. Gaillard JP, et al. 1993. Eur. J. Immunol. 23:820. |
| **Gene ID** | 3570 |

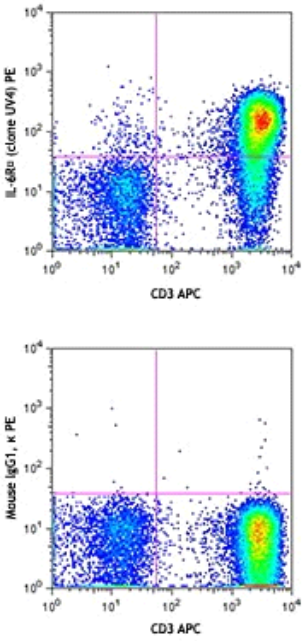
## Related Protocols

Cell Surface Flow Cytometry Staining Protocol

## Other Formats

APC anti-human CD126 (IL-6Rα), Biotin anti-human CD126 (IL-6Rα), Purified anti-human CD126 (IL-6Rα), PerCP/Cyanine5.5 anti-human CD126 (IL-6Rα), PE/Cyanine7 anti-human CD126 (IL-6Rα), TotalSeq™-A0819 anti-human CD126 (IL-6Rα), TotalSeq™-C0819 anti-human CD126 (IL-6Rα)

## Product Data




Human peripheral blood lymphocytes were stained with CD3 APC and IL-6Rα (clone UV4) PE (top) or mouse IgG1, κ PE isotype control (bottom).



8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587