

**PE Anti-Human CD3 (SK7) Antibody**  
Catalog # ATB10431**Specification****PE Anti-Human CD3 (SK7) Antibody - Product Information**

Application	FC
Isotype	Mouse IgG1, kappa
Reactivity	Human
Formulation	10mM NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, 0.09% NaN <sub>3</sub> , 0.1% gelatin, pH7.2 0.1% gelatin, pH7.2

**PE Anti-Human CD3 (SK7) Antibody - Additional Information**

Gene ID	916
Gene Name	CD3E
Alternative Name(s)	
Leu-4, T3	

**Format**

PE

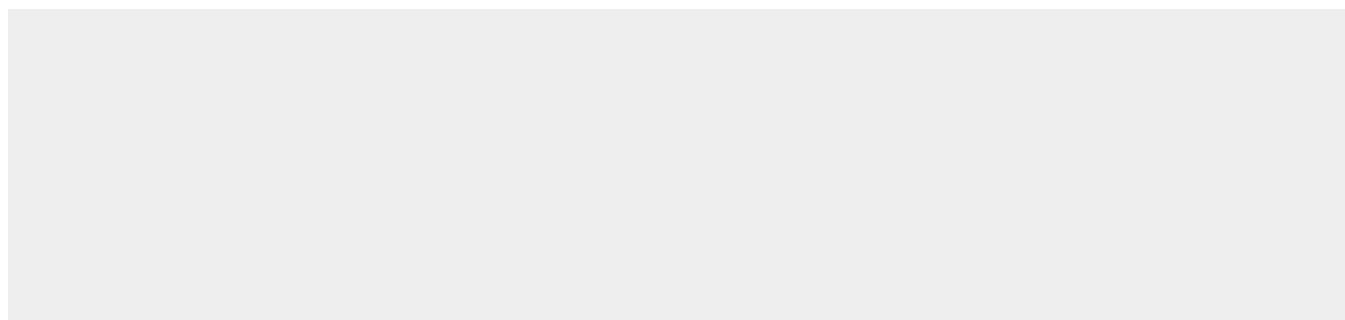
**Storage Conditions**

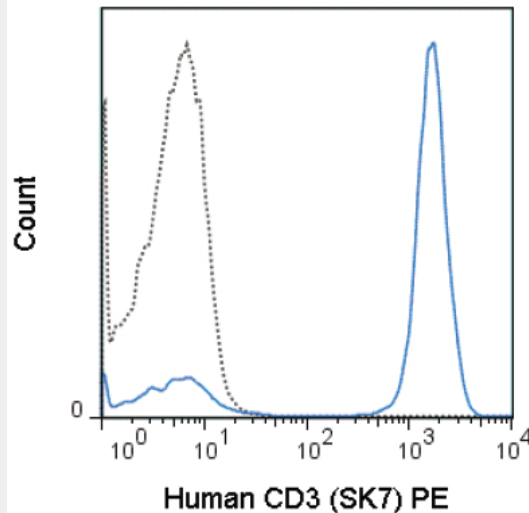
2-8°C protected from light

**PE Anti-Human CD3 (SK7) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PE Anti-Human CD3 (SK7) Antibody - Images**



Human peripheral blood lymphocytes were stained with 5  $\mu$ L (0.25  $\mu$ g) PE Anti-Human CD3 (ATB10431) (solid line) or 0.25  $\mu$ g PE Mouse IgG1 isotype control.

### PE Anti-Human CD3 (SK7) Antibody - Background

The SK7 antibody is specific for human CD3 $\epsilon$ , also known as CD3 epsilon, a 20 kDa subunit of the T cell receptor complex, along with CD3 gamma and CD3 delta. These integral membrane protein chains assemble with additional chains of the T cell receptor (TCR), as well as CD3 zeta chain, to form the T cell receptor - CD3 complex. Together with co-receptors CD4 or CD8, the complex serves to recognize antigens bound to MHC molecules on antigen-presenting cells. These interactions promote T cell receptor signaling (T cell activation), inducing cell proliferation, differentiation, production of cytokines or activation-induced cell death. CD3 is differentially expressed during thymocyte-to-T cell development and on all mature T cells.

The SK7 antibody is a widely used phenotypic marker for human T cells. This antibody may induce T cell activation in the presence of monocytes. The antibody has also been demonstrated to be cross-reactive with Chimpanzee CD3. Binding of clone SK7 can be blocked by an alternative Anti-Human CD3 clone, OKT3. Please choose the appropriate format for each application.

### PE Anti-Human CD3 (SK7) Antibody - References

McMichael AJ, Beverly PCL, Gilks W, et al, ed. Leukocyte Typing III: White Cell Differentiation Antigens. New York: Oxford University Press; 1987.

Kaneoka H, Perez-Rojas G, Sasasaki T, Benike CJ and Engleman EG. 1983. J Immunol. 131: 158-164. (in vitro activation)

Haringman JJ, Vinkenoog M, Gerlag DM, Smeets TJM, Zwinderman AH and Tak PP. 2005. Arthritis Res Ther. 7(4): R862-R867. (Immunohistochemistry - frozen tissue)

Goval J-J, Greimers R, Boniver J and de Leval L. 2006. J Histochem Cytochem. 54(1): 75-84. (Immunofluorescence - frozen tissue)

Wrann CD, Laue T, Hubner L, Kuhlmann S, Jacobs R, Goudeva L and Nave H. 2012. Am J Physiol Endocrinol Metab. 302(1): E108-E116. (Flow Cytometry)

Soto PC, Stein LL, Hurtado-Ziola N, Hedrick SM and Varki A. 2010. J Immunol. 184(8): 4185-4195. (Flow Cytometry - Chimpanzee)

