

**APC-Cy7 Anti-Human CD27 (O323) Antibody**  
**Catalog # ATB10066****Specification**

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**APC-Cy7 Anti-Human CD27 (O323) Antibody - Product Information**

Application	FC
Isotype	Mouse IgG1, kappa
Concentration	5 uL (0.125 ug)/test
Reactivity	Human
Formulation	10 mM NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, 0.09% Na <sub>3</sub> N, 0.1% gelatin, pH7.2
Host	Mouse

**APC-Cy7 Anti-Human CD27 (O323) Antibody - Additional Information**

Gene ID	939
Gene Name	CD27
<b>Alternative Name(s)</b>	
TNFRSF7, S152, T14	

**Format**  
APC-Cy7**Preparation**

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

**Application Notes**

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10<sup>5</sup> to 1x10<sup>8</sup> cells.

**Storage Conditions**

2-8°C protected from light

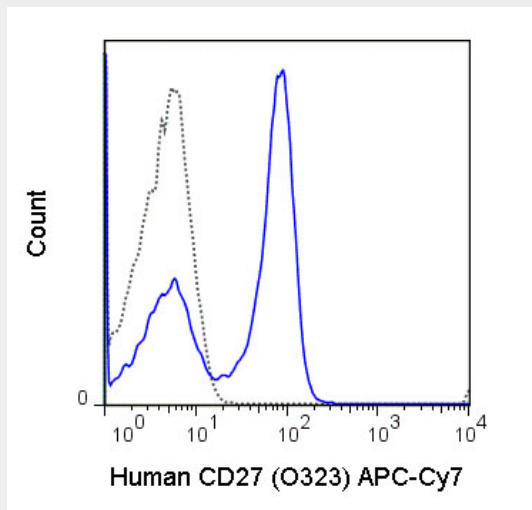
**APC-Cy7 Anti-Human CD27 (O323) Antibody - Protocols**

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](#)

### APC-Cy7 Anti-Human CD27 (O323) Antibody - Images



Human peripheral blood lymphocytes were stained with 5 uL (0.125 ug) APC-Cy7 Anti-Human CD27 (ATB10066) (solid line) or 0.125 ug APC-Cy7 Mouse IgG1 isotype control.

### APC-Cy7 Anti-Human CD27 (O323) Antibody - Background

The O323 antibody reacts with human CD27 (TNFRSF7), a cell surface homodimer of 55 kDa subunits, which provides co-stimulatory signaling in support of the T cell (TCR) and B cell (BCR) receptors. By comparison with CD28, whose TCR co-stimulatory signal can trigger cell proliferation, CD27 signaling appears to promote cell survival and differentiation to effector / memory stages. Also in contrast with CD28, the CD27 receptor may be shed following interaction with its ligand CD70, which is typically expressed on activated dendritic cells, T cells and B cells. With respect to B cells, CD27 is considered to be a phenotypic marker for memory B cells. CD27 has been included within a group of phenotypic markers for identifying human B regulatory cells (Bregs), a cell type proposed to regulate CD4<sup>+</sup> T cell proliferation and Foxp3 / CTLA-4 expression in Treg cells. The O323 antibody may be used for analysis of CD27 expression on peripheral T cells, and is frequently used in combination with antibodies for IgD and IgM to distinguish naïve vs. memory B cell populations. For identification of Breg cells, this antibody has been used in combination with antibodies for CD25, CD27, CD1d, IL-10 and TGF-beta (Kessel et al. 2012. *Autoimm. Rev.* 11(9): 670-677). The antibody is also reported for cross-reactivity with Baboon, Cynomolgus and Rhesus CD27.