

**PerCP-Cy5.5 Anti-Human CD28 (CD28.2) Antibody**  
**Catalog # ATB10273****Specification****PerCP-Cy5.5 Anti-Human CD28 (CD28.2) 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% NaN <sub>3</sub> , 0.1% gelatin, pH7.2
Host	Mouse

**PerCP-Cy5.5 Anti-Human CD28 (CD28.2) Antibody - Additional Information****Format**  
PerCP-Cy5.5**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 quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

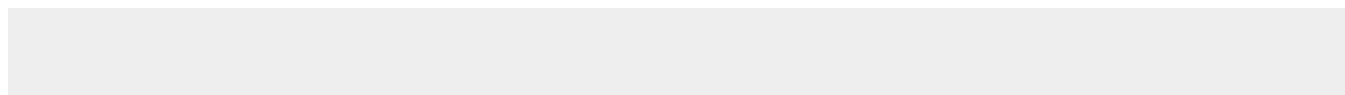
**Storage Conditions**

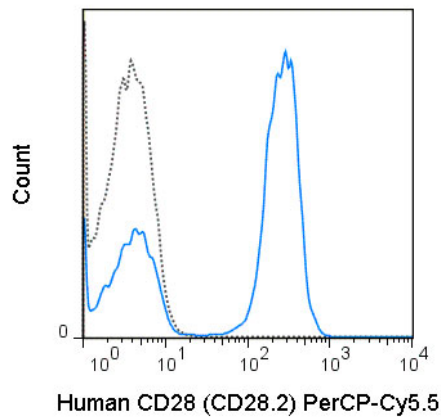
2-8°C protected from light

**PerCP-Cy5.5 Anti-Human CD28 (CD28.2) 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](#)

**PerCP-Cy5.5 Anti-Human CD28 (CD28.2) Antibody - Images**



Human peripheral blood lymphocytes were stained with 5  $\mu$ L (0.125  $\mu$ g) PerCP-Cy5.5 Anti-Human CD28 (ATB10273) (solid line) or 0.125  $\mu$ g PerCP-Cy5.5 Mouse IgG1 isotype control (dashed line).

#### **PerCP-Cy5.5 Anti-Human CD28 (CD28.2) Antibody - Background**

The CD28.2 antibody reacts with human CD28, a 44 kDa type I surface glycoprotein which acts as a co-stimulatory receptor in support of the T cell receptor (TCR). CD28 exists as a homodimer with specificity for two known ligands, known as B7-1 (CD80) and B7-2 (CD86), which are expressed on activated B cells and antigen-presenting cells. These ligands trigger CD28 signaling in concert with TCR activation to drive T cell proliferation, induce high-level expression of IL-2, impart resistance to apoptosis, and enhance T cell cytotoxicity. The interaction / co-stimulatory signaling between the B7 ligands and CD28 provides crucial communication between T cells and B cells or APCs to coordinate the adaptive immune response. Other members of the CD28 family of receptors include CTLA-4 (CD152), PD-1 (CD279), ICOS and BTLA. The CD28.2 antibody may be used as a phenotypic marker for human CD28, expressed on all CD4<sup>+</sup> T cells and CD8<sup>+</sup> T cells, and is widely used as a reagent for activation of the CD28 receptor in vitro and in vivo. This antibody is also reported to be cross-reactive with several non-human species, including Baboon, Chimpanzee, Cynomolgus, and Rhesus.