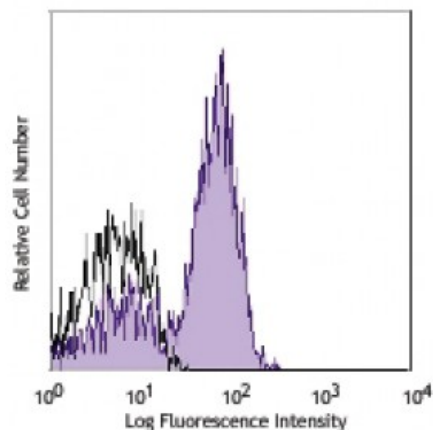


**Alexa Fluor® 700 anti-human CD28**

<b>Catalog # / Size:</b>	2114600 / 100 µg 2114595 / 25 µg
<b>Clone:</b>	CD28.2
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	Human
<b>Preparation:</b>	The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 700 under optimal conditions.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Workshop Number:</b>	V-CD28.05
<b>Concentration:</b>	0.5



Human peripheral blood lymphocytes stained with CD28.2 Alexa Fluor® 700

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is ≤2.0 microg per million cells in 100 microL volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation, immunohistochemical staining of acetone-fixed frozen tissue sections<sup>4</sup>, and *in vitro* T cell costimulation<sup>5-8</sup>. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue. The CD28.2 antibody co-stimulates T cell proliferation and cytokine production in the presence of suboptimal amounts of anti-CD3 antibody. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 302914). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 302934) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

- Application References:**
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**Description:** CD28 is a 44 kD disulfide-linked homodimeric type I glycoprotein. It is a member of the immunoglobulin superfamily and is also known as T44 or Tp44. CD28 is expressed on most T lineage cells, NK cell subsets, and plasma cells. CD28 binds both CD80 and CD86 using a highly conserved motif MYPPY in the CDR3-like loop. CD28 is considered a major co-stimulatory molecule, inducing T lymphocyte activation and IL-2 synthesis, and preventing cell death. *In vitro* studies indicate that ligation of CD28 on T cells by CD80 and CD86 on antigen presenting cells provides a costimulatory signal required for T cell activation and proliferation.

**Antigen**  
**References:** 1. Schlossman S, et al. Eds. 1995. *Leucocyte Typing V*. Oxford University Press. New York.  
2. June CH, et al. 1994. *Immunol. Today* 15:321.  
3. Linskey PS, et al. 1993. *Annu. Rev. Immunol.* 11:191.