

## PerCP/Fire™ 806 anti-human CD28 Antibody

<b>Catalog# / Size</b>	377815 / 25 tests 377816 / 100 tests
<b>Clone</b>	S20013B
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	T44, Tp44
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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. <i>In vitro</i> 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.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human CD28 transfected cells
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PerCP/Fire™ 806 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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. It is recommended that the reagent be titrated for optimal performance for each application.  * PerCP/Fire™ 806 has a maximum excitation of 478 nm and a maximum emission of 806 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>Application Notes</b>	Clone S20013B antibody can completely block the binding of clone CD28.2 on target.  Clone S20013B can partially block Clone S20013F on target.  Clone S20013B can increase anti-CD3 induced human peripheral T-cell proliferation.  Clone S20013B is a superagonistic antibody raised towards human CD28, and can induce activation, proliferation of human peripheral T cells without anti-CD3 stimulation.
<b>RRID</b>	AB_3683415 (BioLegend Cat. No. 377815) AB_3683415 (BioLegend Cat. No. 377816)

## Antigen Details

<b>Structure</b>	Ig superfamily, type I transmembrane glycoprotein, homodimer, 44 kD
<b>Distribution</b>	Mature T cells, thymocytes, NK cell subsets, plasma cells, EBV-positive B cells
<b>Function</b>	T cell costimulation
<b>Ligand/Receptor</b>	CD80, CD86
<b>Cell Type</b>	Lymphocytes, T cells, Tfh, Th1, Th17, Th2, Thymocytes, Tregs
<b>Biology Area</b>	Adaptive Immunity, Cell Proliferation and Viability, Costimulatory Molecules, Immuno-Oncology, Immunology
<b>Molecular Family</b>	CD Molecules

### Antigen References

- Schlossman S, *et al.* Eds. 1995. Leukocyte Typing V. Oxford University Press. New York.
- June CH, *et al.* 1994. *Immunol Today*. 15:321-31.
- Linsley PS and Ledbetter JA. 1993. *Annu Rev Immunol*. 11:191-212.

**Gene ID** [940](#)

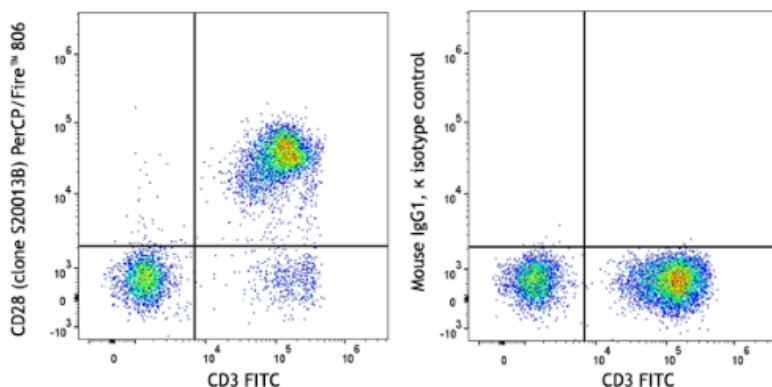
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Ultra-LEAF™ Purified anti-human CD28 (Superagonistic), APC anti-human CD28, FITC anti-human CD28, PE anti-human CD28, PE/Cyanine7 anti-human CD28, PerCP/Cyanine5.5 anti-human CD28, PerCP/Fire™ 806 anti-human CD28, PerCP/Fire™ 780 anti-human CD28 Antibody, Spark Blue™ 550 anti-human CD28 (Flexi-Fluor™), Spark Blue™ 574 anti-human CD28 (Flexi-Fluor™) Antibody

## Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) FITC and anti-human CD28 (clone S20013B) PerCP/Fire™ 806 (left) or mouse IgG1, κ PerCP/Fire™ 806 isotype control (right).

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