

## Brilliant Violet 421™ anti-mouse CD28 Antibody

<b>Catalog# / Size</b>	122023 / 50 µg
<b>Clone</b>	E18
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Tp44, T44
<b>Isotype</b>	Mouse IgG2b, κ
<b>Description</b>	CD28 is a 44 kD glycoprotein, also known as Tp44 or T44. It is a member of the Ig superfamily, expressed on thymocytes, most peripheral T cells, and NK cells. In association with CD80 (B7-1) and CD86 (B7-2), CD28 acts as the second signal for T and NK cell activation and proliferation. The E18 antibody blocks the binding of 37.51 antibody to CD28 and costimulates T cell activation and proliferation.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	A20 cells and recombinant mCD28Ig
<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 Brilliant Violet 421™ under optimal conditions.
<b>Concentration</b>	0.2 mg/mL
<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>	<p>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 ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p><a href="#">Learn more about Brilliant Violet™.</a></p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: <i>in vitro</i> costimulation of T and NK cells <sup>1</sup> , <i>in vitro</i> blocking of allogeneic mixed leukocyte response and inhibition of MHC-unrestricted CTL cytotoxicity, and <i>in vitro</i> induction of thymocyte differentiation. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 122004).

## Application References

1. Dennehy KM, *et al.* 2006. *J. Immunol.* 176:5725.

(PubMed link indicates  
BioLegend citation)

RRID AB\_3674981 (BioLegend Cat. No. 122023)

## Antigen Details

<b>Structure</b>	Ig superfamily, 44 kD
<b>Distribution</b>	Thymocytes, CD4 <sup>+</sup> , CD8 <sup>+</sup> peripheral T cells, NK cells
<b>Function</b>	Costimulates T and NK cells
<b>Ligand/Receptor</b>	CD80 (B7-1), CD86 (B7-2)
<b>Cell Type</b>	NK cells, T cells, Thymocytes, Tregs
<b>Biology Area</b>	Costimulatory Molecules, Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	1. Barclay AN, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press. 2. Lenschow DJ, <i>et al.</i> 1996. <i>Annu. Rev. Immunol.</i> 14:233. 3. Gross JA, <i>et al.</i> 1992. <i>J. Immunol.</i> 149:380.
<b>Gene ID</b>	<a href="#">12487</a>

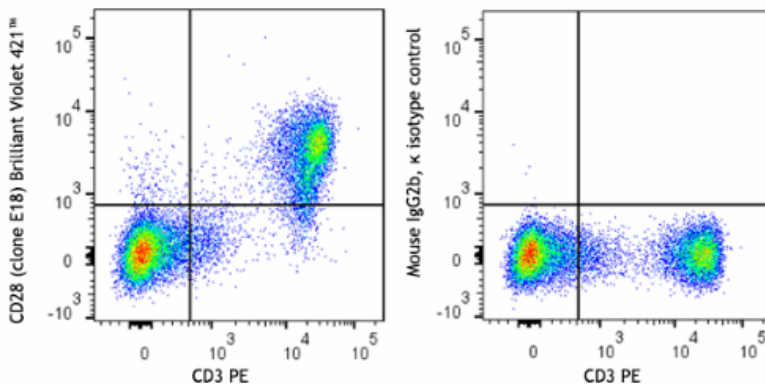
## Related Protocols

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

## Other Formats

Purified anti-mouse CD28, FITC anti-mouse CD28, PE anti-mouse CD28, PE/Cyanine7 anti-mouse CD28, APC anti-mouse CD28, Alexa Fluor® 488 anti-mouse CD28, Ultra-LEAF™ Purified anti-mouse CD28, Brilliant Violet 421™ anti-mouse CD28

## Product Data



C57BL/6 splenocytes were stained with anti-mouse CD3 (clone 145-2C11) PE and anti-mouse CD28 (clone E18) Brilliant Violet 421™ (left) or mouse IgG2b, κ Brilliant Violet 421™ isotype control (right).

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