

## Brilliant Violet 421™ anti-human CD27 Antibody

<b>Catalog# / Size</b>	356417 / 25 tests 356418 / 100 tests
<b>Clone</b>	M-T271
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	V 5T CD27.03
<b>Other Names</b>	S152, T14, TNFRSF7
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	CD27 is a 50-55 kD type I membrane protein also known as S152 and T14. It is a lymphocyte-specific member of the TNF-receptor superfamily. CD27 is expressed on medullary thymocytes, virtually all mature T cells, some B cells, and NK cells. CD27 binds to CD70, and plays a role in costimulation of T cell activation and regulation of B cell differentiation and proliferation. The cytoplasmic domains of CD27 have also been shown to interact with TRAF2 and TRAF5 to elicit NF-κB and SAPK/JNK activation.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Baboon, Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human T cells from a T-ALL patient.
<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>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.</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: immunohistochemical staining of formalin-fixed paraffin-embedded frozen tissue sections <sup>1</sup> , immunofluorescent staining <sup>2</sup> , and ELISA <sup>3</sup> .

## Application References

(PubMed link indicates BioLegend citation)

1. Ma S, *et al.* 2011. *J. Virol.* 85:165. (IHC)
2. Manzo A, *et al.* 2008. *Arthritis Rheum.* 11:3377. (IF)
3. Kato K, *et al.* 2007. *Exp. Hematol.* 35:434. (ELISA)

## Product Citations

1. Tran TM, *et al.* 2020. *Immunity.* 51(4):750-765. [PubMed](#)
2. Kim CJ, *et al.* 2018. *Immunity.* 49:1034. [PubMed](#)
3. Zhu X, *et al.* 2017. *Arch Oral Biol.* 10.1016/j.archoralbio.2017.03.010. [PubMed](#)
4. Meehan S, *et al.* 2019. *Commun Biol.* 2:229. [PubMed](#)
5. Svensson A, *et al.* 2017. *PLoS One.* 10.1371/journal.pone.0183268. [PubMed](#)
6. Rodda LB, *et al.* 2020. *Cell.* 184(1):169-183.e17. [PubMed](#)
7. Bonifacius A, *et al.* 2021. *Immunity.* 54(2):340-354.e6. [PubMed](#)
8. Mintz MA, *et al.* 2019. *Immunity.* 51:310. [PubMed](#)
9. Cao Y, *et al.* 2021. *Cell Res.* 31:732. [PubMed](#)
10. Wang L, *et al.* 2021. *Vaccines (Basel).* :9. [PubMed](#)
11. Sokal A, *et al.* 2021. *Cell.* 184(5):1201-1213.e14. [PubMed](#)
12. Nguyen J, *et al.* 2021. *Mol Syst Biol.* 17:e10560. [PubMed](#)
13. Shehata L, *et al.* 2019. *Cell Rep.* 28:3300. [PubMed](#)
14. Velazquez VM, *et al.* 2017. *Mol Ther Methods Clin Dev.* 0.277083333. [PubMed](#)
15. Gussarow D, *et al.* 2021. *Front Med (Lausanne).* 8:770381. [PubMed](#)
16. Song S, *et al.* 2021. *Front Immunol.* 12:705140. [PubMed](#)
17. Heiden M, *et al.* 2016. *Sci Rep.* 6: 26892. [PubMed](#)
18. Sokal A, *et al.* 2021. *Immunity.* S1074-7613:00396. [PubMed](#)
19. Shehata L, *et al.* 2019. *Nat Commun.* 10:1126. [PubMed](#)

## RRID

AB\_2562598 (BioLegend Cat. No. 356417)  
AB\_2562599 (BioLegend Cat. No. 356418)

## Antigen Details

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<b>Structure</b>	TNF-R superfamily, type I transmembrane glycoprotein, 50-55 kD
<b>Distribution</b>	Medullary thymocytes, T and B cell subsets, NK cells
<b>Interaction</b>	CD27 binds to CD70
<b>Ligand/Receptor</b>	CD70
<b>Cell Type</b>	B cells, NK cells, T cells, Thymocytes
<b>Biology Area</b>	Costimulatory Molecules, Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Knapp W, <i>et al.</i> 1989. <i>Leucocyte Typing IV: White Cell Differentiation Antigens.</i> Oxford University Press.</li><li>2. Schlossman S, <i>et al.</i> 1995. <i>Leucocyte Typing V: White Cell Differentiation Antigens.</i> Oxford University Press.</li><li>3. Hintzen R, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:307.</li><li>4. Agematsu K, <i>et al.</i> 1995. <i>J. Immunol.</i> 154:3627.</li></ol>
<b>Gene ID</b>	<a href="#">939</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

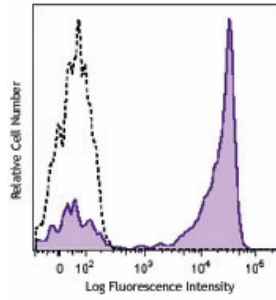
## Other Formats

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Purified anti-human CD27, FITC anti-human CD27, PE anti-human CD27, PerCP/Cyanine5.5 anti-human CD27, APC anti-human CD27, PE/Cyanine7 anti-human CD27, Pacific Blue™ anti-human CD27, Alexa Fluor® 700 anti-human CD27, Brilliant Violet 421™ anti-human CD27, Brilliant Violet 510™ anti-human CD27, PE/Dazzle™ 594 anti-human CD27, APC/Cyanine7 anti-human CD27, Biotin anti-human CD27, APC/Fire™ 750 anti-human CD27, Brilliant Violet 711™ anti-human CD27, PerCP anti-human CD27, Alexa Fluor® 647 anti-human CD27, KIRAVIA Blue 520™ anti-human CD27, PE/Cyanine5 anti-human CD27

## Product Data

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Human peripheral blood lymphocytes were stained with CD27 (clone M-T271) Brilliant Violet 421™ (filled histogram) or mouse IgG1 Brilliant Violet 421™ isotype control (open histogram).

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Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587