

Brilliant Violet 510™ anti-human CD27 Antibody

Catalog# / Size	302835 / 25 tests 302836 / 100 tests
Clone	O323
Regulatory Status	RUO
Workshop	IV T-186
Other Names	S152, T14, TNFRSF7
Isotype	Mouse IgG1, κ
Description	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 an important 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

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon, Squirrel Monkey
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. 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 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</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>
Excitation Laser	Violet Laser (405 nm)
Application References	1. Knapp W, <i>et al.</i> Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York.

(PubMed link indicates BioLegend citation)

2. Correia DV, *et al.* 2011. *Blood* 118:992. (FC) [PubMed](#)

Product Citations

1. Woo MS, *et al.* 2021. *iScience*. 24(7):102752. [PubMed](#)
2. Nakano M, *et al.* 2021. *Front Immunol.* 12:713225. [PubMed](#)
3. Karim F, *et al.* 2021. *Elife*. 10:.. [PubMed](#)
4. Pholcharee T, *et al.* 2021. *Nat Commun.* 12:1063. [PubMed](#)
5. Turner JS, *et al.* 2021. *Nature*. 596:109. [PubMed](#)
6. Tu HA, *et al.* 2020. *Cell Rep Med.* 1:100155. [PubMed](#)
7. Abeykoon JP, *et al.* 2021. *Br J Haematol.* 193:380. [PubMed](#)
8. Nel I, *et al.* 2021. *Diabetologia.* 64(10):2306-2321. [PubMed](#)
9. Rossignol ED, *et al.* 2021. *Cell Reports.* 35(8):109167. [PubMed](#)
10. Mudd PA, *et al.* 2022. *Cell.* 185:603. [PubMed](#)
11. Soh KT, *et al.* 2020. *Cytometry B Clin Cytom.* 98:161. [PubMed](#)
12. Turner JS, *et al.* 2020. *Nature.* 586:127. [PubMed](#)
13. Cillo AR, *et al.* 2021. *Cell Rep Med.* 2:100476. [PubMed](#)
14. Setliff I, *et al.* 2018. *Cell Host Microbe.* 23:845. [PubMed](#)
15. Montel-Hagen A *et al.* 2019. *Cell stem cell.* 24(3):376-389. [PubMed](#)
16. Salumets A, *et al.* 2022. *Aging Cell.* 21:e13607. [PubMed](#)

RRID

AB_2561382 (BioLegend Cat. No. 302835)
AB_2562086 (BioLegend Cat. No. 302836)

Antigen Details

Structure	TNF-R superfamily, type I transmembrane glycoprotein, 50-55 kD
Distribution	Medullary thymocytes, T and B cell subsets, NK cells
Function	T cell costimulation
Ligand/Receptor	CD70
Cell Type	B cells, NK cells, T cells, Thymocytes, Tregs
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	1. Hintzen R, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:307. 2. Agematsu K, <i>et al.</i> 1995. <i>J. Immunol.</i> 154:3627.
Gene ID	939

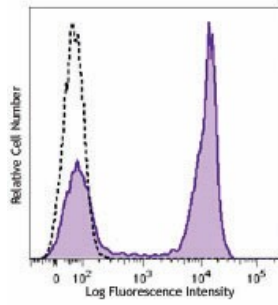
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-human CD27, Biotin anti-human CD27, FITC anti-human CD27, PE anti-human CD27, Purified anti-human CD27, Alexa Fluor® 647 anti-human CD27, Alexa Fluor® 700 anti-human CD27, APC/Cyanine7 anti-human CD27, PerCP anti-human CD27, PerCP/Cyanine5.5 anti-human CD27, Pacific Blue™ anti-human CD27, Brilliant Violet 421™ anti-human CD27, Brilliant Violet 570™ anti-human CD27, Brilliant Violet 650™ anti-human CD27, Brilliant Violet 605™ anti-human CD27, Brilliant Violet 711™ anti-human CD27, Brilliant Violet 785™ anti-human CD27, Brilliant Violet 510™ anti-human CD27, PE/Cyanine7 anti-human CD27, Purified anti-human CD27 (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD27, APC/Fire™ 750 anti-human CD27, TotalSeq™-A0154 anti-human CD27, Brilliant Violet 750™ anti-human CD27, TotalSeq™-B0154 anti-human CD27, TotalSeq™-C0154 anti-human CD27, Spark NIR™ 685 anti-human CD27, PE/Fire™ 810 anti-human CD27, TotalSeq™-D0154 anti-human CD27, APC/Fire™ 810 anti-human CD27, PE/Cyanine5 anti-human CD27 Antibody, Spark UV™ 387 anti-human CD27

Product Data



Human peripheral blood lymphocytes were stained with CD27 (clone O323) Brilliant Violet 510™.

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