# BioLegend®

# GMP PerCP/Cyanine5.5 anti-human CD27 Antibody

Catalog# / Size	260404 / 100 tests
Clone	M-T271
Workshop	V 5T CD27.03
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 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-kB and SAPK/JNK activation.

## **Product Details**

Reactivity	Human
Reported Reactivity	Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human T cells from a T-ALL patient.
Formulation	Phosphate-buffered solution, pH 7.2, containing True-Stain Monocyte Blocker™, 0.09% sodium azide and 0.2% (w/v) BSA (origin USA) and a stabilizer.
Preparation	The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.
Concentration	200 µg/mL
Storage & Handling	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> .
Application	<u>FC - Quality tested</u>
Recommended Usage	Each lot of this antibody is quality control tested by <u>immunofluorescent staining with flow</u> <u>cytometric analysis</u> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ L per million cells in 100 $\mu$ L staining volume or 5 $\mu$ L per 100 $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
	* PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Excitation Laser	Blue Laser (488 nm)
Application Notes	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)
Disclaimer	<b>GMP RUO Flow Cytometry Antibodies.</b> BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include:

- · Batch-to-batch consistency
- Material traceability
- Documented procedures
- Documented employee training
- Equipment maintenance and monitoring records
- Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- QA review of released products

#### **Antigen Details**

Structure	TNF-R superfamily, type I transmembrane glycoprotein, 50-55 kD
Distribution	Medullary thymocytes, T and B cell subsets, NK cells
Interaction	CD27 binds to CD70
Ligand/Receptor	CD70
Cell Type	B cells, NK cells, T cells, Thymocytes
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	<ol> <li>Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV: White Cell Differentiation Antigens. Oxford University Press.</li> <li>Schlossman S, <i>et al.</i> 1995. Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press.</li> <li>Hintzen R, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:307.</li> <li>Agematsu K, <i>et al.</i> 1995. J. <i>Immunol.</i> 154:3627.</li> </ol>
Gene ID	939

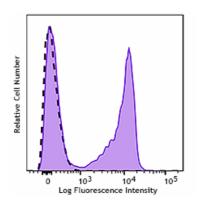
### **Related Protocols**

<u>Cell Surface Flow Cytometry Staining Protocol</u>

#### **Other Formats**

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<sup>™</sup> anti-human CD27, Alexa Fluor® 700 anti-human CD27, Brilliant Violet 421<sup>™</sup> anti-human CD27, Brilliant Violet 510<sup>™</sup> anti-human CD27, PE/Dazzle<sup>™</sup> 594 anti-human CD27, APC/Cyanine7 anti-human CD27, Biotin anti-human CD27, APC/Fire<sup>™</sup> 750 anti-human CD27, Brilliant Violet 711<sup>™</sup> anti-human CD27, PerCP anti-human CD27, Alexa Fluor® 647 anti-human CD27, KIRAVIA Blue 520<sup>™</sup> anti-human CD27, PE/Cyanine5 anti-human CD27, Brilliant Violet 650<sup>™</sup> anti-human CD27, Spark Violet<sup>™</sup> 423 anti-human CD27, GMP PE/Cyanine7 anti-human CD27, Spark Red<sup>™</sup> 718 anti-human CD27 (Flexi-Fluor<sup>™</sup>)

#### Product Data



Typical results from human peripheral blood lymphocytes stained either with M-T271 PerCP/Cyanine5.5 used at 5  $\mu$ L/test (filled histogram) or with an isotype control (open histogram).

For Research Use Only. Suitable for ex vivo cell processing. Not for injection or diagnostic or therapeutic use.

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