

**Spark Violet™ 423 anti-human CD27**

**Catalog # / Size:** 356442 / 100 tests  
356441 / 25 tests

**Clone:** M-T271

**Isotype:** Mouse IgG1, κ

**Immunogen:** Human T cells from a T-ALL patient.

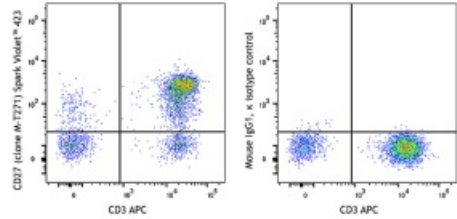
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Spark Violet™ 423 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)

**Workshop Number:** V 5T CD27.03

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with anti-human CD3 APC and anti-human CD27 (clone M-T271) Spark Violet™ 423 (left) or mouse IgG1, κ Spark Violet™ 423 isotype control(right).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** 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. It is recommended that the reagent be titrated for optimal performance for each application.

\* Spark Violet™ 423 has a maximum excitation of 400 nm and a maximum emission of 415 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:**

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)

**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-κB and SAPK/JNK activation.

- Antigen** 1. Knapp W, *et al.* 1989. Leucocyte Typing IV: White Cell Differentiation Antigens. Oxford University Press.
- References:** 2. Schlossman S, *et al.* 1995. Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press.
3. Hintzen R, *et al.* 1994. *Immunol. Today* 15:307.
4. Agematsu K, *et al.* 1995. *J. Immunol.* 154:3627.