## **Brilliant Violet 421™ anti-human CD3**

Catalog # / Size: 2324165 / 25 tests

2324170 / 100 tests

Clone: SK7

**Isotype:** Mouse IgG1, κ

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with Brilliant Violet 421<sup>™</sup> under optimal conditions. The solution is free of unconjugated Brilliant Violet 421<sup>™</sup> and

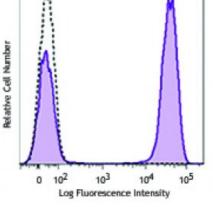
unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: 0.5



Human peripheral blood lymphocytes were stained with CD3 (clone SK7) Brilliant Violet 421<sup>™</sup> (filled histogram) or mouse IgG1, κ Brilliant Violet 421<sup>™</sup> isotype control (open histogram).

## **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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421<sup>™</sup> excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421<sup>™</sup> is

a trademark of Sirigen Group Ltd.

Application Notes:

Additional reported application (for the relevant formats) include:

immunohistochemical staining of frozen tissue sections<sup>4,5,8</sup>, immunofluorescent

staining<sup>6</sup>, and Western blotting3.

Application References:

1. Kan EA, et al. 1983. J. Immunol. 131:536.

2. Wood GS, et al. 1985. Am. J. Pathol. 120:371.

3. Van Dongen JJM, *et al.* 1988. *Blood* 71:603. (WB)

4. Haringman JJ, et al. 2005. Arthritis Res. Ther. 7:R862. (IHC)

5. Carbone A, et al. 1999. Blood 93:2319. (IHC)

6. Goval JJ, et al. 2006. J. Histochem. Cytochem. 54:75. (IF)

7. Rutjens E, et al. 2007. J. Immunol. 178:1702.

8. Kap Y, et al. 2009. J. Histochem. Cytochem. 57:1159. (IHC)

9. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)

**Description:** C

CD3 $\epsilon$  is a 20 kD chain of the CD3/T-cell receptor (TCR) complex, which is composed of two CD3 $\epsilon$ , one CD3 $\gamma$ , one CD3 $\delta$ , one CD3 $\zeta$  (CD247), and a T-cell receptor ( $\alpha/\beta$  or  $\gamma/\delta$ ) heterodimer. It is found on all mature T cells, NK T cells, and some thymocytes. CD3, also known as T3, is a member of the immunoglobulin superfamily that plays a role in antigen recognition, signal transduction, and T

cell activation.

## **Antigen** References:

- 1. Barclay N, et al. 1993. The Leucocyte FactsBook. Academic Press. San Diego.
- 2. Beverly P, *et al.* 1981. *Eur. J. Immunol.* 11:329. 3. Lanier L, *et al.* 1986. *J. Immunol.* 137:2501.