

# Brilliant Violet 750™ anti-human CD3

**Catalog # /** 2324230 / 100 tests  
**Size:** 2324225 / 25 tests

**Clone:** SK7

**Isotype:** Mouse IgG1,  $\kappa$

**Immunogen:** KG1a cell line

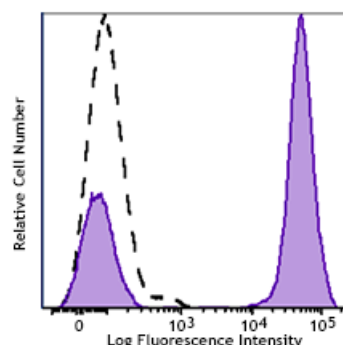
**Reactivity:** Human, Non-human primate

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 750™ and unconjugated antibody.

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

**Workshop Number:** HCDM listed

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with CD3 (clone SK7) Brilliant Violet 750™ (filled histogram) or mouse IgG1,  $\kappa$  Brilliant Violet 750™ 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  $\mu$ l per million cells 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.

Brilliant Violet 750™ excites at 405 nm and emits at 750 nm. The bandpass filter 780/60 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 750™ is a trademark of Sirigen Group Ltd.

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**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 blotting<sup>3</sup>.

**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)
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**Description:** CD3ε is a 20 kD chain of the CD3/T-cell receptor (TCR) complex, which is composed of two CD3ε, one CD3γ, one CD3δ, one CD3ζ (CD247), and a T-cell receptor (α/β or γ/δ) 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.