

**Spark Blue™ 550 anti-human CD4**

**Catalog # / Size:** 2323280 / 100 tests  
2323275 / 25 tests

**Clone:** SK3

**Isotype:** Mouse IgG1, κ

**Immunogen:** Papain solubilized HLA-A2

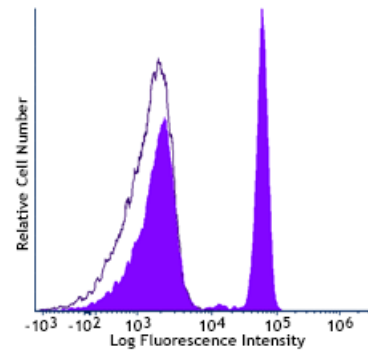
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Spark Blue™ 550 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Workshop Number:** IV T-164

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with CD4 (SK3) Spark Blue 550 (filled histogram) versus unstained cells (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 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 Blue™ 550 has a maximum excitation of 516 nm and a maximum emission of 540 nm.

**Application Notes:** The BB7.2 antibody recognizes human leukocyte antigen (HLA) A2 which is a subset of MHC-class I molecules encoded by A\*02 alleles.

Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>3</sup>.

- Application References:**
1. Evans RL, *et al.* 1981. *Immunol.* 78:544
  2. Arno A *et al.* 1999. *J. Infect. Dis.* 180:56
  3. Muech M, *et al.* 1997. *Blood* 89:1364
  4. Wang L, *et al.* 2012. *Cytometry A.* 81:567. [PubMed](#)

**Description:** CD4, also known as T4, is a 55 kD single-chain type I transmembrane glycoprotein expressed on most thymocytes, a subset of T cells, and monocytes/macrophages. CD4, a member of the Ig superfamily, recognizes antigens associated with MHC class II molecules and participates in cell-cell interactions, thymic differentiation, and signal transduction. CD4 acts as a primary receptor for HIV, binding to HIV gp120. CD4 has also been shown to interact with IL-16.

- Antigen References:**
1. Center D *et al.* 1996. *Immunol. Today* 17:476.
  2. Gaubin M *et al.* 1996. *Eur. J. Clin. Chem. Clin. Biochem.* 34:723.