## **Product Data Sheet**

#### APC/Fire™ 810 anti-human CD25

Catalog # / 2380745 / 25 tests

**Size:** 2380750 / 100 tests

Clone: M-A251

**Isotype:** Mouse IgG1, κ

Immunogen: Human PHA-induced lymphocyte cells

Reactivity: Human, Non-human primate, Other

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

chromatography and conjugated with

APC/Fire™ 810 under optimal

conditions.

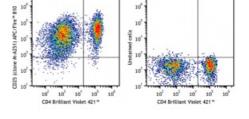
**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA)

Workshop Number: IV A053

Concentration: Lot-specific



PHA-stimulated (3 days) human peripheral blood lymphocytes were stained with anti-human CD4 Brilliant Violet 421™ and anti-human CD25 APC/Fire™ 810 (clone M-A251) (left) or stained with CD4 Brilliant Violet 421™ only (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  $\mu$ 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

\* APC/Fire™ 810 has a maximum excitation of 650 nm and a maximum

emission of 810 nm.

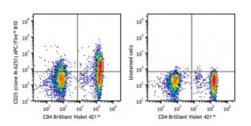
each application.

Application Notes:

Additional reported applications (for the relevant formats) include: immunohistochemical staining of paraformaldehyde fixed frozen

sections.1

The CD25 molecule reveals three epitope regions: A, B, and C. M-A251 antibody recognizes epitope region B. Unlike other CD25 antibody clones, M-A251 can detect CD25 after fixation with paraformaldehyde.



Human peripheral blood lymphocytes were stained with CD4 Brilliant Violet 421™ and anti-human CD25 APC/Fire™ 810 (clone M-A251) (left) or stained with CD4 Brilliant Violet 421™ only (right).

## Application References:

1. Li H and Pauza CD. 2015. Eur. J. Immunol. 45:298. (IHC)

#### **Description:**

CD25 is a 55 kD type I transmembrane glycoprotein also known as low affinity IL-2 receptor  $\alpha$  chain or Tac. It is expressed on progenitor lymphocytes, activated T and B cells, and activated monocytes/macrophages. CD25 is also expressed on a subset of non-stimulated CD4 $^+$ T cells termed T regulatory cells. Soluble CD25/IL-2R $\alpha$  is produced as a consequence of lymphocyte stimulation and is found in biological fluids following inflammatory responses. CD25 associates with IL-2 receptor  $\beta$  (CD122) and common  $\gamma$  (CD132) chains to form a high affinity IL-2R complex.

# Antigen References:

- 1. Knapp W, et al. 1989. Leucocyte Typing IV: White Cell Differentiation Antigens. Oxford University Press.
- 2. Schlossman S, et al. 1995. Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press.
- 3. Barclay N, et al. 1997. The Leukocyte Antigen FactsBook. Academic Press Inc.
- 4. Taniguchi T and Minami Y. et al. 1993. Cell 73:5.
- 5. Waldmann T. 1991. J. Biol. Chem. 266:2681.