

**APC/Fire™ 750 anti-human CD7**

**Catalog # / Size:** 2315605 / 25 tests  
2315610 / 100 tests

**Clone:** CD7-6B7

**Isotype:** Mouse IgG2a, κ

**Immunogen:** KG1a cell line

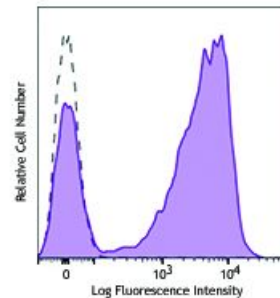
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 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 CD7 (clone CD7-6B7) APC/Fire™ 750 (closed histogram) or mouse IgG2a, κ isotype control APC/Fire™ 750™ (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.

\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

**Application Notes:** Additional reported (for the relevant formats) applications include proteogenomics<sup>2</sup>.

- Application References:**
1. Knapp W, et al. 1989. *Leucocyte Typing IV:White Cell Differentiation Antigens*. Oxford University Press.
  2. Peterson VM, et al. 2017. *Nat. Biotechnol.* 35:936. (PG)

**Description:** CD7 is a 40 kD type I transmembrane glycoprotein also known as gp40. It is a member of the immunoglobulin superfamily found on T cells, NK cells, thymocytes, hematopoietic progenitors, and monocytes (weakly). CD7 is also expressed on acute lymphocytic leukemia (ALL) and some acute myeloid leukemia (AML) cells. CD7 crosslinking induces a calcium flux in T lymphocytes, presumably as a result of cytoplasmic domain association with PI3-kinase. CD7 costimulation can induce cytokine secretion and modulate cellular adhesion.

- Antigen References:**
1. Barclay N, et al. 1993. *The Leucocyte Antigen FactsBook*. Academic Press Inc. San Diego.
  2. Stillwell R, et al. 2001. *Immunol. Res.* 24:31.
  3. Rabinowich H, et al. 1994. *J. Immunol.* 152:517.