## **Technical Data Sheet**

# **APC Mouse Anti-Human CD7**

#### **Product Information**

Material Number: 561604

Alternate Name: GP40; LEU-9; T-cell leukemia antigen; Tp40; TP41

Entrez Gene ID: 924

Size: 50 tests

Vol. per Test: 5  $\mu$ l

Clone: M-T701

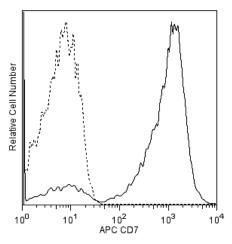
Isotype: Mouse IgG1,  $\kappa$ Reactivity: QC Testing: Human

Workshop: IV T163

**Storage Buffer:** Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

## Description

The M-T701 monoclonal antibody specifically binds to a 40 kDa type I transmembrane glycoprotein expressed on thymocytes, T cells, pre-B cells and NK cells. CD7 is present in reduced density on monocytic cells and cell lines. Functional studies demonstrate that crosslinking of the CD7 can induce transmembrane calcium flux in T cells.



Flow cytometric analysis of CD7 expression on human peripheral blood lymphocytes. Whole blood was stained with either APC Mouse Anti-Human CD7 antibody (Cat. No. 561604; solid line histogram) or with an APC Mouse IgG1, κ Isotype Control (Cat. No. 555751; dashed line histogram). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

#### **Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to APC under optimum conditions, and unconjugated antibody and free APC were removed.

## **Application Notes**

#### Application

Flow cytometry Routinely Tested	

## **Suggested Companion Products**

Catalog Number	Name	Size	Clone
555751	APC Mouse IgG1, κ Isotype Control	100 tests	MOPC-21
554656	Stain Buffer (FBS)	500 ml	(none)
555899	Lysing Buffer	100 ml	(none)

## **Product Notices**

- 1. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 2. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10<sup>6</sup> cells in a 100-μl experimental sample (a test).
- 3. An isotype control should be used at the same concentration as the antibody of interest.
- 4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

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- 5. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 7. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

## References

Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook*. San Diego, CA: Academic Press; 1997. (Biology)

Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Clone-specific)

Rabinowich H, Pricop L, Herberman RB, Whiteside TL. Expression and function of CD7 molecule on human natural killer cells. *J Immunol*. 1994; 152(2):517-526. (Biology)

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