

## APC/Cyanine7 anti-human CD7 Antibody

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| <b>Catalog# / Size</b>   | 385817 / 25 tests<br>385818 / 100 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Clone</b>             | A20153E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Regulatory Status</b> | RUO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>           | Mouse IgG2b, $\kappa$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description</b>       | 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. |

### Product Details

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| <b>Verified Reactivity</b>    | Human                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Antibody Type</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Host Species</b>           | Mouse                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>              | Human CD7 recombinant protein                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Formulation</b>            | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)                                                                                                                                                                                                                                                                                                                   |
| <b>Preparation</b>            | The antibody was purified by affinity chromatography and conjugated with APC/Cyanine7 under optimal conditions.                                                                                                                                                                                                                                                                                           |
| <b>Concentration</b>          | Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool).                                                                                                                                                                                                                                               |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>                                                                                                                                                                                                                                                               |
| <b>Application</b>            | <a href="#">FC - Quality tested</a>                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Recommended Usage</b>      | Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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 each application. |
| <b>Excitation Laser</b>       | Red Laser (633 nm)                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Application Notes</b>      | Clone A20153E can completely block binding of clone 4H9-CD7 and partially blocks binding of clone CD7-6B7 on target cells.                                                                                                                                                                                                                                                                                |
| <b>RRID</b>                   | AB_3720513 (BioLegend Cat. No. 385817)<br>AB_3720513 (BioLegend Cat. No. 385818)                                                                                                                                                                                                                                                                                                                          |

### Antigen Details

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|---------------------|-----------------------------------------------------------------------------------------|
| <b>Structure</b>    | Ig superfamily, type I transmembrane glycoprotein, 40 kD                                |
| <b>Distribution</b> | T cells, NK cells, thymocytes, hematopoietic progenitors, myeloid leukemic cell subsets |
| <b>Function</b>     | T cell Activation                                                                       |

|                           |                                                                                                                                                                                                                                                                                                                   |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Cell Type</b>          | Hematopoietic stem and progenitors, Leukemia, NK cells, T cells, Thymocytes                                                                                                                                                                                                                                       |
| <b>Biology Area</b>       | Costimulatory Molecules, Immunology                                                                                                                                                                                                                                                                               |
| <b>Molecular Family</b>   | CD Molecules                                                                                                                                                                                                                                                                                                      |
| <b>Antigen References</b> | <ol style="list-style-type: none"> <li>1. Barclay N, <i>et al.</i> 1993. <i>The Leucocyte Antigen FactsBook</i>. Academic Press Inc. San Diego.</li> <li>2. Stillwell R, <i>et al.</i> 2001. <i>Immunol Res.</i> 24:31-52.</li> <li>3. Rabinowich H, <i>et al.</i> 1994. <i>J Immunol.</i> 152:517-26.</li> </ol> |
| <b>Gene ID</b>            | <a href="#">924</a>                                                                                                                                                                                                                                                                                               |

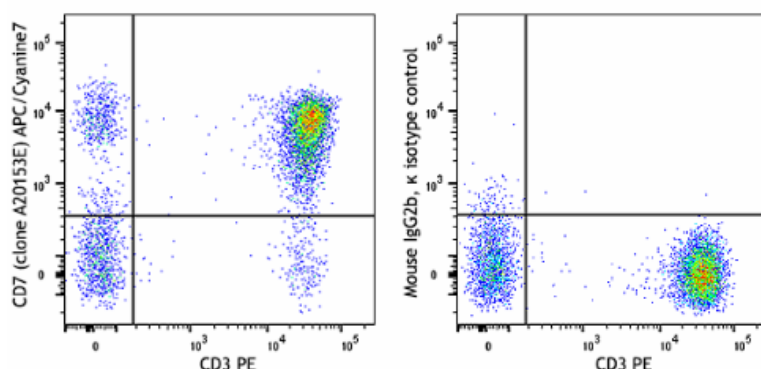
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD7, PE anti-human CD7, PE/Dazzle™ 594 anti-human CD7, Alexa Fluor® 488 anti-human CD7, APC anti-human CD7, Brilliant Violet 421™ anti-human CD7, PE/Cyanine7 anti-human CD7 Antibody, APC/Cyanine7 anti-human CD7 Antibody, PerCP/Cyanine 5.5 anti-human CD7 Antibody

## Product Data



Human peripheral blood lymphocytes were stained with anti-human CD7 (clone UCHT1) PE and anti-human CD7 (clone A20153E) APC/Cyanine7 (left) or mouse IgG2b, κ APC/Cyanine7 isotype control (right).

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