

## GMP APC anti-human CD3 Antibody

<b>Catalog# / Size</b>	260122 / 100 tests
<b>Clone</b>	SK7
<b>Other Names</b>	T3, CD3 $\epsilon$
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	CD3 $\epsilon$ is a 20 kD chain of the CD3/T-cell receptor (TCR) complex, which is composed of two CD3 $\epsilon$ , one CD3 $\gamma$ , one CD3 $\delta$ , one CD3 $\zeta$ (CD247), and a T-cell receptor ( $\alpha/\beta$ or $\gamma/\delta$ ) heterodimer. It is found on all mature T cells, NK T cells, and some thymocytes. CD3, also known as T3, is a member of the immunoglobulin superfamily that plays a role in antigen recognition, signal transduction, and T cell activation.

### Product Details

<b>Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
<b>Concentration</b>	50 $\mu$ g/mL
<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>	Additional reported application (for the relevant formats) include: immunohistochemical staining of frozen tissue sections <sup>4,5,8</sup> , immunofluorescent staining <sup>6</sup> , and Western blotting <sup>3</sup> .
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Kan EA, <i>et al.</i> 1983. <i>J. Immunol.</i> 131:536.</li> <li>2. Wood GS, <i>et al.</i> 1985. <i>Am. J. Pathol.</i> 120:371.</li> <li>3. Van Dongen JJM, <i>et al.</i> 1988. <i>Blood</i> 71:603. (WB)</li> <li>4. Haringman JJ, <i>et al.</i> 2005. <i>Arthritis Res. Ther.</i> 7:R862. (IHC)</li> <li>5. Carbone A, <i>et al.</i> 1999. <i>Blood</i> 93:2319. (IHC)</li> <li>6. Goval JJ, <i>et al.</i> 2006. <i>J. Histochem. Cytochem.</i> 54:75. (IF)</li> <li>7. Rutjens E, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:1702.</li> <li>8. Kap Y, <i>et al.</i> 2009. <i>J. Histochem. Cytochem.</i> 57:1159. (IHC)</li> <li>9. Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC)</li> </ol>
<b>Disclaimer</b>	<p><b>GMP RUO Flow Cytometry Antibodies.</b> BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include:</p> <ul style="list-style-type: none"> <li>• Batch-to-batch consistency</li> <li>• Material traceability</li> <li>• Documented procedures</li> <li>• Documented employee training</li> <li>• Equipment maintenance and monitoring records</li> <li>• Lot-specific certificates of analysis</li> </ul>

(PubMed link indicates BioLegend citation)

- Quality audits per ISO 13485:2016
- QA review of released products

## Antigen Details

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<b>Structure</b>	Ig superfamily, with the subunits of CD3 $\gamma$ , CD3 $\delta$ , CD3 $\zeta$ , (CD247) and TCR ( $\alpha/\beta$ or $\gamma/\delta$ ) forms CD3/TCR complex, 20 kD
<b>Distribution</b>	Mature T and NK T cells, during thymocyte differentiation
<b>Function</b>	Antigen recognition, signal transduction, T cell activation
<b>Ligand/Receptor</b>	Peptide antigen bound to MHC
<b>Cell Type</b>	NKT cells, T cells, Tregs
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Molecular Family</b>	CD Molecules, TCRs
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Barclay N, <i>et al.</i> 1993. The Leucocyte FactsBook. Academic Press. San Diego.</li> <li>2. Beverly P, <i>et al.</i> 1981. <i>Eur. J. Immunol.</i> 11:329.</li> <li>3. Lanier L, <i>et al.</i> 1986. <i>J. Immunol.</i> 137:2501.</li> </ol>
<b>Gene ID</b>	<a href="#">916</a>

## Related Protocols

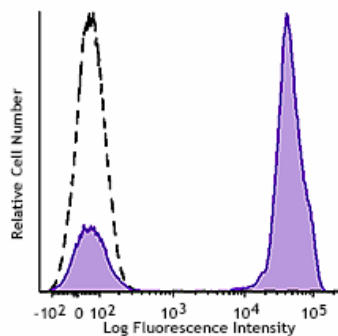
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[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

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APC/Fire™ 750 anti-human CD3, Biotin anti-human CD3, Purified anti-human CD3, FITC anti-human CD3, PE anti-human CD3, Alexa Fluor® 488 anti-human CD3, APC anti-human CD3, PerCP/Cyanine5.5 anti-human CD3, PerCP anti-human CD3, PE/Cyanine7 anti-human CD3, APC/Cyanine7 anti-human CD3, Alexa Fluor® 700 anti-human CD3, Pacific Blue™ anti-human CD3, Alexa Fluor® 647 anti-human CD3, Brilliant Violet 510™ anti-human CD3, Brilliant Violet 421™ anti-human CD3, Brilliant Violet 605™ anti-human CD3, Brilliant Violet 711™ anti-human CD3, Brilliant Violet 785™ anti-human CD3, PE/Dazzle™ 594 anti-human CD3, Brilliant Violet 750™ anti-human CD3, TotalSeq™-A0049 anti-human CD3, TotalSeq™-C0049 anti-human CD3, Spark Blue™ 550 anti-human CD3, TotalSeq™-B0049 anti-human CD3, Alexa Fluor® 660 anti-human CD3, APC/Fire™ 810 anti-human CD3, Spark NIR™ 685 anti-human CD3, PE/Fire™ 640 anti-human CD3, PE/Fire™ 700 anti-human CD3, GMP FITC anti-human CD3, PE/Cyanine5 anti-human CD3 Antibody



Typical results from human peripheral blood lymphocytes stained either with SK7 APC used at 5  $\mu$ L/test (filled histogram) or with an isotype control (open histogram).

**Symbols Glossary\***

Symbol	Meaning	Symbol Title	Symbol No.	Symbol	Meaning	Symbol Title	Symbol No.
	Catalog number	Catalogue number	5.1.6		Indicates the need for the user to consult the instructions for use.	Consult instructions for use	5.4.3
	Indicates the temperature limits to which the medical device can be safely exposed.	Temperature limit	5.3.7		Indicates a medical device that needs protection from light sources.	Keep away from sunlight	5.3.2
	Indicates the upper limit of temperature to which the medical device can be safely exposed.	Upper limit of temperature	5.3.6		Indicates the date after which the medical device is not to be used.	Use-by date	5.1.4
	Indicates the medical device manufacturer.	Manufacturer	5.1.1		Indicates the authorized representative in the European Community.	Authorized representative in the European Community	5.1.2
	Indicates the manufacturer's batch code so that the batch or lot can be identified.	Batch code	5.1.5		Indicates a medical device that is intended to be used as an in vitro diagnostic medical device.	<i>In vitro</i> diagnostic medical device	5.5.1

\* Symbol information is from EN ISO 15223-1:2016 Medical devices – Symbols to be used with medical device labels, labelling and information to be supplied – Part 1: General requirements

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