

## APC anti-human TCR V $\gamma$ 9 Antibody

<b>Catalog# / Size</b>	331309 / 25 tests 331310 / 100 tests
<b>Clone</b>	B3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	T cell receptor V $\gamma$ 9
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	The V $\gamma$ 9 TCR is a variant of the TCR $\gamma$ chain expressed on a subset of $\gamma/\delta$ T cells. V $\gamma$ 9V $\delta$ 2 T lymphocytes, a major $\gamma/\delta$ T cell subset in humans, recognize phosphoantigens, certain tumor cells, and cells treated with aminobisphosphonates. This cell population displays cytolytic activity against various tumor cells. The $\gamma/\delta$ TCR is a heterodimeric TCR complex composed of covalently bound $\gamma$ and $\delta$ chains involved in antigen recognition and the non-covalently associated monomeric proteins CD3 $\delta$ , $\gamma$ , $\epsilon$ , and $\zeta$ chains.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Chimpanzee, Cynomolgus
<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 BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<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.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Van Rhijn I, <i>et al.</i> 2003. <i>Intl. Immunol.</i> 15:373.</li> <li>2. Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC)</li> </ol>
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>1. Poran A, <i>et al.</i> 2020. <i>Cell Reports Medicine.</i> 1(8):100141. <a href="#">PubMed</a></li> <li>2. Beatson RE, <i>et al.</i> 2021. <i>Cell Rep Med.</i> 2:100473. <a href="#">PubMed</a></li> <li>3. Ott PA, <i>et al.</i> 2020. <i>Cell.</i> 183(2):347-362.e24. <a href="#">PubMed</a></li> <li>4. de Bruin RC, <i>et al.</i> 2017. <i>J Immunol.</i> 198:308. <a href="#">PubMed</a></li> <li>5. Bruin R, <i>et al.</i> 2016. <i>Clin Immunol.</i> 169:128-38. <a href="#">PubMed</a></li> <li>6. Daniels J, <i>et al.</i> 2020. <i>Nat Commun.</i> 11:1806. <a href="#">PubMed</a></li> <li>7. Ogongo P, <i>et al.</i> 2020. <i>J Clin Invest.</i> 130:214. <a href="#">PubMed</a></li> </ol>
<b>RRID</b>	AB_2057505 (BioLegend Cat. No. 331309) AB_2057504 (BioLegend Cat. No. 331310)

## Antigen Details

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<b>Structure</b>	Ig superfamily member, TCR $\gamma/\delta$ with CD3 forms the CD3/TCR complex
<b>Distribution</b>	Expressed on majority of peripheral $\gamma/\delta$ T cells
<b>Function</b>	Antigen recognition, T cell activation
<b>Ligand/Receptor</b>	Peptide bound to MHC
<b>Cell Type</b>	T cells
<b>Biology Area</b>	Adaptive Immunity, Immunology
<b>Molecular Family</b>	TCRs
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Scotet E, <i>et al.</i> 2005. <i>Immunity</i> 22:71</li><li>2. Rincon-Orozco B, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:2144</li></ol>
<b>Gene ID</b>	<a href="#">6965</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

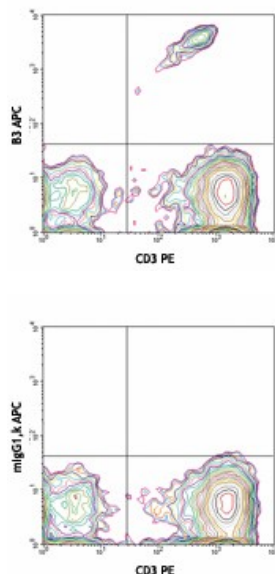
## Other Formats

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Purified anti-human TCR V $\gamma$ 9, FITC anti-human TCR V $\gamma$ 9, PE anti-human TCR V $\gamma$ 9, APC anti-human TCR V $\gamma$ 9, TotalSeq™-A0583 anti-human TCR V $\gamma$ 9, PE/Cyanine5 anti-human TCR V $\gamma$ 9, Alexa Fluor® 700 anti-human TCR V $\gamma$ 9, APC/Fire™ 750 anti-human TCR V $\gamma$ 9, TotalSeq™-C0583 anti-human TCR V $\gamma$ 9, PE/Cyanine7 anti-human TCR V $\gamma$ 9, TotalSeq™-B0583 anti-human TCR V $\gamma$ 9, PerCP/Cyanine5.5 anti-human TCR V $\gamma$ 9, APC/Cyanine7 anti-human TCR V $\gamma$ 9

## Product Data

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Human peripheral blood lymphocytes stained with B3 APC and CD3 PE (top) or mouse Ig1,k isotype control APC and CD3 PE (bottom).

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