

## Alexa Fluor<sup>®</sup> 647 anti-human TCL1 Antibody

<b>Catalog# / Size</b>	330508 / 100 tests
<b>Clone</b>	1-21
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	T-cell leukemia/lymphoma protein 1A, Protein p14 TCL1, Oncogene TCL1, TCL-1
<b>Isotype</b>	Mouse IgG2b, $\kappa$
<b>Description</b>	<p>TCL1, also known as T-cell leukemia/lymphoma protein 1A, protein p14 TCL1 and oncogene TCL-1, is a 14kD beta-barrel protein that was originally identified on the basis of its association with T-cell prolymphocytic leukemia (T-PLL). Activated by the T-cell receptor enhancer through inv(14)(q11;q32.1) or t(14;14)(q11;q32.1), TCL1 is normally expressed in immature cortical thymocytes, activated peripheral T-cells, pro-B cells, and naive mantle zone B cells of peripheral lymphoid tissues, but not in post-germinal center (GC) memory B cells and plasma cells. Akt and TCL1 interact via Akt's pleckstrin homology domain to form hetero-oligomers at the leaflet of the inner plasma membrane stimulating the protein kinase C-mitogen activated protein kinase-extracellular signal-related kinase (PKC-MAPK-ERK) signal transduction pathway. TCL1 also inhibits activation-induced cell death in T-cells by blocking PKC<math>\theta</math>. In addition to T-PLL dysregulation is implicated in such B-cell neoplasias as lymphoblastic lymphoma, chronic lymphocytic leukemia (CLL) and Burkitt lymphoma.</p>

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	outer $\alpha$ -loop region of TCL1 peptide
<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 Alexa Fluor <sup>®</sup> 647 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="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	<p>Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a>. For flow cytometric staining, the suggested use of this reagent is 5 <math>\mu</math>l per million cells in 100 <math>\mu</math>l staining volume or 5 <math>\mu</math>l per 100 <math>\mu</math>l of whole blood.</p> <p>* Alexa Fluor<sup>®</sup> 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.</p> <p>Alexa Fluor<sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	Additional reported applications include: immunoprecipitation, western blot, immunohistochemical staining of frozen or formalin-fixed, paraffin embedded tissue sections.
<b>Application References</b>	<ol style="list-style-type: none"><li>Herling M, <i>et al.</i> 2008. <i>Blood</i> 111:328</li><li>Herling M, <i>et al.</i> 2007. <i>Am. J. Surg. Pathol.</i> 31:1123</li></ol>

### Product Citations

1. Bunse M, et al. 2021. Nat Commun. 0.666666667. [PubMed](#)

RRID AB\_2204405 (BioLegend Cat. No. 330508)

## Antigen Details

<b>Structure</b>	Beta barrel protein, 14kD
<b>Distribution</b>	Cytoplasm
<b>Function</b>	Enhances Akt mediated cell survival, stabilizes mitochondrial membrane potential
<b>Interaction</b>	Akt1, Akt2, Akt3, caco2
<b>Biology Area</b>	Cell Biology, Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Narducci MG et al. 2000. <i>Cancer Research</i> 60:2095.</li><li>2. Teitell MA et al. 2005 <i>Nat. Rev. Cancer</i> 5:640</li><li>3. Laine J et al. 2000. <i>Molecular Cell</i> 6:395</li><li>4. Virgilio L et al. 1994. <i>Proc. Natl. Acad. Sci.</i> 91:12530</li><li>5. Masayuk N et al. 2007 <i>FASEB J.</i> 21:2273</li><li>6. Despouy G et al. 2007 <i>Blood</i> 110:4406</li><li>7. Rhine S et al. 2006 <i>Blood</i> 108:1991</li></ol>
<b>Gene ID</b>	<a href="#">8115</a>

## Related Protocols

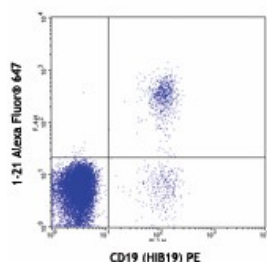
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

## Other Formats

Alexa Fluor® 647 anti-human TCL1, PE anti-human TCL1

## Product Data



Human peripheral blood lymphocytes stained with anti-CD19 (HIB19) PE then intracellularly stained with 1-21 Alexa Fluor® 647

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