

Alexa Fluor® 647 anti-human TCL1 Antibody

Catalog# / Size	330508 / 100 tests
Clone	1-21
Regulatory Status	RUO
Other Names	T-cell leukemia/lymphoma protein 1A, Protein p14 TCL1, Oncogene TCL1, TCL-1
Isotype	Mouse IgG2b, κ
Description	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 PKCθ. In addition to T-PLL dysregulation is implicated in such B-cell neoplasias as lymphoblastic lymphoma, chronic lymphocytic leukemia (CLL) and Burkitt lymphoma.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	outer α-loop region of TCL1 peptide
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications include: immunoprecipitation, western blot, immunohistochemical staining of frozen or formalin-fixed, paraffin embedded tissue sections.
Application References	1. Herling M, <i>et al.</i> 2008. <i>Blood</i> 111:328 2. Herling M, <i>et al.</i> 2007. <i>Am. J. Surg. Pathol.</i> 31:1123
(PubMed link indicates BioLegend citation)	

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

RRID AB_2204405 (BioLegend Cat. No. 330508)

Antigen Details

Structure	Beta barrel protein, 14kD
Distribution	Cytoplasm
Function	Enhances Akt mediated cell survival, stabilizes mitochondrial membrane potential
Interaction	Akt1, Akt2, Akt3, caco2
Biology Area	Cell Biology, Immunology
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none">1. Narducci MG <i>et al.</i> 2000. <i>Cancer Research</i> 60:2095.2. Teitell MA <i>et al.</i> 2005 <i>Nat. Rev. Cancer</i> 5:6403. Laine J <i>et al.</i> 2000. <i>Molecular Cell</i> 6:3954. Virgilio L <i>et al.</i> 1994. <i>Proc. Natl. Acad. Sci.</i> 91:125305. Masayuk N <i>et al.</i> 2007 <i>FASEB J.</i> 21:22736. Despouy G <i>et al.</i> 2007 <i>Blood</i> 110:44067. Rhine S <i>et al.</i> 2006 <i>Blood</i> 108:1991
Gene ID	8115

Related Protocols

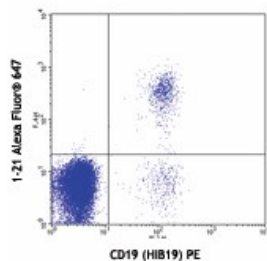
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[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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