

## Alexa Fluor® 647 anti-human TCL1

**Catalog # / Size:** 330507 / 25 tests  
330508 / 100 tests

**Clone:** 1-21

**Isotype:** Mouse IgG2b,  $\kappa$

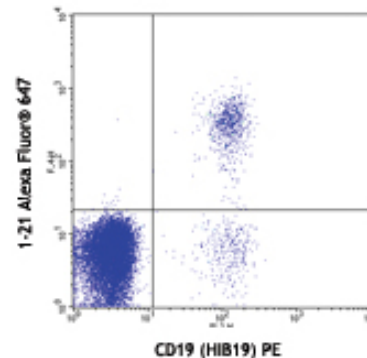
**Immunogen:** outer  $\alpha$ -loop region of TCL1 peptide

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



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

## Applications:

**Applications:** ICFC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is 5  $\mu$ l per million cells 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.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

\*\* Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**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, *et al.* 2008. *Blood*. 111:328  
2. Herling, M., *et al.* 2007. *Am. J. Surg. Pathol.* 31: 1123

**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 PKC $\theta$ . In addition to T-PLL dysregulation is implicated in such B-cell neoplasias as lymphoblastic lymphoma, chronic lymphocytic leukemia (CLL) and Burkitt lymphoma.

**Antigen References:** 1. Narducci, MG, *et al.* 2000. *Cancer Research* 60:2095.  
2. Teitell, MA, *et al.* 2005 *Nat. Rev. Cancer* 5:640  
3. Laine J, *et al.* 2000. *Molecular Cell* 6:395  
4. Virgilio, L, *et al.* 1994. *Proc. Natl. Acad. Sci.* 91:12530  
5. Masayuk, N, *et al.* 2007 *FASEB J.* 21:2273  
6. Despouy, G, *et al.* 2007 *Blood*. 110:4406  
7. Rhine, S, *et al.* 2006 *Blood*. 108:1991

Related Products:	Product	Clone	Application
	Alexa Fluor® 647 Mouse IgG2b, $\kappa$ Isotype Ctrl	MPC-11	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	Permeabilization Wash Buffer (10X)		ICC, ICFC, IHC



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.