

## Product datasheet for **TA320471**

### **Tcl1 (TCL1A) Mouse Monoclonal Antibody [Clone ID: eBio1-21 (1-21)]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	eBio1-21 (1-21)
Applications:	FC
Recommended Dilution:	Flow, IHC, IP, WB
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Formulation:	Aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Concentration:	lot specific
Purification:	Affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	T-cell leukemia/lymphoma 1A
Database Link:	<a href="#">NP_068801</a> <a href="#">Entrez Gene 8115 Human</a> <a href="#">P56279</a>



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**Background:**

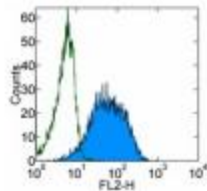
The eBio1-21 antibody reacts with human T cell leukemia/lymphoma 1 (TCL1), a 14 kDa proto-oncogene product with a suggested role in intracellular regulation of T cell signalling. TCL1 was identified as the oncogene located at the 14q32.1 chromosome breakpoint region in T-cell prolymphocytic leukemia (T-PLL). In T-PLL, TCL1 is overexpressed as a result of an inversion or a reciprocal translocation, by juxtaposition to the T-cell receptor promoter/enhancer elements. TCL1 binds to the pleckstrin homology domain of Akt (protein kinase B) family proteins, which facilitates Akt dimerization and activity. By increasing Akt activity TCL1 may enhance the serine/threonine phosphorylation of major Akt signaling substrates, such as I $\kappa$ B complex, mTOR, BAD, p70S6 kinase, FOXO transcription factors, and GSK3 $\beta$ . These substrates regulate cellular differentiation, growth, survival, and metabolism. Besides its tumorigenic role in T-PLL, TCL1 is normally expressed in the CD3-CD4-CD8- subset of thymic precursors in the T cell lineage, the plasmacytoid subset of dendritic cells, stimulated (not resting) mature T cells, and B cells up to the germinal center stage of maturation. TCL1 is inappropriately expressed by chromosome rearrangements that lead to pre-malignant clonal T cell expansions and mature T cell tumors. TCL1 shows a regulated expression pattern in chronic lymphocytic leukemia (CLL).

**Synonyms:**

TCL1

**Protein Families:**

Druggable Genome

**Product images:**

Staining of Daudi cells with 0.25  $\mu$ g of Mouse IgG2b kappa Isotype Control Purified (open histogram) or 0.25  $\mu$ g of Anti-Human TCL1 Purified (filled histogram) followed by Anti-Mouse IgG Biotin and Streptavidin PE. Total viable cells were used for analysis.