

## Product datasheet

### Anti-Tcl1 antibody [EPR3949] ab108978

Recombinant **RabMAb**

★★★★★ **3 Abreviews** **1 References** **13 Images**

#### Overview

<b>Product name</b>	Anti-Tcl1 antibody [EPR3949]
<b>Description</b>	Rabbit monoclonal [EPR3949] to Tcl1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Daudi and ramos cell lysates Human tonsil tissue Ramos whole cell lysates Jurkat (human acute T cell leukemia)
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number	EPR3949
Isotype	IgG

## Applications

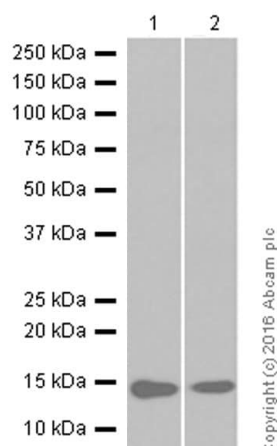
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab108978 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/400. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. Unpurified format: 1/100 - 1/1000.
WB		1/1000 - 1/10000. Predicted molecular weight: 13 kDa.
IHC-P	★★★★★ (2)	1/100 - 1/700. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Perform antigen retrieval
ICC/IF		1/100 - 1/250.

## Target

<b>Function</b>	Enhances the phosphorylation and activation of AKT1, AKT2 and AKT3. Promotes nuclear translocation of AKT1. Enhances cell proliferation, stabilizes mitochondrial membrane potential and promotes cell survival.
<b>Tissue specificity</b>	Restricted in the T-cell lineage to immature thymocytes and activated peripheral lymphocytes. Preferentially expressed early in T- and B-lymphocyte differentiation.
<b>Involvement in disease</b>	Note=Chromosomal aberrations activating TCL1A are found in chronic T-cell leukemias (T-CLL). Translocation t(14;14)(q11;q32); translocation t(7;14)(q35;q32); inversion inv(14)(q11;q32) that involves the T-cell receptor alpha/delta loci.
<b>Sequence similarities</b>	Belongs to the TCL1 family.
<b>Cellular localization</b>	Cytoplasm. Nucleus. Microsome. Endoplasmic reticulum. Microsomal fraction.

## Images



Western blot - Anti-Tcl1 antibody [EPR3949]  
(ab108978)

**All lanes :** Anti-Tcl1 antibody [EPR3949] (ab108978) at 1/1000 dilution

**Lane 1 :** Ramos (human Burkitt's lymphoma) whole cell lysate

**Lane 2 :** Daudi (human Burkitt's lymphoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

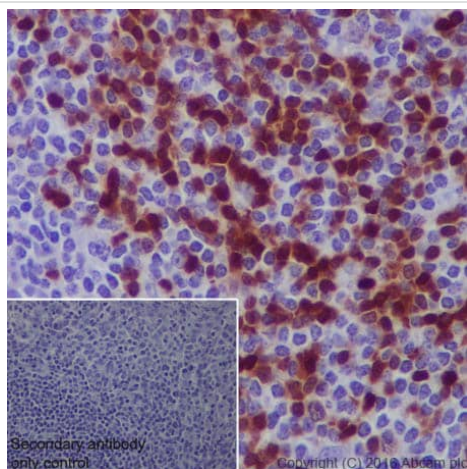
**All lanes :** Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

**Predicted band size:** 13 kDa

**Additional bands at:** 13 kDa. We are unsure as to the identity of these extra bands.

**Blocking buffer:** 5% NFDM/TBST

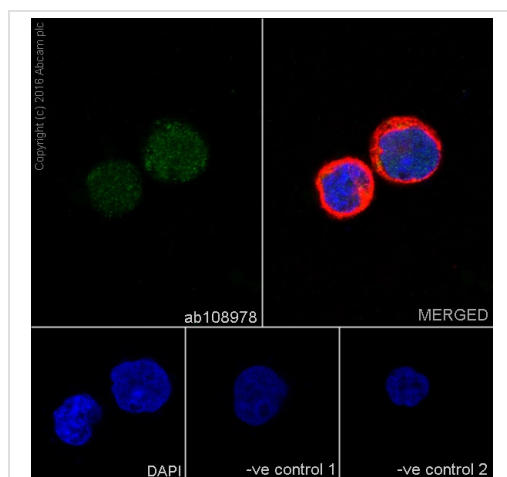
**Diluting buffer:** 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tcl1 antibody [EPR3949]  
(ab108978)

ab108978 staining Tcl1 in human tonsil tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/700. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at 1/500.

**Negative control 1:** PBS in place of primary antibody.



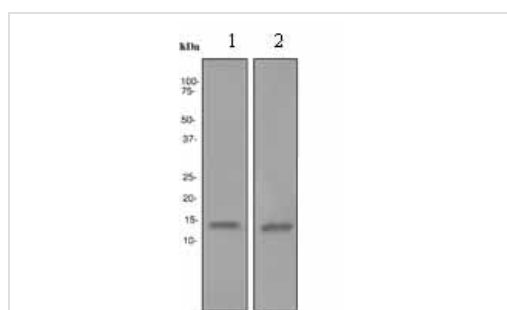
Immunocytochemistry/ Immunofluorescence - Anti-Tc1 antibody [EPR3949] (ab108978)

ab108978 staining Tc1 in Jurkat (human acute T cell leukemia) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/200. A goat anti rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) was used as the secondary antibody at 1/1000.

[ab7291](#) and [ab150120](#) were used as counterstains for primary antibody ab108978 and secondary antibody [ab150077](#) respectively and DAPI was used as a nuclear counterstain.

**Negative control 1:** Rabbit primary antibody and anti-mouse secondary antibody ([ab150120](#))

**Negative control 2:** Mouse primary antibody ([ab7291](#)) and anti-rabbit secondary antibody ([ab150077](#))



Western blot - Anti-Tc1 antibody [EPR3949] (ab108978)

**All lanes :** Anti-Tc1 antibody [EPR3949] (ab108978) at 1/1000 dilution

**Lane 1 :** Daudi cell lysate

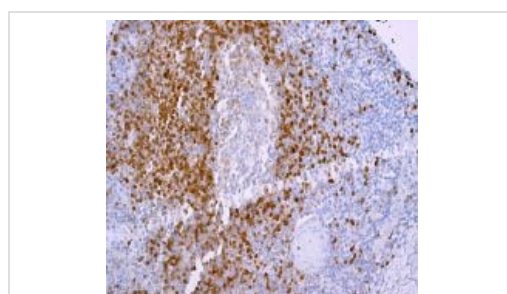
**Lane 2 :** Ramos cell lysates

Lysates/proteins at 10 µg per lane.

## Secondary

**All lanes :** Standard HRP labelled goat anti-goat. at 1/2000 dilution

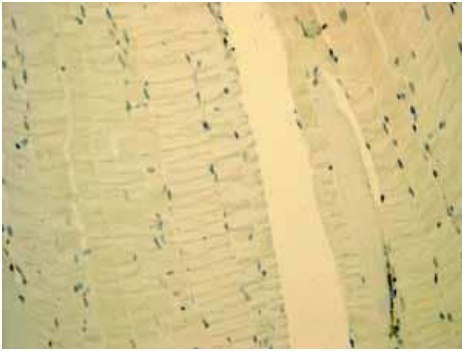
**Predicted band size:** 13 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tc1 antibody [EPR3949] (ab108978)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue using ab108978.

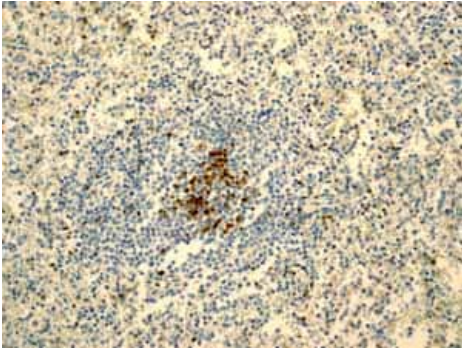
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tcl1 antibody [EPR3949] (ab108978)

ab108978 showing negative staining in Skeletal muscle tissue.

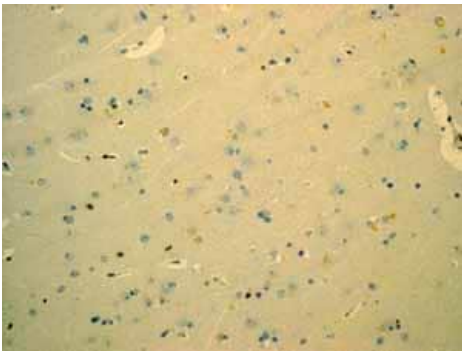
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tcl1 antibody [EPR3949] (ab108978)

ab108978 showing positive staining in Normal spleen tissue.

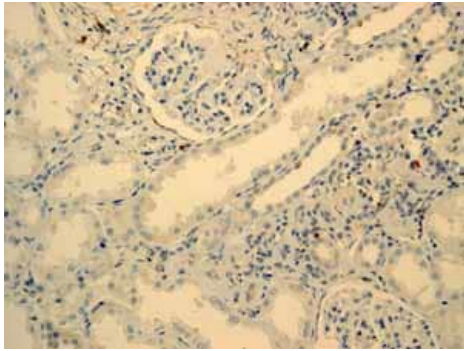
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tcl1 antibody [EPR3949] (ab108978)

ab108978 showing negative staining in Normal brain tissue.

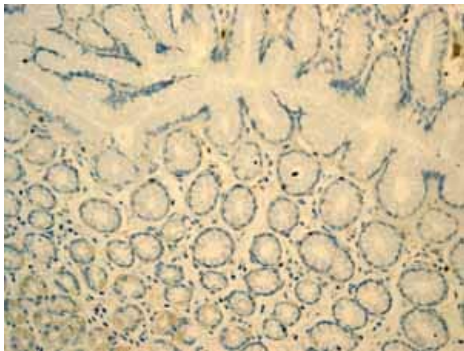
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tcl1 antibody [EPR3949] (ab108978)

ab108978 showing negative staining in Normal kidney tissue.

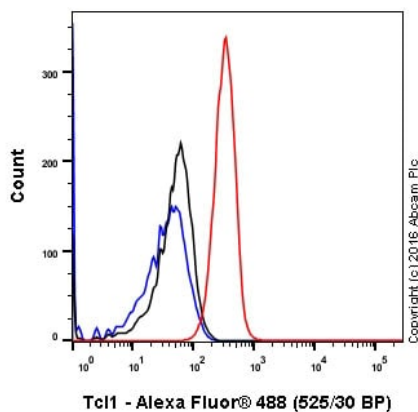
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tcl1 antibody [EPR3949] (ab108978)

ab108978 showing negative staining in Normal stomach tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



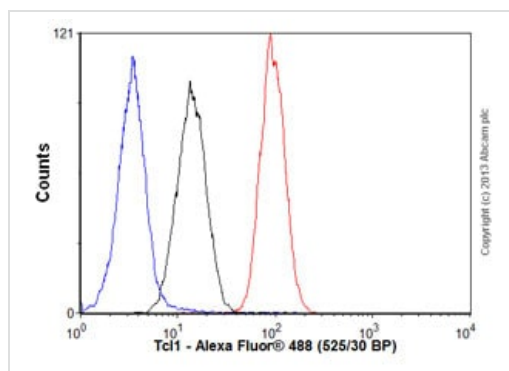
Flow Cytometry (Intracellular) - Anti-Tcl1 antibody [EPR3949] (ab108978)

ab108978 staining Tcl1 in the human cell line Ramos (human Burkitt's lymphoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/400. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)





Flow Cytometry (Intracellular) - Anti-Tcl1 antibody  
[EPR3949] (ab108978)

Overlay histogram showing Ramos cells stained with ab108978 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab108978, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in Ramos cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Tcl1 antibody [EPR3949] (ab108978)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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