

Anti-Tcl1 Antibody [PD00-94]

HA721207



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, IF-Cell, FC, IF-Tissue
Molecular Wt:	Predicted band size: 13 kDa
Clone number:	PD00-94

Description: T-cell leukemia/lymphoma protein 1A (TCL1) is a member of the TCL1 family and enhances the phosphorylation and activation of AKT1, AKT2 and AKT3. TCL1 promotes the nuclear translocation of AKT1 and enhances cell proliferation, stabilizes mitochondrial membrane potential and promotes cell survival. The expression of TCL1 is restricted to lymphoid cells. It is expressed early in lymphocyte differentiation. Strong expression of TCL1 is found in a subset of mantle zone B lymphocytes and is expressed to a lesser extent by follicle center cells. In B-cell neoplasia, TCL1 immunoreactivity is found in the majority of B-cell lymphomas including lymphoblastic lymphoma, chronic lymphocytic leukemia, mantle cell lymphoma, follicular lymphoma, Burkitt lymphoma, diffuse large B-cell lymphoma (60%), and primary cutaneous B-cell lymphoma (55%). The expression of the TCL1 gene characterizes low-grade B-cell lymphomas.

Immunogen: Recombinant protein within human Tcl1 aa 1-114.

Positive control: Daudi cell lysate, Raji cell lysate, human tonsil tissue, human appendix tissue, PC-3, Daudi.

Subcellular location: Cytoplasm, Nucleus, Microsome, Endoplasmic reticulum.

Database links: SwissProt: P56279 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:10,000-1:30,000
IF-Cell	1:50
FC	1:500-1:1,000
IF-Tissue	1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

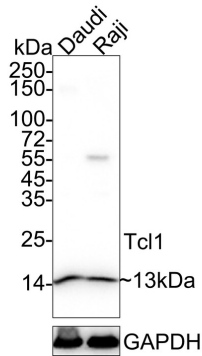
Service mail:support@huabio.cn

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Fig1: Western blot analysis of Tcl1 on different lysates with Rabbit anti-Tcl1 antibody (HA721207) at 1/1,000 dilution.

Lane 1: Daudi cell lysate

Lane 2: Raji cell lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 13 kDa

Observed band size: 13 kDa

Exposure time: 10 seconds;

4-20% SDS-PAGE gel.

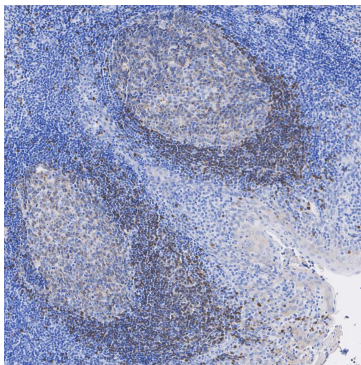
Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721207) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Application: Immunohistochemistry (IHC-P)

Species: Human

Tissue: Tonsil

Sample: Paraffin-embedded section



Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0) (high pressure), 2 minutes.

Wash buffer: 1× TBST

Endogenous peroxidase blocking: 3% H₂O₂, 10 minutes at room temperature.

Blocking: 1% BSA + 10% normal goat serum, 10 minutes at room temperature.

Primary antibody: HA721207, 1/30,000, 1 hour at room temperature.

Secondary antibody: HA1119, 20 minutes at room temperature.

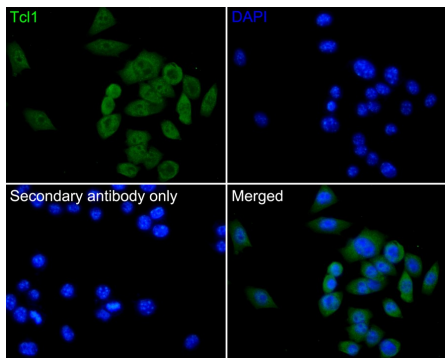


Fig3: Immunocytochemistry analysis of PC-3 cells labeling Tc1 with Rabbit anti-Tc1 antibody (HA721207) at 1/50 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes at 37 °C, permeabilized with 0.05% Triton X-100 in PBS for 20 minutes, and then blocked with 2% negative goat serum for 30 minutes at room temperature. Cells were then incubated with Rabbit anti-Tc1 antibody (HA721207) at 1/50 dilution in 2% negative goat serum overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

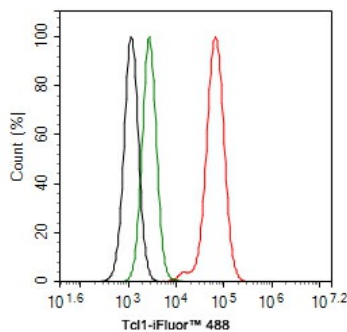


Fig4: Flow cytometric analysis of Daudi cells labeling Tc1.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA721207, 1ug/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4 °C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4 °C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

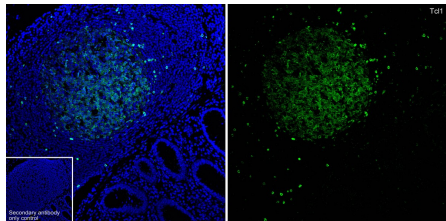


Fig5: Application: IF-Tissue

Species: Human

Site: appendix

Sample: Paraffin-embedded section

Antibody concentration: 1/1,000

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Sun S et al. Current understandings on T-cell prolymphocytic leukemia and its association with TCL1 proto-oncogene. *Biomed Pharmacother.* 2020 Jun
2. Lewis R et al. CXCR4 hyperactivation cooperates with TCL1 in CLL development and aggressiveness. *Leukemia.* 2021 Oct

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