

**Product Name: TCF-3 Rabbit Polyclonal Antibody****Catalog #: APRab18734**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
<b>Molecular Weight</b>	68kDa

**Antigen Information**

<b>Gene Name</b>	TCF3
<b>Alternative Names</b>	TCF3; BHLHB21; E2A; ITF1; Transcription factor E2-alpha; Class B basic helix-loop-helix protein 21; bHLHb21; Immunoglobulin enhancer-binding factor E12/E47; Immunoglobulin transcription factor 1; Kappa-E2-binding factor; Transcription facto
<b>Gene ID</b>	6929.0
<b>SwissProt ID</b>	P15923
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human TCF3. AA range:571-620

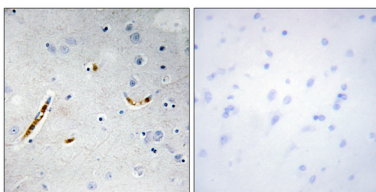
## Background

This gene encodes a member of the E protein (class I) family of helix-loop-helix transcription factors. E proteins activate transcription by binding to regulatory E-box sequences on target genes as heterodimers or homodimers, and are inhibited by heterodimerization with inhibitor of DNA-binding (class IV) helix-loop-helix proteins. E proteins play a critical role in lymphopoiesis, and the encoded protein is required for B and T lymphocyte development. Deletion of this gene or diminished activity of the encoded protein may play a role in lymphoid malignancies. This gene is also involved in several chromosomal translocations that are associated with lymphoid malignancies including pre-B-cell acute lymphoblastic leukemia (t(1;19), with PBX1), childhood leukemia (t(19;19), with TFPT) and acute leukemia (t(12;19), with ZNF384). Alternatively spliced transcript variants encoding multiple isoforms have been described. Chromosomal aberrations involving TCF3 are cause of forms of pre-B-cell acute lymphoblastic leukemia (B-ALL). Translocation t(1;19)(q23;p13.3) with PBX1; Translocation t(17;19)(q22;p13.3) with HLF. Inversion inv(19)(p13;q13) with TFPT. function: Heterodimers between TCF3 and tissue-specific basic helix-loop-helix (bHLH) proteins play major roles in determining tissue-specific cell fate during embryogenesis, like muscle or early B-cell differentiation. Dimers bind DNA on E-box motifs: 5'-CANNTG-3'. Binds to the kappa-E2 site in the kappa immunoglobulin gene enhancer. PTM: Phosphorylated following NGF stimulation. similarity: Contains 1 basic helix-loop-helix (bHLH) domain. subunit: Efficient DNA binding requires dimerization with another bHLH protein. Forms a heterodimer with ASH1 and TWIST2. Isoform E12 interacts with GRIPE and FIGLA (By similarity). Interacts with PTF1A and TGFB1I1. Component of a nuclear TAL-1 complex composed at least of CBFA2T3, LDB1, TAL1 and TCF3 (By similarity). Interacts with UBE2L.

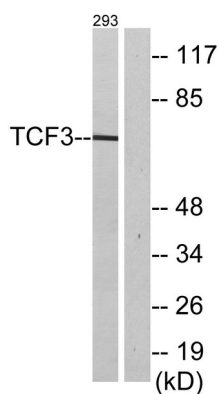
## Research Area

Stem cell pathway; WNT; WNT-T CELL;  $\beta$ -Catenin; Protein\_Acetylation

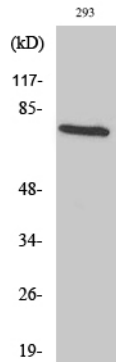
## Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using TCF3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using TCF3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using TCF-3 Polyclonal Antibody