

# Summary

Production Name	TCF-3 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,WB,ELISA
Reactivity	Human, Mouse, Rat

## Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

### Immunogen

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

# Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000
Molecular Weight	68kD



## 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 beedisease: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 UBE2I.,

#### **Research Area**

Stem cell pathway; WNT;WNT-T CELL;β-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.

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





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





#### Note

For research use only.