

TCF-3 Polyclonal Antibody

Catalog No: YT4579

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: TCF-3

Fields: >>Signaling pathways regulating pluripotency of stem cells;>>Human T-cell

leukemia virus 1 infection;>>Transcriptional misregulation in cancer

Gene Name: TCF3

Protein Name: Transcription factor E2-alpha

P15923

P15806

Human Gene Id: 6929

Human Swiss Prot

No:

Mouse Gene Id: 21423

Mouse Swiss Prot

No:

Rat Gene Id: 171046

Rat Swiss Prot No: P21677

Immunogen: The antiserum was produced against synthesized peptide derived from human

TCF3. AA range:571-620

Specificity: TCF-3 Polyclonal Antibody detects endogenous levels of TCF-3 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 68kD

Cell Pathway : Stem cell pathway; WNT; WNT-T CELL; β-Catenin; Protein_Acetylation

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 bee

Function: disease: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)

Stimulation., similarity: Contains I basic nellx-loop-nellx (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.

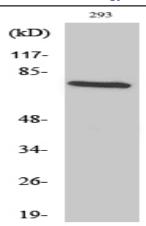
Subcellular Location:

Nucleus.

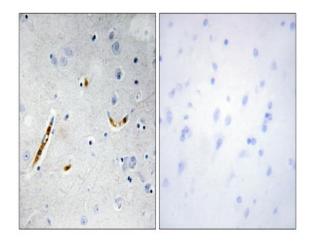
Expression:

Lymphoma, Muscle, PCR rescued clones,

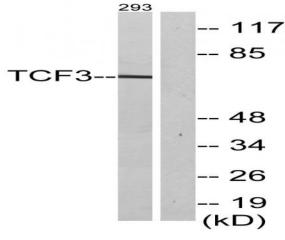
Products Images



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



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.