

E2A Polyclonal Antibody

Catalog No: YT1441

Reactivity: Human; Mouse; Rat

Applications: IHC;IF;ELISA

Target: E2A

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

E2A. AA range:321-370

Specificity: E2A Polyclonal Antibody detects endogenous levels of E2A protein.

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

Source: Polyclonal, Rabbit, IgG

Dilution : IHC 1:100 - 1:300. ELISA: 1:5000.. 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)

Molecularweight: 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

TFPT) and acute leukemia (t(12;19), with ZNF384). Alternatively spliced

that are associated with lymphoid malignancies including pre-B-cell acute lymphoblastic leukemia (t(1;19), with PBX1), childhood leukemia (t(19;19), with

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)

domain., subunit: Efficient DNA binding requires dimerization with another bHLH protein. Forms a heterodimer with ASH1 and TWIST2. Isoform E12 interacts with

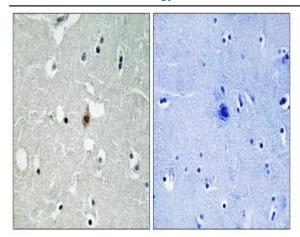
GRIPE and FIGLA (By similarity). Interacts with PTF1A and TGFB1I1.

Subcellular Location:

Nucleus.

Expression: Lymphoma, Muscle, PCR rescued clones,

Products Images



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using E2A Antibody. The picture on the right is blocked with the synthesized peptide.