

## **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

1/3



**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

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)

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

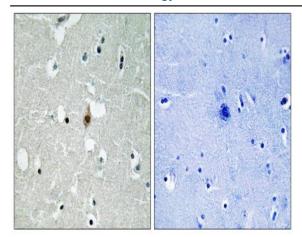
GRIPE and FIGLA (By similarity). Interacts with PTF1A and TGFB1I1.

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.