



E2A Monoclonal Antibody

Catalog No	YP-Ab-00965
Isotype	IgG
Reactivity	Human
Applications	WB;FCM;ELISA
Gene Name	TCF3
Protein Name	Transcription factor E2-alpha
Immunogen	Purified recombinant fragment of human E2A expressed in E. Coli.
Specificity	E2A Monoclonal Antibody detects endogenous levels of E2A protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	
Cell Pathway	Nucleus .
Tissue Specificity	Lymphoma,Muscle,PCR rescued clones,
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 TGFB11.



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

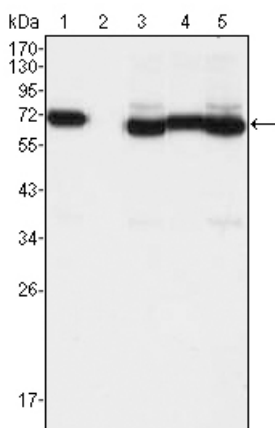
matters needing attention

Avoid repeated freezing and thawing!

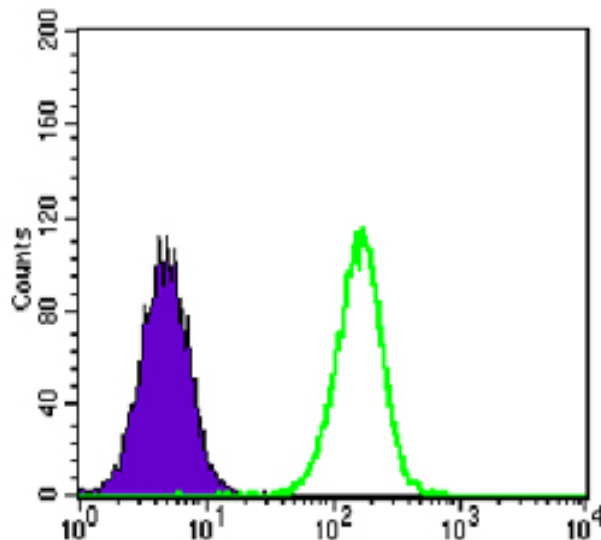
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using E2A Monoclonal Antibody against A549 (1), A431 (2), HeLa (3), PANC-1 (4) and PC-3 (5) cell lysate.



Flow cytometric analysis of A549 cells using E2A Monoclonal Antibody (green) and negative control (purple).