Immunoway
Best Tools for immunology Research

E2A Monoclonal Antibody

Catalog No :	YM0204
Reactivity :	Human
Applications :	WB;FCM;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
Human Gene Id :	6929
Human Swiss Prot No :	P15923
Mouse Swiss Prot No :	P15806
Immunogen :	Purified recombinant fragment of human E2A expressed in E. Coli.
Specificity :	E2A Monoclonal Antibody detects endogenous levels of E2A protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
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

P References :

1.J Biol Chem. 2000 Oct 27;275(43):33567-73.
2.Mol Cell Biol. 2001 Mar;21(5):1866-73.
3.J Biol Chem. 2003 Jan 24;278(4):2370-6. Epub 2002 Nov 14.

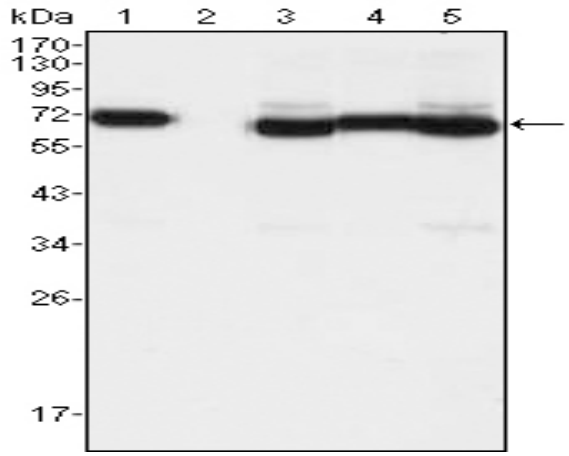
Background : This gene encodes a member of the E protein (class I) family of helix-loop-helix transcription factors. E proteins activate transcription by binding to regulatory E-box sequences on target genes as heterodimers or homodimers, and are inhibited by heterodimerization with inhibitor of DNA-binding (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.

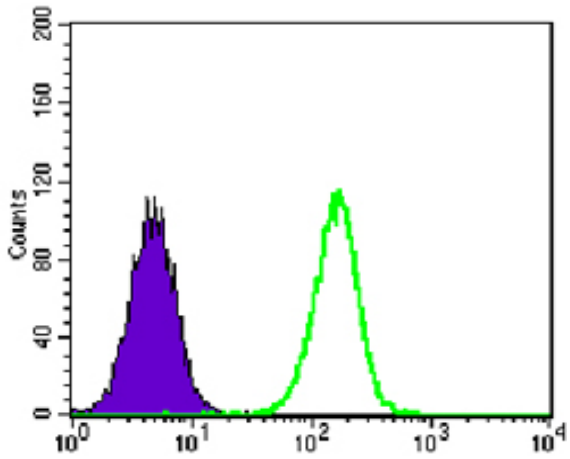
Subcellular Location : Nucleus .

Expression : Lymphoma,Muscle,PCR rescued clones,

Products Images



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).