

### Summary

Production Name	E2F-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB
Reactivity	Human,Mouse,Rat

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at $4^{\circ}$ C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

#### Immunogen

Gene Name	E2F1 RBBP3
Alternative Names	E2F1 RBBP3
Gene ID	1869.0
SwissProt ID	Q01094.Synthetic peptide from human protein at AA range: 100-170

## Application

Dilution Ratio	IF 1:50-200 WB 1:500-2000, ELISA 1:10000-20000 IHC 1:100 - 1:300.
Molecular Weight	60kD

### Background

The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family plays a crucial role

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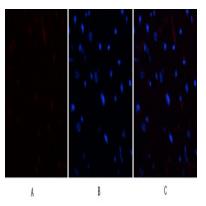


in the control of cell cycle and action of tumor suppressor proteins and is also a target of the transforming proteins of small DNA tumor viruses. The E2F proteins contain several evolutionally conserved domains found in most members of the family. These domains include a DNA binding domain, a dimerization domain which determines interaction with the differentiation regulated transcription factor proteins (DP), a transactivation domain enriched in acidic amino acids, and a tumor suppressor protein association domain which is embedded within the transactivation domain. This protein and another 2 members, E2F2 and E2F3, have an additional cyclin binding domain. This protein binds preferentially to retinoblastoma protein pRB in a cell-cycle dependent manner. It can mediafunction:Transcription activator that binds DNA cooperatively with dp proteins through the E2 recognition site, 5'-TTTC[CG]CGC-3' found in the promoter region of a number of genes whose products are involved in cell cycle regulation or in DNA replication. The DRTF1/E2F complex functions in the control of cell-cycle progression from G1 to S phase. E2F-1 binds preferentially RB1 protein, in a cell-cycle dependent manner. It can mediate both cell proliferation and p53-dependent apoptosis., PTM: Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase., similarity: Belongs to the E2F/DP family., subunit: Component of the DRTF1/E2F transcription factor complex. Forms heterodimers with DP family members. The E2F-1 complex binds specifically hypophosphorylated retinoblastoma protein RB1. During the cell cycle, RB1 becomes phosphorylated in mid-to-late G1 phase, detaches from the DRTF1/E2F complex, rendering E2F transcriptionally active. Viral oncoproteins, notably E1A, T-antigen and HPV E7, are capable of sequestering RB protein, thus releasing the active complex. Interacts with TRRAP, which probably mediates its interaction with histone acetyltransferase complexes, leading to transcription activation. Binds TOPBP1 and EAPP. Interacts with ARID3A.,

### **Research Area**

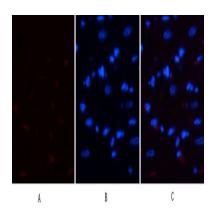
Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA;Pathways in cancer;Pancreatic cancer;Glioma;Prostate cancer;Melanoma;Bladder cancer;Chronic myeloid leukemia;Small cell lung cancer;Non-small cell lung cancer;

# Image Data

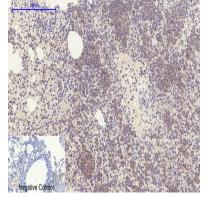


Immunofluorescence analysis of rat-heart tissue. 1,E2F-1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight).
2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min.
Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

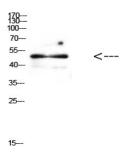




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Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,E2F-1 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.



Western Blot analysis of MOUSE-BRAIN cells using Antibody diluted at 500. Secondary antibody was diluted at 1:20000

#### Note

For research use only.