



## Rabbit Anti-E2F1 antibody

SL0599R

<b>Product Name:</b>	E2F1
<b>Chinese Name:</b>	转录因子E2F-1抗体
<b>Alias:</b>	E2F 1; E2F transcription factor 1; E2F-1; E2f1 E2F transcription factor 1; KIAA4009; mKIAA4009; OTTHUMP00000030661; PBR 3; PBR3; PRB binding protein E2F 1; PRB-binding protein E2F-1; RBAP 1; RBAP-1; RBAP1; RBBP 3; RBBP-3; RBBP3; RBP 3; RBP3; Retinoblastoma associated protein 1; Retinoblastoma binding protein 3; Retinoblastoma-associated protein 1; Retinoblastoma-binding protein 3; Transcription factor E2F1; E2F1 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	46kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human E2F1:101-180/437
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	The protein encoded by this gene is a member of the E2F family of transcription factors. The E2F family plays a crucial role 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 mediate both cell proliferation and p53-dependent/independent apoptosis. [provided by RefSeq, Jul 2008]

**Function:**

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.

**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. Interacts with TRRAP, which probably mediates its interaction with histone acetyltransferase complexes, leading to transcription activation. Binds TOPBP1. Interacts with ARID3A. Binds EAPP.

**Subcellular Location:**

Nucleus.

**Post-translational modifications:**

Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase. Acetylation stimulates DNA-binding. Enhanced under stress conditions such as DNA damage and inhibited by retinoblastoma protein pRB. Regulated by KAP1/TRIM28 which recruits HDAC1 to E2F1 resulting in deacetylation. Acetylated by P/CAF/KAT2B.

**Similarity:**

Belongs to the E2F/DP family.

**SWISS:**

Q01094

**Gene ID:**

1869

**Database links:**

[Entrez Gene: 1869](#)Human

[Entrez Gene: 13555](#)Mouse

[Entrez Gene: 399489](#)Rat

[Oimim: 189971](#)Human

[SwissProt: Q01094](#)Human

[SwissProt: Q61501](#)Mouse

[SwissProt: O09139](#)Rat

[Unigene: 654393](#)Human

[Unigene: 18036](#)Mouse

[Unigene: 72471](#)Rat

**Important Note:**

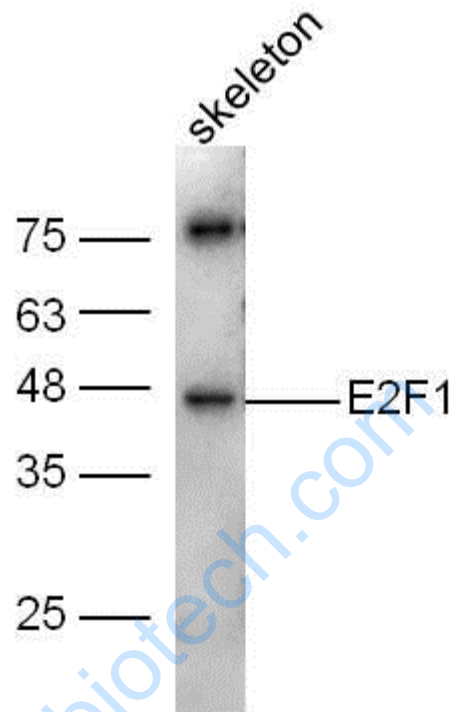
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transcriptional regulatory factor (Transcription Regulators)

E2F1—属于调节性转录因子E2F家族。有学者认为：E2F-

1既可作为癌基因起作用，又可作为抑癌基因起作用。其不同可能由细胞中其他生长促进或抑制性蛋白质水平和(或)活性决定，同时与细胞所处环境及器官特异性有关。在控制细胞周期和Tumour抑制基因蛋白的活性方面起关键作用。

Picture:



Sample:

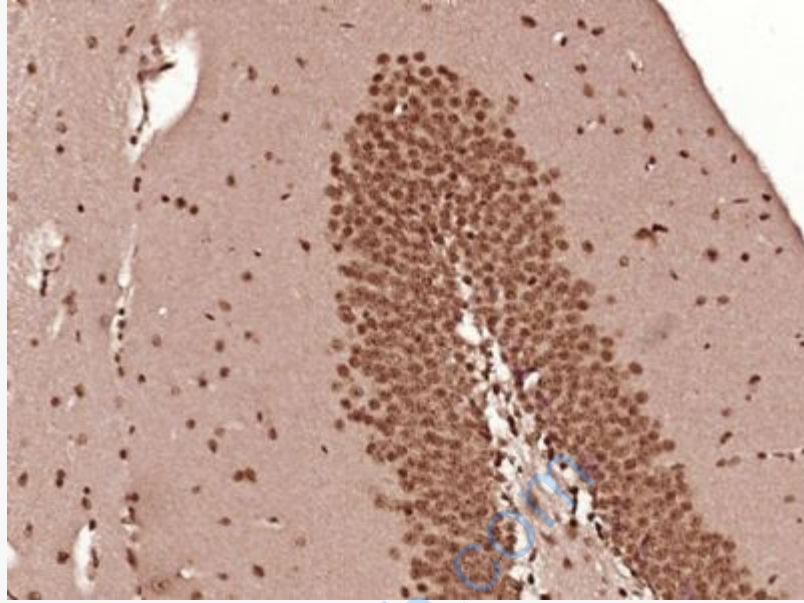
Skeleton (Mouse) Lysate at 40 ug

Primary: Anti-E2F1 (SL0599R) at 1/300 dilution

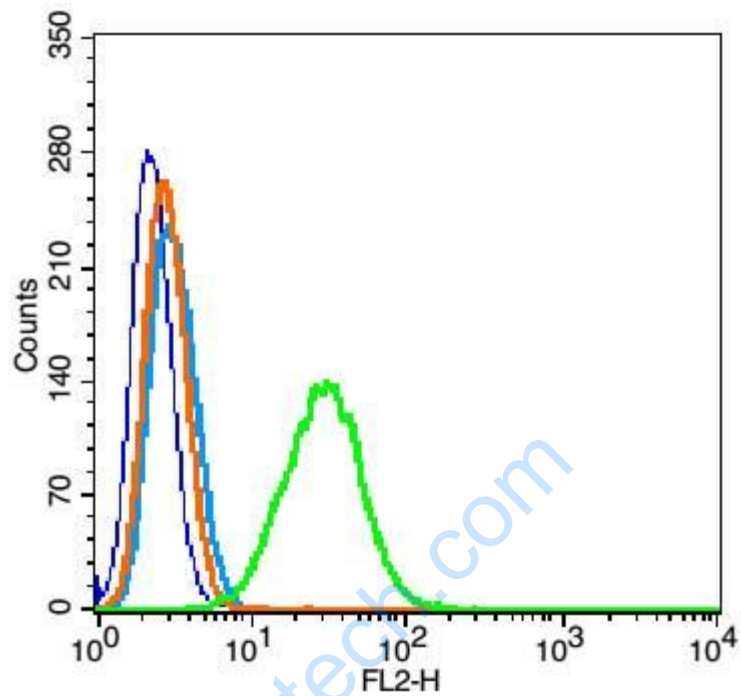
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 46 kD

Observed band size: 46 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (E2F1) Polyclonal Antibody, Unconjugated (SL0599R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control:RSC96 cells(blue).

Primary Antibody:Rabbit Anti-E2F1 antibody(SL0599R), Dilution: 0.2 $\mu$ g in 100  $\mu$ L  
1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions );

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X  
PBS containing 0.5% BSA.

#### Protocol

The cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice. Primary antibody (SL0599R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned

above to react with the primary antibody at 1/200 dilution for 30 min on ice.

Acquisition of 20,000 events was performed.

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