



Rabbit Anti-E2F1 antibody

SL23185R

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| Product Name: | E2F1 |
| Chinese Name: | 转录因子E2F-1抗体 |
| Alias: | 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. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,Sheep, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=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. |
| Molecular weight: | 46kDa |
| Cellular localization: | The nucleus |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human E2F1:101-200/437 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | 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. |
| PubMed: | PubMed |
| Product Detail: | 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:

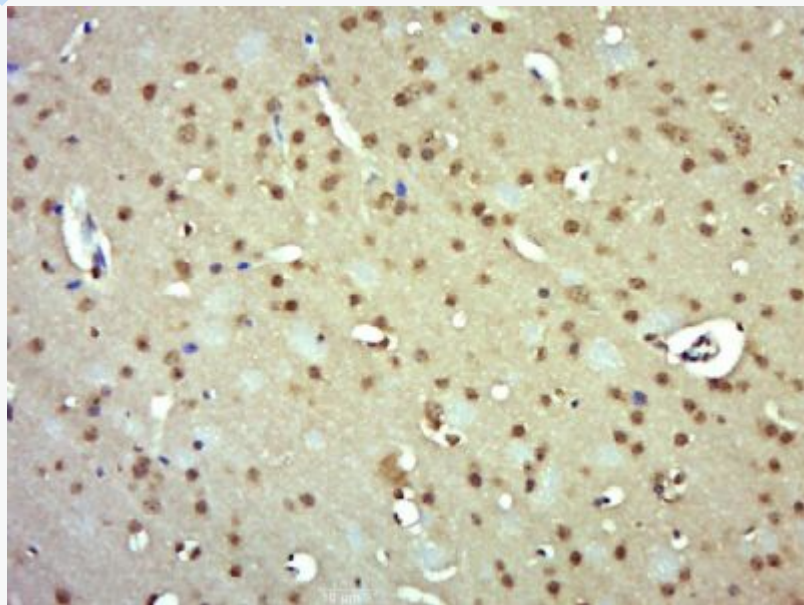
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transcriptional regulatory factor (Transcription Regulators)

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:



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 (SL23185R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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