



## Rabbit Anti-phospho-E2F1 (Ser337) antibody

SL5305R

<b>Product Name:</b>	phospho-E2F1 (Ser337)
<b>Chinese Name:</b>	磷酸化转录因子E2F-1抗体
<b>Alias:</b>	phospho-E2F1(Ser337); p-E2F1 (phospho-Ser337); E2F1 (phospho S337); 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,Horse,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestIF=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 Synthesised phosphopeptide derived from human E2F1 around the phosphorylation site of Ser337:PS(p-S)PP
<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.

**PubMed:**

[PubMed](#)

E2F's are DNA binding proteins, which associate with negative regulators, such as the retinoblastoma p107 protein, resulting in an altered rate of gene transcription. 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. E2F1 is proposed to be involved in several cellular processes that range from tumor suppressor, cell progression and oncogenesis. E2F1 overexpression can also drive cells into apoptosis.

**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 (By similarity). Binds EAPP.

**Subcellular Location:**

Nucleus.

**Post-translational modifications:**

Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase (By similarity).

**Similarity:**

Belongs to the E2F/DP family.

**SWISS:**

Q01094

**Gene ID:**

1869

**Database links:**

**Product Detail:**

[Entrez Gene: 1869](#)Human

[Oimim: 189971](#)Human

[SwissProt: Q01094](#)Human

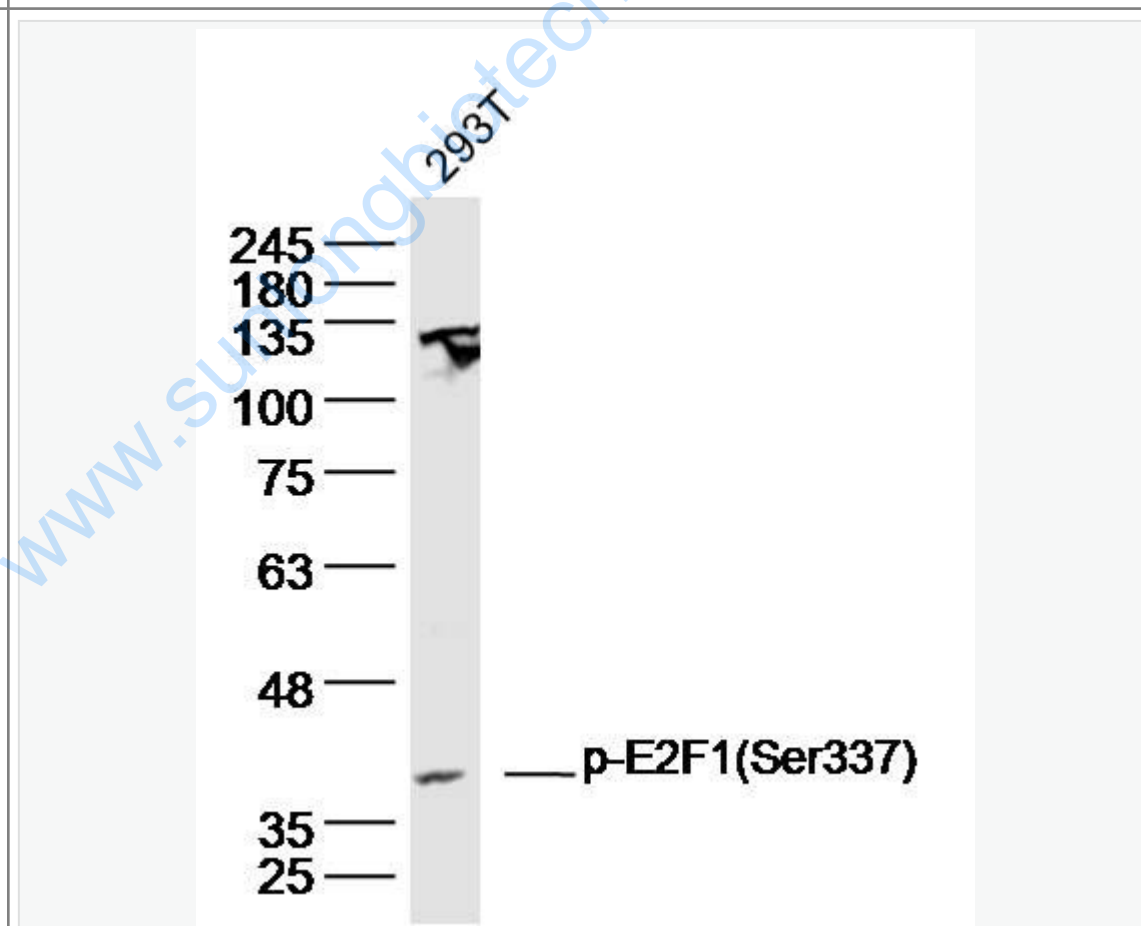
[Unigene: 654393](#)Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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:



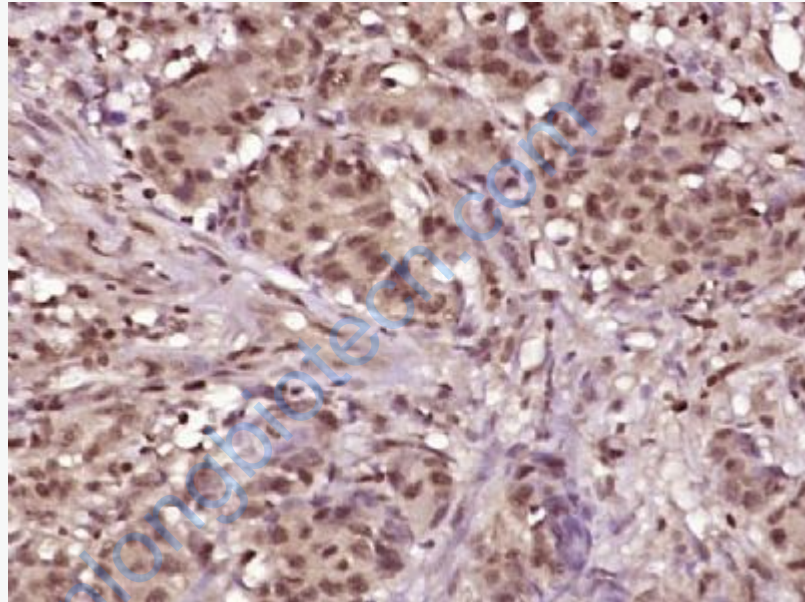
Sample: 293T Cell (Human) Lysate at 40 ug

Primary: Anti-phospho-E2F1 (Ser337) (SL5305R) at 1/300 dilution

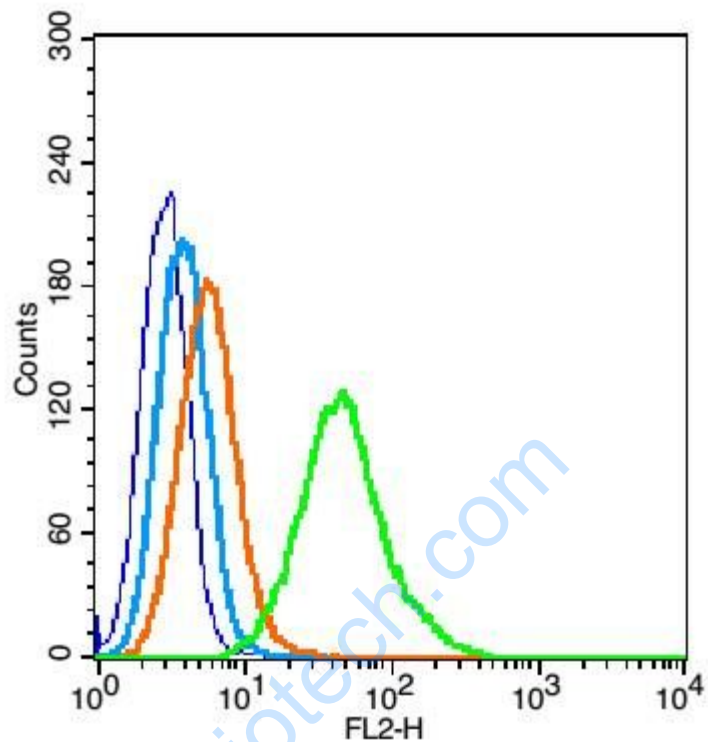
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 46 kD

Observed band size: 40 kD



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); 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 (Ser337)) Polyclonal Antibody, Unconjugated (SL5305R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control(blue): TM4 cells(fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody:Rabbit Anti-E2F 1 antibody(SL5305R), Dilution: 1 $\mu$ 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 . Primary antibody (SL5305R) 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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