

Rabbit Anti-phospho-E2F1 (Ser364) antibody

SL4076R

Product Name:	phospho-E2F1 (Ser364)
Chinese Name:	磷酸化转录因子E2F-1抗体
Alias:	E2F1 (phospho S364); E2F1 (phospho Ser364); p-E2F1 (S364); p-E2F1 (Ser364); E2F1; 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,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/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.
Molecular weight:	48kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human E2F1 around the phosphorylation site of Ser364:MG(p-S)LR
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

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.

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 midto-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. Interacts with TRIM28; the interaction inhibits E2F1 acetylation through recruiting HDAC1 and represses its transcriptional activity. Interaction with KAT2B; the interaction acetylates E2F1 enhancing its DNA-binding and transcriptional activity. Interacts with BIRC2/c-IAP1 (via BIR domains). Interacts with human cytomegalovirus/HHV-5 protein UL123.

Product Detail:

Subcellular Location:

Nucleus:

Post-translational modifications:

Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase.

Similarity:

Belongs to the E2F/DP family.

SWISS:

Q01094

Gene ID:

1869

Database links:

Entrez Gene: 1869Human

Entrez Gene: 13555Mouse

Entrez Gene: 399489Rat

Omim: 189971Human

SwissProt: Q01094Human

SwissProt: Q61501Mouse

SwissProt: O09139Rat

Unigene: 654393Human

<u>Unigene: 18036</u>Mouse

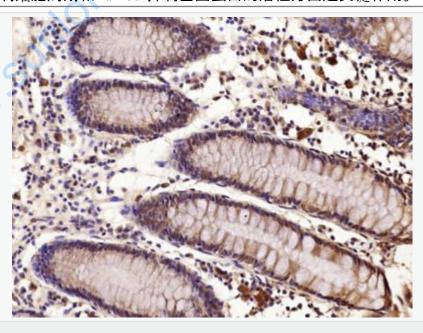
Unigene: 72471Rat

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-

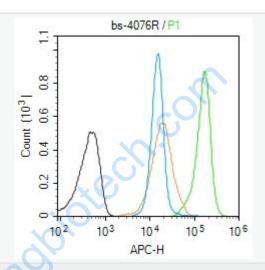
1既可作为癌基因起作用,又可作为抑癌基因起作用。其不同可能由细胞中其他生长促进或抑制性蛋白质水平和(或)活性决定,同时与细胞所处环境及器官特异性有关。在控制细胞周期和Tumour抑制基因蛋白的活性方面起关键作用。



Picture:

Paraformaldehyde-fixed, paraffin embedded (Human colon carcinoma); Antigen retrieval by microwave in sodium citrate buffer (pH6.0); Block endogenous

peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (phospho-E2F1 (Ser364)) Polyclonal Antibody, Unconjugated (SL4076R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.



Blank control (Black line): Molt4 (Black).

Primary Antibody (green line): Rabbit Anti-phospho-E2F1 (Ser364) antibody (SL4076R)

Dilution: 1µg/10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein

interactions for 30 min at room temperature .Cells stained with Primary Antibody for
30 min at room temperature. The secondary antibody used for 40 min at room
temperature. Acquisition of 20,000 events was performed.

