

Rabbit Anti-phospho-E2F1 (Ser332)/Cy5 Conjugated antibody

SL5306R-Cy5

Product Name	Anti-phospho-E2F1 (Ser332)/Cy5
Chinese Name	Cy5 标记的磷酸化转录因子 E2F-1 抗体
Alias	phospho-E2F1(Ser332); p-E2F1 (phospho-Ser332); E2F1 (phospho S332); 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.
Product Type	Phosphorylated anti
Research Area	Tumour Cell biology immunology Signal transduction
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat
Applications	Flow-Cyt=1ug/Test,IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	46kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated Synthesised phosphopeptide derived from human E2F1 around the phosphorylation site of Ser332
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

background:

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.

Product Detail

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.

Similarity:

Belongs to the E2F/DP family.

Database links:

[Entrez Gene: 1869](#) Human

[Omim: 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。