

Product name:	E2F-1 Rabbit Polyclonal Antibody
Cat number:	ABN10251
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthetic peptide from human protein at AA range: 100-170
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:500-1:2000, IHC 1:50-1:300, ICC/IF 1:50-1:200, ELISA 1:10000-1:20000
Molecular Weight:	60kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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 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. PTM: Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase. similarity: Belongs to the E2F/DP family. 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. 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.