

Product name:	E2F-4 Rabbit Polyclonal Antibody
Cat number:	ABN10255
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human E2F4 around the non-acetylation site of Lys96. AA range:61-110
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	43kDa
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 binds to all three of the tumor suppressor proteins pRB, p107 and p130, but with higher affinity to the last two. It plays an important role in the suppression of proliferation-associated gene expression. Present in the growth-arrested state, its abundance does not change significantly as cells move into and through the cell cycle. **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-4 binds with high affinity to RBL1 and RBL2. In some instances, can also bind RB protein. **polymorphism:** The poly-Ser region of E2F4 is polymorphic and the number of Ser varies in the population (from 8 to 17). The variation might be associated with tumorigenesis. **PTM:** Differentially phosphorylated in vivo. **similarity:** Belongs to the E2F/DP family. **subunit:** Component of the DRTF1/E2F transcription factor complex. Binds cooperatively with DP-1 to E2F sites. The E2F4/DP-1 dimer interacts preferentially with pocket protein RBL1, which inhibits the E2F transactivation domain. Lower affinity interaction has been found with retinoblastoma protein RB1. Interacts with TRRAP, which probably mediates its interaction with histone acetyltransferase complexes, leading to transcription activation. Interacts with HCFC1. Component of the DREAM complex (also named LINC complex) at least composed of E2F4, E2F5, LIN9, LIN37, LIN52, LIN54, MYBL1, MYBL2, RBL1, RBL2, RBBP4, TFDP1 and TFDP2. The complex exists in quiescent cells where it represses cell cycle-dependent genes. It dissociates in S phase when LIN9, LIN37, LIN52 and LIN54 form a subcomplex that binds to MYBL2. **tissue specificity:** Found in all tissue examined including heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.