

E2F2 Rabbit pAb

Catalog # AP99191

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q14209
Other Accession	Q14209
Reactivity	Human
Predicted	Rat, Pig, Mouse, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47506
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human E2F2
Epitope Specificity	101-200/443
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the E2F/DP family.
SUBUNIT	Component of the DRTF1/E2F transcription factor complex. Forms heterodimers with DP family members. The E2F2 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 RB1, thus releasing the active complex. Binds EAPP.
Post-translational modifications	Phosphorylated by CDK2 and cyclin A-CDK2 in the S-phase (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	E2F/DP family winged-helix DNA-binding domain. This family contains the transcription factor E2F and its dimerisation partners TDP1 and TDP2, which stimulate E2F-dependent transcription. E2F binds to DNA as a homodimer or as a heterodimer in association with TDP1/2, the heterodimer having increased binding efficiency. The crystal structure of an E2F4-DP2-DNA complex shows that the DNA-binding domains of the E2F and DP proteins both have a fold related to the winged-helix DNA-binding motif. Recognition of the central c/gGCGGg/c sequence of the consensus DNA-binding site is symmetric, and amino acids that contact these bases are conserved among all known E2F and DP proteins.

Additional Information

Gene ID	1870
Other Names	E2F-2; E2F2_HUMAN; E2F2; E2F2_MOUSE; E2F transcription factor 2

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	E2F2
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. E2F2 binds specifically to RB1 in a cell-cycle dependent manner.
Cellular Location	Nucleus.
Tissue Location	Highest level of expression is found in placenta, low levels are found in lung. Found as well in many immortalized cell lines derived from tumor samples

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.