Product Name: TFDP1 Rabbit Polyclonal Antibody
Catalog #: APRab18820

Summary

Production Name	TFDP1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB,
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	TFDP1
Alternative Names	TFDP1; DP1; Transcription factor Dp-1; DRTF1-polypeptide 1; DRTF1; E2F dimerization partner 1
Gene ID	7027.0
SwissProt ID	Q14186.The antiserum was produced against synthesized peptide derived from human DP-1. AA range:361-410

Application

Dilution Ratio	WB 1:500 - 1:2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Molecular Weight	55kD

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Background

This gene encodes a member of a family of transcription factors that heterodimerize with E2F proteins to enhance their DNA-binding activity and promote transcription from E2F target genes. The encoded protein functions as part of this complex to control the transcriptional activity of numerous genes involved in cell cycle progression from G1 to S phase. Alternative splicing results in multiple transcript variants. Pseudogenes of this gene are found on chromosomes 1, 15, and X.[provided by RefSeq, Jan 2009],function:Can stimulate E2F-dependent transcription. Binds DNA cooperatively with E2F family members 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 DP2/E2F complex functions in the control of cell-cycle progression from G1 to S phase. The E2F-1/DP complex appears to mediate both cell proliferation and apoptosis.,induction:Down-regulated during differentiation.,miscellaneous:E2F/DP transactivation can be mediated by several cofactors including TBP, TFIIH, MDM2 and CBP.,PTM:Phosphorylation by E2F-1-bound cyclin A-CDK2, in the S phase, inhibits E2F-mediated DNA binding and transactivation.,similarity:Belongs to the E2F/DP family.,subunit:Component of the E2F/DP transcription factor complex. Forms heterodimers with E2F family members. The complex can interact with hypophosphorylated retinoblastoma protein RB1 and related proteins (RBL1 and RBL2) that inhibit the E2F transactivation domain. This repression involves recruitment of histone deacetylase (HDAC). During the cell cycle, from mid-to-late G1 phase, RB family members become phosphorylated, detach from the DRTF1/E2F complex to render E2F transcriptionally active. Viral oncoproteins, notably E1A, T-antigen and HPV E7, are capable of sequestering RB protein, thus releasing the active complex. Part of the E2F6.com-1 complex in G0 phase is composed of E2F6, MGA, MAX, TFDP1, CBX3, BAT8, EUHMTASE1, RING1, RNF2, MBLR, L3MBTL2 YAF2. 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:Highest levels in muscle. Also expressed in brain, placenta, liver and kidney. Lower levels in lung and pancreas. Not detected in heart.,

Research Area

Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;TGF-beta;

Image Data

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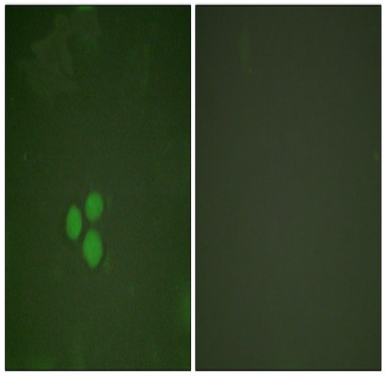
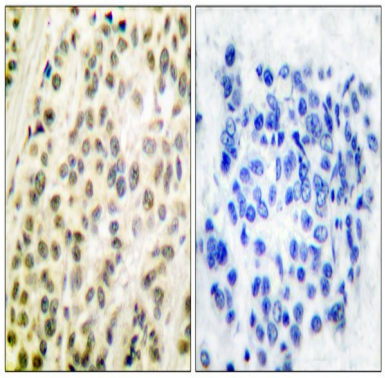
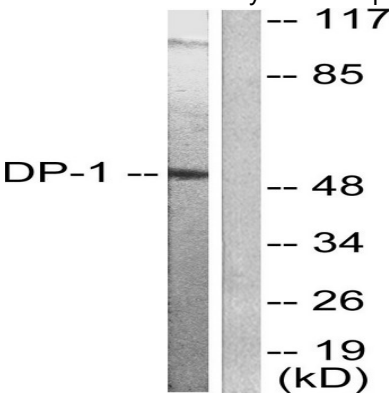


Immunofluorescence analysis of HeLa cells, using DP-1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using DP-1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using DP-1 Antibody. The lane on the right is blocked with the synthesized peptide.

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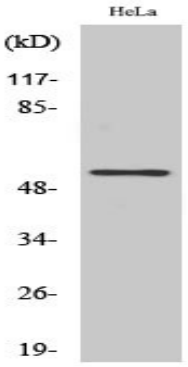

Western Blot analysis of various cells using TFDP1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit （SC-003,Inventbiotech,MN,USA）.

Note

For research use only.