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TFDP2 Rabbit pAb

Catalog # AP98357

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q14188
Other Accession	Q14188
Predicted	Rat, Pig, Human, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49236
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TFDP2/DP2
Epitope Specificity	101-200/446
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 E2F family members. The complex can interact with hypophosphorylated retinoblastoma protein RB1 and related proteins (RBL1 and RBL2) that inhibit the E2F transactivation domain. During the cell cycle, RB 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 GMCL (By similarity). 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.
Post-translational modifications	Ser-24 is probably phosphorylated by CDK2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. Tissue specificity: High levels in heart and skeletal muscle. Also found in placenta, kidney, brain, lung and liver. The presence as well as the abundance of the different transcripts appear to vary significantly in different tissues and cell lines.

Additional Information

Gene ID	7029
Other Names	DP2; Tcfdp2; TFDP2_HUMAN; TFDP2; E2F dimerization partner 2; transcription factor Dp-2; transcription factor Dp-2 (E2F dimerization partner 2)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	TFDP2
Synonyms	DP2
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 TFDP2:E2F complex functions in the control of cell- cycle progression from G1 to S phase. The E2F1:DP complex appears to mediate both cell proliferation and apoptosis. Blocks adipocyte differentiation by repressing CEBPA binding to its target gene promoters (PubMed:20176812).
Cellular Location	Nucleus.
Tissue Location	High levels in heart and skeletal muscle. Also found in placenta, kidney, brain, lung and liver. The presence as well as the abundance of the different transcripts appear to vary significantly in different tissues and cell lines

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