

## Immunotag™ TFDP1 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4611
Product Description	Immunotag™ TFDP1 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	TFDP1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human DP-1. AA range:361-410
Specificity	TFDP1 Polyclonal Antibody detects endogenous levels of TFDP1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	TFDP1
Accession No.	Q14186 Q08639
Alternate Names	TFDP1; DP1; Transcription factor Dp-1; DRTF1-polypeptide 1; DRTF1; E2F dimerization partner 1

## Antibody Specification

Description	transcription factor Dp-1(TFDP1) Homo sapiens 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],
Cell Pathway/ Category	Cell_Cycle_G1S,Cell_Cycle_G2M_DNA,TGF-beta,
Protein Expression	Muscle,
Subcellular Localization	nucleus,nucleoplasm,transcription factor complex,mitochondrion,
Protein Function	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.,
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