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TAF1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11765b

Product Information

Application	WB, E
Primary Accession	P21675
Other Accession	NP_620278.1, NP_004597.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14388
Calculated MW	214714
Antigen Region	1863-1893

Additional Information

Gene ID	6872
Other Names	Transcription initiation factor TFIID subunit 1, Cell cycle gene 1 protein, TBP-associated factor 250 kDa, p250, Transcription initiation factor TFIID 250 kDa subunit, TAF(II)250, TAFII-250, TAFII250, TAF1, BA2R, CCG1, CCGS, TAF2A
Target/Specificity	This TAF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1863-1893 amino acids from the C-terminal region of human TAF1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TAF1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TAF1 (HGNC:11535)
Synonyms	BA2R, CCG1, CCGS, TAF2A

Function	The TFIID basal transcription factor complex plays a major role in the initiation of RNA polymerase II (Pol II)-dependent transcription (PubMed:33795473). TFIID recognizes and binds promoters with or without a TATA box via its subunit TBP, a TATA-box-binding protein, and promotes assembly of the pre-initiation complex (PIC) (PubMed:33795473). The TFIID complex consists of TBP and TBP-associated factors (TAFs), including TAF1, TAF2, TAF3, TAF4, TAF5, TAF6, TAF7, TAF8, TAF9, TAF10, TAF11, TAF12 and TAF13 (PubMed:33795473). TAF1 is the largest component and core scaffold of the TFIID complex, involved in nucleating complex assembly (PubMed:25412659, PubMed:27007846, PubMed:33795473). TAF1 forms a promoter DNA binding subcomplex of TFIID, together with TAF7 and TAF2 (PubMed:33795473). Contains novel N- and C-terminal Ser/Thr kinase domains which can autophosphorylate or transphosphorylate other transcription factors (PubMed:25412659, PubMed:8625415). Phosphorylates TP53 on 'Thr-55' which leads to MDM2- mediated degradation of TP53 (PubMed:25412659). Phosphorylates GTF2A1 and GTF2F1 on Ser residues (PubMed:25412659). Possesses DNA-binding activity (PubMed:25412659). Essential for progression of the G1 phase of the cell cycle (PubMed:11278496, PubMed:15053879, PubMed:2038334, PubMed:8450888, PubMed:8625415, PubMed:9660973, PubMed:9858607). Exhibits histone acetyltransferase activity towards histones H3 and H4 (PubMed:15870300).
Cellular Location	Nucleus

Background

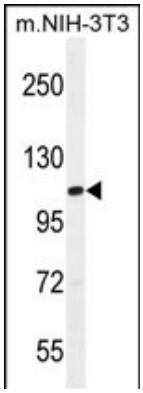
Initiation of transcription by RNA polymerase II requires the activities of more than 70 polypeptides. The protein that coordinates these activities is the basal transcription factor TFIID, which binds to the core promoter to position the polymerase properly, serves as the scaffold for assembly of the remainder of the transcription complex, and acts as a channel for regulatory signals. TFIID is composed of the TATA-binding protein (TBP) and a group of evolutionarily conserved proteins known as TBP-associated factors or TAFs. TAFs may participate in basal transcription, serve as coactivators, function in promoter recognition or modify general transcription factors (GTFs) to facilitate complex assembly and transcription initiation. This gene encodes the largest subunit of TFIID. This subunit binds to core promoter sequences encompassing the transcription start site. It also binds to activators and other transcriptional regulators, and these interactions affect the rate of transcription initiation. This subunit contains two independent protein kinase domains at the N and C-terminals, but also possesses acetyltransferase activity and can act as a ubiquitin-activating/conjugating enzyme. This gene is part of a complex transcriptional unit (TAF1/DYT3), wherein some products share exons with TAF1 as well as additional exons downstream.

References

Tavassoli, P., et al. Mol. Endocrinol. 24(4):696-708(2010)
Allende-Vega, N., et al. Mol. Cell. Biochem. 316 (1-2), 99-106 (2008) :
Centeno, F., et al. Intervirology 51(2):137-143(2008)
Olejnik-Schmidt, A.K., et al. Arch. Virol. 153(5):983-990(2008)
Li, A.G., et al. Mol. Cell 28(3):408-421(2007)

Images

TAF1 Antibody (C-term) (Cat. #AP11765b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the TAF1 antibody detected the TAF1 protein (arrow).



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