

TAF1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11765b

Specification

TAF1 Antibody (C-term) - Product Information

Application WB,E
Primary Accession P21675

Other Accession <u>NP_620278.1</u>, <u>NP_004597.2</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Mouse
Rabbit
Polyclonal
Rabbit IgG
214714
1863-1893

TAF1 Antibody (C-term) - 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, TAFII, 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

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.

TAF1 Antibody (C-term) - 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: <u>25412659</u>, PubMed: <u>27007846</u>, PubMed: <u>33795473</u>). 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).

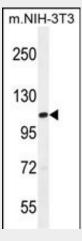
Cellular Location Nucleus

TAF1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TAF1 Antibody (C-term) - 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).



TAF1 Antibody (C-term) - 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.

TAF1 Antibody (C-term) - 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)