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TAF1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI10061

Product Information

Application	WB, CHIP
Primary Accession	P21675
Other Accession	P21675-2, NP_004597, NM_004606
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	214714

Additional Information

Gene ID	6872
Alias Symbol	BA2R, CCG1, CCGS, DYT3, KAT4, NSCL2, OF, P250, TAF2A, TAFII250, XDP, N-TAF1, DYT3/TAF1
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	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. TAF1 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. 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. Two transcripts encoding different isoforms have been identified for this gene.

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-TAF1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.

Precautions TAF1 antibody - middle region 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

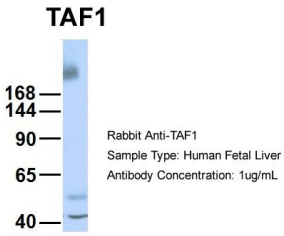
Function The TFIID basal transcription factor complex plays a major role in the initiation of RNA polymerase II (Pol II)-dependent transcription (PubMed:33795473). TFIID recognizes and binds promoters with or without a TATA box via its subunit TBP, a TATA-box-binding protein, and promotes assembly of 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

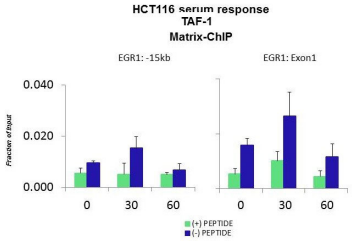
Background

This is a rabbit polyclonal antibody against TAF1. It was validated on Western Blot using a cell lysate as a positive control. Abgent strives to provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire (sales@abgent.com).

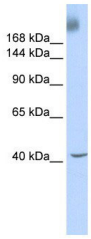
Images



TAF1 antibody - middle region (AI10061) in Hum. Fetal Liver cells using Western Blot
Host: Rabbit
Target Name: TAF1
Sample Tissue: Human Fetal Liver
Antibody Dilution: 1.0 µg/ml



TAF1 antibody - middle region (AI10061) in HCT116 using CHIP
Quiescent human colon carcinoma HCT116 cultures were treated with 10% FBS for three time points (0, 15, 30min) or (0, 30, 60min) were used in Matrix-ChIP and real-time PCR assays at EGR1 gene (Exon1) and 15kb upstream site.



TAF1 antibody - middle region (AI10061) in Human Liver cells using Western Blot
WB Suggested Anti-TAF1 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:312500
Positive Control: Human Liver

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