

### TAF1 antibody - middle region

Rabbit Polyclonal Antibody Catalog # Al10061

#### **Specification**

### TAF1 antibody - middle region - Product Information

Application WB, CHIP Primary Accession P21675

Other Accession <u>P21675-2</u>, <u>NP\_004597</u>, <u>NM\_004606</u>

Reactivity Human, Mouse, Rat, Rabbit, Pig, Dog,

Horse, Bovine

Predicted Human, Mouse, Rat, Chicken, Dog, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 215 kDa KDa

#### TAF1 antibody - middle region - 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, TAFII, 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.

## TAF1 antibody - middle region - 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: <a href="http://www.uniprot.org/citations/33795473" target=" blank">33795473</a>). 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:<a href="http://www.uniprot.org/citations/33795473" target=" blank">33795473</a>). 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: <a href="http://www.uniprot.org/citations/33795473" target=" blank">33795473</a>). TAF1 is the largest component and core scaffold of the TFIID complex, involved in nucleating complex assembly (PubMed:<a href="http://www.uniprot.org/citations/25412659" target="\_blank">25412659</a>, PubMed:<a href="http://www.uniprot.org/citations/27007846" target="\_blank">27007846</a>, PubMed:<a href="http://www.uniprot.org/citations/33795473" target="\_blank">33795473</a>). TAF1 forms a promoter DNA binding subcomplex of TFIID, together with TAF7 and TAF2 (PubMed: <a href="http://www.uniprot.org/citations/33795473" target=" blank">33795473</a>). Contains novel N- and C-terminal Ser/Thr kinase domains which can autophosphorylate or transphosphorylate other transcription factors (PubMed:<a href="http://www.uniprot.org/citations/25412659" target=" blank">25412659</a>, PubMed:<a href="http://www.uniprot.org/citations/8625415" target=" blank">8625415</a>). Phosphorylates TP53 on 'Thr-55' which leads to MDM2- mediated degradation of TP53 (PubMed:<a href="http://www.uniprot.org/citations/25412659" target=" blank">25412659</a>). Phosphorylates GTF2A1 and GTF2F1 on Ser residues (PubMed: <a href="http://www.uniprot.org/citations/25412659" target=" blank">25412659</a>). Possesses DNA-binding activity (PubMed:<a href="http://www.uniprot.org/citations/25412659" target=" blank">25412659</a>). Essential for progression of the G1 phase of the cell cycle (PubMed:<a href="http://www.uniprot.org/citations/11278496" target=" blank">11278496</a>, PubMed: <a href="http://www.uniprot.org/citations/15053879" target="blank">15053879</a>, PubMed:<a href="http://www.uniprot.org/citations/2038334" target="blank">2038334</a>, PubMed: <a href="http://www.uniprot.org/citations/8450888" target="blank">8450888</a>, PubMed: <a href="http://www.uniprot.org/citations/8625415" target="blank">8625415</a>, PubMed:<a href="http://www.uniprot.org/citations/9660973" target="blank">9660973</a>,



 $\label{lem:pubMed:ahref="http://www.uniprot.org/citations/9858607" target="\_blank">9858607</a>). Exhibits histone acetyltransferase activity towards histones H3 and H4 (PubMed:<a href="http://www.uniprot.org/citations/15870300" target="_blank">15870300</a>).$ 

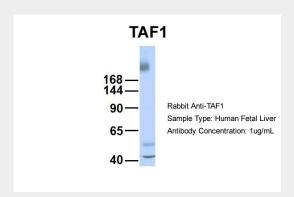
**Cellular Location** Nucleus

## TAF1 antibody - middle region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

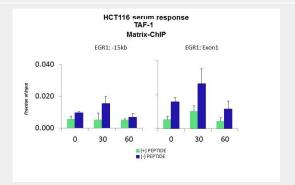
# TAF1 antibody - middle region - Images



TAF1 antibody - middle region (Al10061) in Hum. Fetal Liver cells using Western Blot

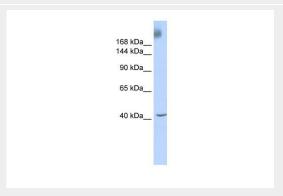
Host: Rabbit Target Name: TAF1

Sample Tissue: Human Fetal Liver Antibody Dilution: 1.0µg/ml



TAF1 antibody - middle region (Al10061) 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 (Al10061) 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

# TAF1 antibody - middle region - 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).