abcam

ab251201

Anti-TAF5 antibody [EPR15433] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR15433

Reactivity data

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse

Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Human, Rat, Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information TAF5

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, PubMed:8758937, PubMed:8942982, PubMed:9045704). The TFIID complex structure can be divided into 3 modules TFIID-A, TFIID-B, and TFIID-C (PubMed:33795473). TAF5 is involved in two modules of TFIID, in TFIID-A together with TAF3 and TBP, and in TFIID-B with TAF8 (PubMed:33795473). Involved in contacts between TFIID and TFIIF in the PIC (PubMed:33795473).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab251201 is the carrier-free version of ab195236.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	TAF5 also known as TAFII100 is a component of the transcription factor IID complex and is vital in the process of assembling the pre-initiation complex for gene transcription. This protein has a molecular mass of approximately 100 kDa. It

	is prominently expressed in a variety of tissues such as liver and heart indicating its broad functional significance in various cellular environments. TAF5 through its structural role helps stabilize the TFIID complex facilitating the binding of transcription machinery to DNA promoters.
Biological function summary	TAF5 forms part of the TFIID complex a cornerstone for gene transcription initiation. TFIID is one of the basal transcription factors essential for RNA polymerase II to carry out transcription of mRNA. The proper assembly and functioning of TFIID rely heavily on TAF5 as it interacts with other TAFs and the TBP (TATA-box Binding Protein) enabling accurate transcriptional regulation. This process impacts the expression of a large number of genes highlighting TAF5's broad biological utility and influence.
Pathways	TAF5 plays a major role in the transcription initiation pathway and is an active participant in the RNA polymerase II transcription machinery. It associates closely with TAF6 and TAF9 within the TFIID complex facilitating the recruitment of other proteins to initiate transcription. Through these interactions TAF5 impacts the cell cycle control and apoptosis pathways modulating cellular responses to developmental cues and environmental stresses. These pathways illustrate the importance of TAF5 in maintaining cellular homeostasis and responding to physiological signals.
Associated diseases and disorders	TAF5 has associations with cancer and certain neurodegenerative diseases. Aberrant expression or mutations in the TAF5 gene may disrupt the transcriptional machinery leading to uncontrolled cellular proliferation or neuronal cell death. For example in cancer TAF5's interaction with TIP60 a histone acetyltransferase modifies chromatin structure influencing tumorigenic processes. Meanwhile in neurodegenerative disorders impaired TAF5 functions might alter gene expression patterns important for neuronal survival linking TAF5 to the disease pathology and progression.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

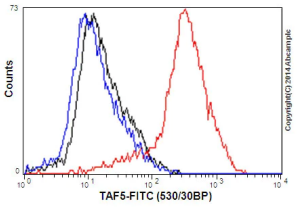
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

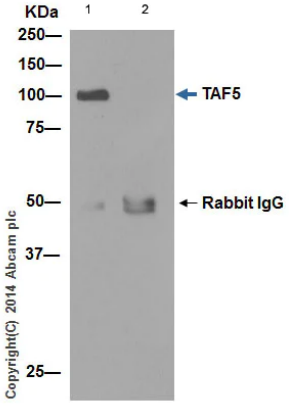
4 product images



Flow Cytometry (Intracellular) - Anti-TAF5 antibody [EPR15433] - BSA and Azide free (ab251201)

TAF5 Flow Cytometry (Intracellular) staining using rabbit Anti-TAF5 antibody

This data was developed using ab195236, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of HepG2 cells (paraformaldehyde-fixed, 2%) labeling TAF5 with ab195236 at 1/110 dilution (red) or a Rabbit monoclonal IgG (negative) (black), followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution. Unlabeled cells (Blue).

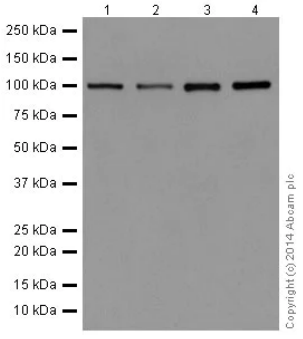


Immunoprecipitation - Anti-TAF5 antibody [EPR15433] - BSA and Azide free (ab251201)

This data was developed using ab195236, the same antibody clone in a different buffer formulation.
Western blot analysis of immunoprecipitation pellet from 293 cell lysate immunoprecipitated using ab195236 at 1/70 dilution (lane 1) or a Rabbit monoclonal IgG (lane 2).
Western Blot performed using ab195236 at 1/1000 dilution (0.6µg/ml).
Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution.

All lanes:
Immunoprecipitation - Anti-TAF5 antibody [EPR15433] - C-terminal (ab195236)

Predicted band size: 87 kDa



Western blot - Anti-TAF5 antibody [EPR15433] - BSA and Azide free (ab251201)

TAF5 Western blot staining using rabbit Anti-TAF5 antibody

This data was developed using ab195236, the same antibody clone in a different buffer formulation.
The observed MW is consistent with what has been described in the literature (PMID: 9045704).

All lanes:
Western blot - Anti-TAF5 antibody [EPR15433] - C-terminal (ab195236) at 1/1000 dilution

Lane 1:
HeLa cell lysate at 20 µg

Lane 2:

MCF7 cell lysate at 20 µg

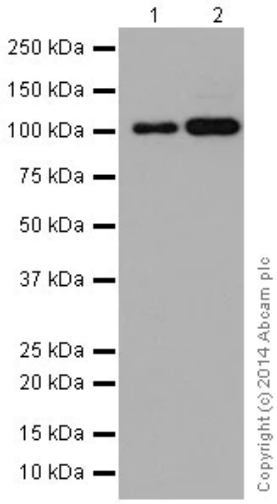
Lane 3:
HepG2 cell lysate at 20 µg

Lane 4:
293 cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 87 kDa



Western blot - Anti-TAF5 antibody [EPR15433] - BSA and Azide free (ab251201)

TAF5 Western blot staining using rabbit Anti-TAF5 antibody

This data was developed using ab195236, the same antibody clone in a different buffer formulation.
The observed MW is consistent with what has been described in the literature (PMID: 9045704).

All lanes:
Western blot - Anti-TAF5 antibody [EPR15433] - C-terminal (ab195236) at 1/1000 dilution

Lane 1:
C6 cell lysate at 10 µg

Lane 2:
RAW 264.7 cell lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 87 kDa

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