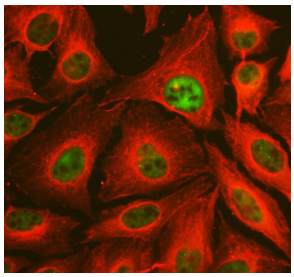
TAF6 Antibody / TATA-box binding protein-associated factor 6 (FY13260)

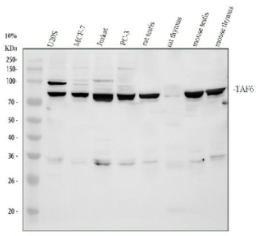
Catalog No.	Formulation	Size
FY13260	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

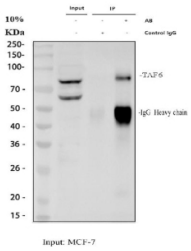
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P49848
Localization	Nuclear
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry/Immunofluorescence : 5ug/ml Immunoprecipitation : 2-4ug/500ug of lysate ELISA : 0.1-0.5ug/ml
Limitations	This TAF6 antibody is available for research use only.



Immunofluorescent staining of TAF6 using anti-TAF6 antibody (green) and anti-Beta Tubulin antibody (red). TAF6 was detected in an immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/ml rabbit anti-TAF6 antibody and mouse anti-Beta Tubulin antibody overnight at 4oC. DyLight 488 Conjugated Goat Anti-Rabbit IgG and Cy3 Conjugated Goat Anti-Mouse IgG were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37oC. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of TAF6 using anti-TAF6 antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human U2OS whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human Jurkat whole cell lysates, Lane 4: human PC-3 whole cell lysates, Lane 5: rat testis tissue lysates, Lane 6: rat thymus tissue lysates, Lane 7: mouse testis tissue lysates, Lane 8: mouse thymus tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TAF6 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. A specific band was detected for TAF6 at approximately 73 kDa. The expected molecular weight of TAF6 is ~73 kDa.



Immunoprecipitating TAF6 in MCF-7 whole cell lysate. Western blot analysis of TAF6 using anti-TAF6 antibody. Lane 1: MCF-7 whole cell lysates (30ug), Lane 2: Rabbit control IgG instead of anti-TAF6 antibody in MCF-7 whole cell lysate, Lane 3: anti-TAF6 antibody (2ug) + MCF-7 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TAF6 antibody at a dilution of 0.5 ug/ml and probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using ECL Plus Western Blotting Substrate. A specific band was detected for TAF6 at approximately 73 kDa. The expected molecular weight of TAF6 is at 73 kDa.

Description

TAF6 antibody detects TATA-box binding protein-associated factor 6, a core subunit of the transcription factor IID (TFIID) complex that plays a central role in the initiation of RNA polymerase II-dependent transcription. The UniProt recommended name is Transcription initiation factor TFIID subunit 6 (TAF6). This protein is one of several TBP-associated factors (TAFs) that assemble with the TATA-binding protein (TBP) to recognize and bind core promoter regions, facilitating recruitment of the transcriptional machinery and gene activation.

TAF6 is an integral structural and functional component of TFIID, contributing to promoter recognition, nucleosome remodeling, and transcription start site selection. The TFIID complex serves as a scaffold for preinitiation complex formation, interacting with transcriptional regulators, general transcription factors, and coactivators. TAF6 participates in DNA binding and mediates protein-protein interactions with other TAF subunits, including TAF9 and TAF12, forming submodules that stabilize TFIID assembly and promoter binding.

The TAF6 antibody identifies a protein of approximately 68 kDa encoded by the TAF6 gene on chromosome 7q22.3. Multiple isoforms of TAF6 are generated through alternative splicing, including the pro-apoptotic TAF6? variant, which lacks a short exon and promotes programmed cell death independently of p53 signaling. The balance between canonical TAF6 and TAF6? isoforms influences cellular responses to stress and apoptosis, highlighting the protein's dual role in both transcriptional regulation and cell survival pathways.

Functionally, TAF6 contributes to basal and regulated transcription by integrating signals from transcriptional activators and chromatin modifiers. It participates in the regulation of genes involved in cell cycle progression, DNA repair, and differentiation. TAF6 dysfunction or altered expression has been associated with impaired gene regulation and has been investigated in the context of cancer and neurodegenerative disorders, where transcriptional control is disrupted.

TAF6 antibody is useful for applications such as immunoblotting, immunohistochemistry, and immunofluorescence to study transcription complex composition, promoter occupancy, and RNA polymerase II recruitment. It enables detection of TAF6 in nuclear extracts, cultured cells, and tissue samples, supporting research into transcriptional regulation and stress-induced gene expression. NSJ Bioreagents provides TAF6 antibody reagents optimized for studies of transcription

initiation, chromatin interaction, and gene expression control.

Application Notes

Optimal dilution of the TAF6 antibody should be determined by the researcher.

Immunogen

E.coli-derived human TAF6 recombinant protein (Position: S16-R479) was used as the immunogen for the TAF6 antibody.

Storage

After reconstitution, the TAF6 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.