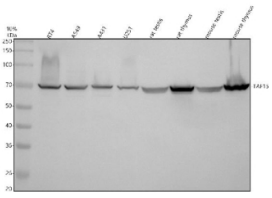
TAF15 Antibody / TATA-binding protein-associated factor 2N (FY13059)

Catalog No.	Formulation	Size
FY13059	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	Q92804
Applications	Western Blot : 0.25-0.5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This TAF15 antibody is available for research use only.



Western blot analysis of TAF15 using anti-TAF15 antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human RT4 whole cell lysates, Lane 2: human whole cell lysates, Lane 3: human whole cell lysates, Lane 4: human U251 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-TAF15 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 strong band is detected at approximately 68 kDa, slightly above the predicted molecular weight of 62 kDa. This apparent upward shift is consistent with published data showing that TAF15 commonly migrates at 66-70 kDa due to phosphorylation, arginine methylation, and its highly disordered N-terminal domain, all of which reduce SDS binding and slow gel mobility.

Description

TAF15 antibody detects TATA-binding protein-associated factor 2N, an RNA-binding protein that participates in transcription initiation, RNA splicing, and stress granule dynamics. The UniProt recommended name is TATA-binding protein-associated factor 2N (TAF15). This multifunctional protein is a member of the FET family of RNA-binding proteins, which includes FUS and EWSR1, all of which link transcriptional and post-transcriptional gene regulation.

Functionally, TAF15 antibody identifies a 592-amino-acid nuclear protein characterized by RNA recognition motifs (RRMs), a low-complexity prion-like domain, and a glycine-rich C-terminus. TAF15 interacts with the TFIID complex, serving as a coactivator in transcription initiation by RNA polymerase II. It also binds nascent transcripts, coordinating RNA processing and export. Through its prion-like domain, TAF15 can assemble into reversible RNA-protein granules under stress, supporting mRNA storage and translational regulation.

The TAF15 gene is located on chromosome 17q11.2 and is ubiquitously expressed, with particularly high levels in neurons and other transcriptionally active cells. TAF15 acts at the interface of chromatin remodeling and RNA metabolism, modulating transcriptional output and transcript stability. It regulates genes involved in differentiation, cell cycle control, and stress response, serving as a key integrator of nuclear RNA metabolism.

Clinically, TAF15 has been implicated in oncogenic translocations and neurodegenerative disorders. Chromosomal rearrangements involving TAF15 generate fusion oncoproteins such as TAF15-NR4A3 and TAF15-CREB1, which act as aberrant transcriptional activators in sarcomas and leukemia. In the nervous system, abnormal aggregation of TAF15 has been linked to amyotrophic lateral sclerosis (ALS) and frontotemporal dementia (FTD), where it contributes to RNA granule pathology and cytoplasmic mislocalization.

TAF15 antibody is widely used in RNA biology, transcriptional regulation, and neurodegeneration research. It is suitable for immunoblotting, immunofluorescence, and chromatin immunoprecipitation to detect TAF15 localization and activity. This antibody supports studies of RNA processing, stress granule formation, and oncogenic fusions. In translational research, TAF15 detection aids in characterizing RNA-protein interactions and gene expression networks underlying disease.

Structurally, TAF15 combines RNA-binding RRMs with intrinsically disordered regions that mediate multivalent interactions with RNA and chromatin-associated proteins. NSJ Bioreagents provides TAF15 antibody reagents validated for use in transcriptional regulation, RNA processing, and neurodegenerative disease research.

Application Notes

Optimal dilution of the TAF15 antibody should be determined by the researcher.

Immunogen

E.coli-derived human TAF15 recombinant protein (Position: Y63-R395) was used as the immunogen for the TAF15 antibody.

Storage

After reconstitution, the TAF15 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.