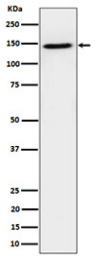
TAF3 Antibody / TATA-box binding protein associated factor 3 [clone 30T12] (FY13322)

Catalog No.	Formulation	Size
FY13322	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30T12
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q5VWG9
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunocytochemistry/Immunofluorescence: 1:50-1:200
Limitations	This TAF3 antibody is available for research use only.



Western blot analysis of TAF3 expression in human HeLa cell lysate using TAF2 antibody. TAF3 antibody detects a strong band at ~140-150 kDa. Although the theoretical mass is ~104 kDa, TAF3 (a TFIID subunit with long acidic/disordered regions) migrates markedly slower on SDS-PAGE, and phosphorylation further increases apparent size.

Description

TAF3 antibody detects TATA-box binding protein associated factor 3, encoded by the TAF3 gene. TATA-box binding protein associated factor 3 is a subunit of the transcription factor IID complex, which is required for transcription initiation by RNA polymerase II. TAF3 antibody provides researchers with a valuable tool for studying gene regulation, transcription initiation, and chromatin dynamics.

TATA-box binding protein associated factor 3 interacts directly with TATA-box binding protein and other TAF subunits to stabilize the transcription preinitiation complex at promoter regions. Research using TAF3 antibody has shown that it also recognizes histone modifications, particularly H3K4me3, through its plant homeodomain finger. This allows TAF3 to couple chromatin state with transcription initiation, providing a mechanism for epigenetic regulation of gene expression.

Studies with TAF3 antibody have revealed that TATA-box binding protein associated factor 3 plays critical roles during development and differentiation. It is required for myogenic differentiation and early embryonic gene expression programs. Loss of TAF3 disrupts promoter recognition and impairs transcriptional activation, highlighting its central function in developmental biology.

Dysregulation of TATA-box binding protein associated factor 3 has been linked to disease. Research using TAF3 antibody has shown that altered expression contributes to cancer by modifying transcriptional programs. Because of its ability to read epigenetic marks, TAF3 is a key regulator of gene networks that govern proliferation and differentiation. These findings underscore its importance in both normal physiology and pathology.

TAF3 antibody is widely applied in chromatin immunoprecipitation, western blotting, and immunohistochemistry. Chromatin immunoprecipitation maps TAF3 binding at promoters, western blotting detects full-length and isoform expression, and immunohistochemistry localizes TAF3 in nuclei across tissues. These applications make TAF3 antibody indispensable for transcription research.

By providing validated TAF3 antibody reagents, NSJ Bioreagents supports studies into transcriptional initiation, epigenetics, and disease. Detection of TATA-box binding protein associated factor 3 provides insight into how transcription factor complexes integrate chromatin signals with gene activation.

Application Notes

Optimal dilution of the TAF3 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human TAF3 was used as the immunogen for the TAF3 antibody.

Storage

Store the TAF3 antibody at -20oC.

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