

TAF3 Antibody / Transcription initiation factor TFIID subunit 3 (FY13130)

Catalog No.	Formulation	Size
FY13130	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
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	Q5VWG9
Applications	Western Blot: 0.25-0.5ug/ml Immunohistochemistry: 2-5ug/ml Immunocytochemistry/Immunofluorescence: 5ug/ml Flow Cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This TAF3 antibody is available for research use only.

Description

TAF3 antibody detects Transcription initiation factor TFIID subunit 3, a component of the TFIID complex that regulates RNA polymerase II-dependent transcription. The UniProt recommended name is Transcription initiation factor TFIID subunit 3 (TAF3). This subunit serves as both a structural and regulatory component linking core promoter recognition to transcriptional activation.

Functionally, TAF3 antibody identifies a 929-amino-acid nuclear protein that contains a PHD finger domain recognizing histone H3K4me3, a chromatin mark associated with active transcription. TAF3 interacts with the TATA-binding protein (TBP) and other TAFs to form the pre-initiation complex, directing RNA polymerase II to target promoters. It also mediates enhancer-promoter looping during gene activation.

The TAF3 gene is located on chromosome 10q22.1 and is broadly expressed in embryonic and differentiated tissues. In muscle and hematopoietic cells, TAF3 cooperates with transcription factors like MyoD and C/EBP to regulate lineage-specific gene expression. Through its histone mark recognition, TAF3 connects epigenetic signals to transcriptional

initiation.

Pathologically, dysregulation of TAF3 has been linked to developmental disorders and cancers. Altered TAF3 expression affects chromatin accessibility and transcriptional fidelity, contributing to tumor progression or differentiation defects. Research using TAF3 antibody supports studies in transcription regulation, epigenetics, and cell fate determination.

TAF3 antibody is validated for western blotting, immunofluorescence, and chromatin immunoprecipitation to detect transcriptional machinery components. NSJ Bioreagents provides TAF3 antibody reagents optimized for transcriptional and chromatin research.

Structurally, Transcription initiation factor TFIID subunit 3 contains a plant homeodomain (PHD) that binds methylated histones, enabling crosstalk between chromatin and transcriptional complexes. This antibody allows detailed analysis of TAF3Â's role in gene regulation and epigenetic control.

Application Notes

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

Immunogen

E.coli-derived human TAF3 recombinant protein (Position: M1-E612) was used as the immunogen for the TAF3 antibody.

Storage

After reconstitution, the TAF3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.