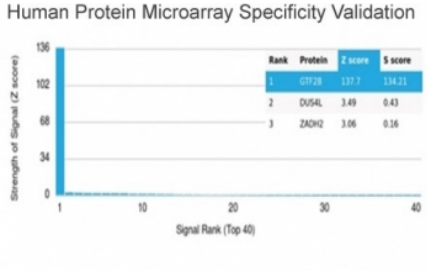
TFIIB Antibody / GTF2B Antibody [clone PCRP-GTF2B-1D1] (V9650)

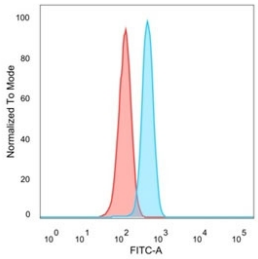
Catalog No.	Formulation	Size
V9650-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9650-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9650SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

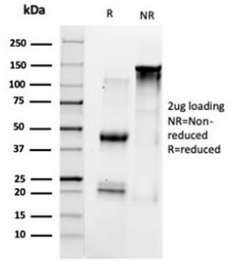
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	PCRP-GTF2B-1D1
Purity	Protein A/G affinity
UniProt	Q00403
Localization	Nucleus
Applications	ELISA (order BSA-free format for coating) Flow cytometry: 1-2ug/million cells
Limitations	This TFIIB Antibody / GTF2B Antibody is available for research use only.



TFIIB Antibody Protein Microarray Validation. Protein microarray analysis of TFIIB Antibody / GTF2B Antibody, clone PCRP-GTF2B-1D1, using a HuProt array containing more than 19,000 full-length human proteins. The intended GTF2B/TFIIB target produces a strongly separated signal relative to other proteins on the array, supporting antibody specificity. The Z-score represents signal strength in standard deviations above the mean array signal, while the S-score represents the difference between the intended target Z-score and the next-highest signal and therefore reflects relative target specificity.



TFIIB Antibody in Human HeLa Cervical Cancer Cells FACS. Flow cytometry testing of TFIIB Antibody / GTF2B Antibody, clone PCRP-GTF2B-1D1, in PFA-fixed human HeLa cervical cancer cells. The antibody-stained population is shown in blue and the isotype control in red. A clear fluorescence shift relative to the isotype control demonstrates detection of TFIIB/GTF2B in human HeLa cells.



TFIIB Antibody Purity Analysis by SDS-PAGE. Electrophoretic analysis of purified, BSA-free TFIIB Antibody / GTF2B Antibody, clone PCRP-GTF2B-1D1, to evaluate antibody purity and integrity. The observed antibody protein pattern supports the purity and integrity of the monoclonal antibody preparation.

Description

TFIIB Antibody / GTF2B Antibody recognizes transcription initiation factor IIB (TFIIB), a general transcription factor encoded by the GTF2B gene that plays a central role in RNA polymerase II-dependent transcription. TFIIB participates in formation of the transcription preinitiation complex and helps recruit RNA polymerase II to promoter DNA, positioning the polymerase for initiation of gene transcription.

Assembly of the RNA polymerase II transcription machinery requires coordinated interactions among multiple general transcription factors. Following recognition of promoter DNA by TATA-binding protein (TBP), TFIIB associates with the TBP-promoter complex and forms an important bridge between TBP and the RNA polymerase II-TFIIF complex. TFIIB therefore contributes to stabilization and organization of the preinitiation complex and helps establish the architecture required for transcription initiation.

In addition to interacting with TBP and RNA polymerase II, TFIIB can recognize core promoter elements positioned near the TATA box and contributes to transcription start-site selection. The protein contains an N-terminal TFIIB-type zinc-binding domain involved in RNA polymerase II recruitment as well as C-terminal regions important for promoter DNA and TBP interactions. These functions make GTF2B an important target for research into basal transcription, promoter recognition, transcription factor assembly and regulation of gene expression.

Clone PCRP-GTF2B-1D1 is a mouse monoclonal antibody generated against full-length recombinant human GTF2B protein and purified by Protein A/G affinity chromatography. The antibody has also been evaluated against more than 19,000 full-length human proteins using a HuProt protein microarray. NSJ Bioreagents provides this TFIIB Antibody for research into transcription initiation and RNA polymerase II-dependent gene expression. A GTF2B Antibody can support investigation of preinitiation complex formation, TBP interactions and basal transcriptional machinery.

Explore our Transcription Factor Antibodies page for additional reagents targeting proteins involved in transcription initiation, transcriptional regulation and gene expression.

Application Notes

Optimal dilution of the TFIIB Antibody / GTF2B Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the TFIIB antibody.

Storage

Aliquot the TFIIB antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

TFIIB antibody, GTF2B antibody, transcription initiation factor IIB antibody, general transcription factor TFIIB antibody, TF2B antibody

Copyright © NSJ Bioreagents. All rights reserved.