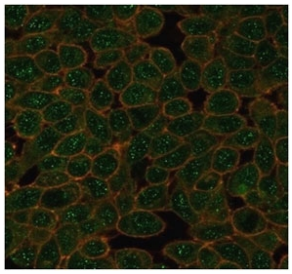
# GTF2A1 Antibody / TFIIA Alpha Beta Antibody [clone PCRP-GTF2A1-1F2] (V9649)

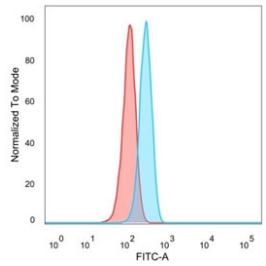
| Catalog No. | Formulation | Size |
|---|---|---|
| V9649-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 100 ug |
| V9649-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 20 ug |
| V9649SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

**Bulk quote request**

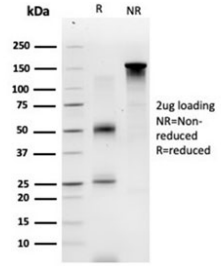
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG2b |
| **Clone Name** | PCRP-GTF2A1-1F2 |
| **Purity** | Protein A/G affinity |
| **UniProt** | P52655 |
| **Localization** | Nucleus, cytoplasm |
| **Applications** | ELISA (order BSA-free format for coating)<br>Flow cytometry: 1-2ug/million cells<br>Immunofluorescence: 1-2ug/ml |
| **Limitations** | This GTF2A1 Antibody / TFIIA Alpha Beta Antibody is available for research use only. |



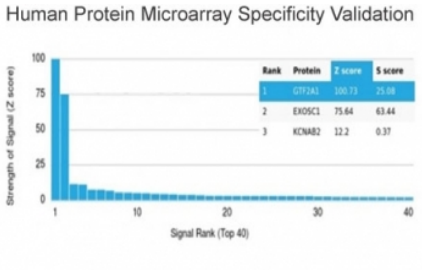
GTF2A1 Antibody in Human HeLa Cervical Cancer Cells IF. Immunofluorescence testing of GTF2A1 Antibody / TFIIA Alpha Beta Antibody, clone PCRP-GTF2A1-1F2, in human HeLa cervical cancer cells. GTF2A1 staining is shown in green, with DAPI nuclear counterstaining in blue. The staining pattern demonstrates detection of GTF2A1 in human HeLa cells.




GTF2A1 Antibody in Human HeLa Cervical Cancer Cells FACS. Flow cytometry testing of GTF2A1 Antibody / TFIIA Alpha Beta Antibody, clone PCRP-GTF2A1-1F2, in human HeLa cervical cancer cells. The antibody-stained population is compared with the corresponding control population, demonstrating detection of GTF2A1 under the tested conditions.




GTF2A1 Antibody Purity Analysis by SDS-PAGE. Electrophoretic analysis of purified GTF2A1 Antibody / TFIIA Alpha Beta Antibody, clone PCRP-GTF2A1-1F2, under reducing and non-reducing conditions. The observed antibody protein pattern supports the purity and integrity of the monoclonal antibody preparation.




GTF2A1 Antibody Protein Microarray Analysis. Protein microarray analysis of GTF2A1 Antibody / TFIIA Alpha Beta Antibody, clone PCRP-GTF2A1-1F2, using a HuProt array containing more than 19,000 full-length human proteins. Each point represents antibody binding to an individual protein on the array. The Z-score reflects signal strength relative to the array distribution, while the S-score reflects separation of the intended target signal from other protein signals. This analysis evaluates the antibody binding profile across a large panel of human proteins.

## Description

GTF2A1 Antibody / TFIIA Alpha Beta Antibody recognizes general transcription factor IIA subunit 1 (GTF2A1), a component of the basal transcription machinery required for regulation of RNA polymerase II-dependent gene expression. GTF2A1 contributes to the TFIIA complex, which interacts with TATA-binding protein (TBP) at gene promoters and helps stabilize transcription factor-DNA interactions during formation of the transcription preinitiation complex.

Initiation of RNA polymerase II transcription requires the coordinated assembly of general transcription factors, including TFIID, TFIIA, TFIIB, TFIIE, TFIIF and TFIIH. TBP, a component of TFIID, recognizes promoter DNA and provides a platform for recruitment of additional transcription machinery. TFIIA interacts with TBP and promoter DNA, helping stabilize the TBP-DNA complex and influencing interactions between TBP and transcriptional regulatory proteins. Through these functions, TFIIA participates in the control of transcription initiation and gene expression.

GTF2A1 is synthesized as a precursor that is proteolytically processed to generate the alpha and beta subunits of TFIIA, while GTF2A2 encodes the gamma subunit. These components assemble into functional TFIIA. Because GTF2A1 participates directly in the basal transcription machinery, it is studied in research involving transcription factor assembly, promoter recognition, transcriptional regulation and mechanisms controlling RNA polymerase II-mediated gene expression.

Clone PCRP-GTF2A1-1F2 is a mouse monoclonal antibody generated against full-length recombinant human GTF2A1 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 GTF2A1 Antibody for research into transcriptional regulation and gene expression. A TFIIA Alpha Beta Antibody can support investigation of TFIIA function, TBP interactions and transcription preinitiation complex formation.

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

## Application Notes

Optimal dilution of the GTF2A1 Antibody / TFIIA Alpha Beta Antibody should be determined by the researcher.

## Immunogen

Recombinant full-length human protein was used as the immunogen for the GTF2A1 antibody.

## Storage

Aliquot the GTF2A1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

## Alternate Names

GTF2A1 antibody, general transcription factor IIA subunit 1 antibody, TFIIA alpha beta antibody, TFIIA alpha/beta antibody, TF2A1 antibody


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