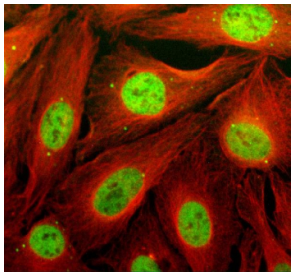
TCF20 Antibody / Transcription factor 20 (FY12029)

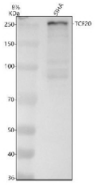
Catalog No.	Formulation	Size
FY12029	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Host	Rabbit
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	Q9UGU0
Localization	Nucleus
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry/Immunofluorescence : 5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This TCF20 antibody is available for research use only.



Immunofluorescent staining of TCF20 using anti-TCF20 antibody (green) and anti-Beta Tubulin antibody (red). TCF20 was detected in an immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/ml rabbit anti-TCF20 antibody and mouse anti-Beta Tubulin antibody overnight at 4oC. DyLight 488 Conjugated Goat Anti-Rabbit IgG and Cy3 Conjugated Goat Anti-Mouse IgG were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37oC. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of TCF20 using anti-TCF20 antibody. Electrophoresis was performed on a 8% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human SIHA whole cell 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-TCF20 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. Expected size of TCF20 ~212 kDa. Observed band at ~250 kDa in human SiHa cell lysate. Although the exact ~250 kDa size is not extensively documented in peer-reviewed Western blot literature, this size shift aligns with antibody supplier validation (observed ~250 kDa) and is consistent with post-translational modifications or isoform variation of this large transcriptional co-regulator.

Description

TCF20 antibody detects Transcription factor 20, encoded by the TCF20 gene. Transcription factor 20 is a nuclear protein that regulates gene transcription by binding to promoter regions and interacting with transcriptional co-regulators. TCF20 antibody provides researchers with a specific reagent for studying transcriptional control, development, and disease processes involving altered gene expression.

Transcription factor 20 contains multiple structural domains, including DNA-binding regions, zinc finger motifs, and protein interaction modules that allow it to function as a versatile transcriptional regulator. Research using TCF20 antibody has shown that it regulates genes involved in neuronal differentiation, immune signaling, and embryonic development. Its ability to partner with transcriptional activators and repressors highlights its broad functional repertoire.

Studies with TCF20 antibody have revealed that mutations in the TCF20 gene cause neurodevelopmental disorders characterized by intellectual disability, autism spectrum features, and hypotonia. These mutations impair transcriptional regulation, leading to widespread developmental consequences. This underscores the importance of Transcription factor 20 in brain development and function.

In addition to neurodevelopmental disorders, altered expression of TCF20 has been associated with cancer. Research using TCF20 antibody has shown that abnormal levels promote dysregulated transcriptional programs that drive proliferation and survival in certain tumor types. This suggests that TCF20 contributes to oncogenesis through transcriptional misregulation.

TCF20 antibody is widely used in chromatin immunoprecipitation, western blotting, and immunohistochemistry. Chromatin immunoprecipitation identifies direct DNA binding targets, western blotting quantifies expression across tissues, and immunohistochemistry reveals nuclear localization in developmental and disease contexts. These applications make TCF20 antibody valuable in both basic and clinical research.

By supplying validated TCF20 antibody reagents, NSJ Bioreagents supports studies into transcriptional regulation, neurodevelopment, and cancer. Detection of Transcription factor 20 provides researchers with insights into how transcriptional regulators control gene expression and development.

Application Notes

Optimal dilution of the TCF20 antibody should be determined by the researcher.

Immunogen

E.coli-derived human TCF20 recombinant protein (Position: D735-K1933) was used as the immunogen for the TCF20 antibody.

Storage

After reconstitution, the TCF20 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.