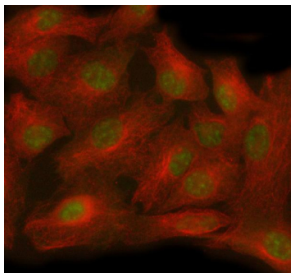
TTC36 Antibody / Tetratricopeptide repeat protein 36 (FY13091)

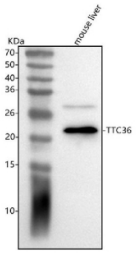
Catalog No.	Formulation	Size
FY13091	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

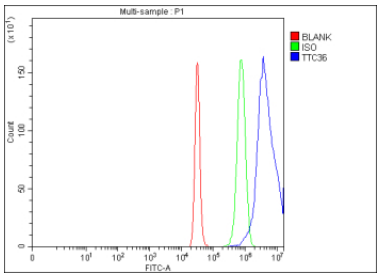
Availability	1-2 days
Species Reactivity	Human, Mouse
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	A6NLP5
Localization	Nuclear
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry : 5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This TTC36 antibody is available for research use only.



Immunofluorescent staining of TTC36 using anti-TTC36 antibody (green) and anti-Beta Tubulin antibody (red). TTC36 was detected in immunocytochemical section of cell. 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-TTC36 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. TTC36 antibody (green) shows nuclear-enriched staining with nucleolar sparing, consistent with reported nuclear localization. Beta-tubulin antibody (red) marks the cytoplasmic microtubule network surrounding the nucleus.



Western blot analysis of TTC36 using anti-TTC36 antibody. Lane 1: mouse liver tissue 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-TTC36 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 enhanced chemiluminescent. A strong band is detected at ~21 kDa, matching the expected size of TTC36. A faint ~28 kDa band is also present and likely represents a modified or isoform variant of TTC36 (e.g., mono-ubiquitinated or glycosylated species), which is variably observed in tissue lysates.



Flow Cytometry analysis of 293T cells using anti-TTC36 antibody. Overlay histogram showing 293T cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TTC36 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Description

TTC36 antibody detects Tetratricopeptide repeat protein 36, a cytoplasmic protein containing multiple TPR motifs that mediate protein-protein interactions involved in cellular signaling and structural organization. The UniProt recommended name is Tetratricopeptide repeat protein 36 (TTC36). Although not fully characterized, TTC36 is believed to function as a molecular scaffold, facilitating the assembly of multiprotein complexes that regulate cell differentiation and signal transduction.

Functionally, TTC36 antibody identifies a 356-amino-acid protein rich in tetratricopeptide repeat sequences, which serve as recognition modules for chaperones and signaling enzymes. TTC36 interacts with cytoskeletal and membrane-associated proteins, suggesting roles in maintaining cell integrity and coordinating intracellular signaling. Its TPR domains likely promote conformational flexibility, enabling diverse binding partners.

The TTC36 gene is located on chromosome 6q22.33 and is expressed in epithelial tissues, gastrointestinal tract, and reproductive organs. Gene expression analyses indicate regulation by Wnt and TGF-beta pathways, implicating TTC36 in developmental and oncogenic signaling. Its expression in enterocytes and hepatocytes supports potential functions in nutrient transport or cellular adhesion.

Pathologically, altered TTC36 expression has been reported in several cancers, including hepatocellular carcinoma and gastric cancer, where its downregulation correlates with increased tumor growth and metastasis. TTC36 is thought to act as a tumor suppressor by modulating signaling cascades that control cell proliferation and adhesion. Research with TTC36 antibody aids in exploring these molecular interactions and their impact on cancer progression.

TTC36 antibody is suitable for western blotting, immunohistochemistry, and immunofluorescence to detect cytoplasmic TPR-containing scaffolds. NSJ Bioreagents offers TTC36 antibody reagents validated for studies of protein complex assembly, signaling regulation, and epithelial cell biology.

Structurally, TTC36 features tandem TPR motifs that create a solenoid-like architecture, enabling multipoint interactions with diverse proteins. This antibody supports detailed investigations into TTC36's scaffolding roles in intracellular communication and cancer biology.

Application Notes

Optimal dilution of the TTC36 antibody should be determined by the researcher.

Immunogen

E.coli-derived human TTC36 recombinant protein (Position: M1-D187) was used as the immunogen for the TTC36 antibody.

Storage

After reconstitution, the TTC36 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.