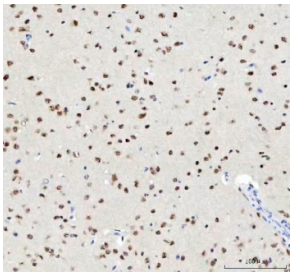
TARDBP Antibody / TAR DNA binding protein / TDP43 (RQ8739)

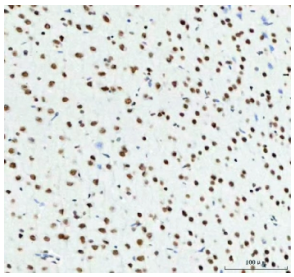
Catalog No.	Formulation	Size
RQ8739	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

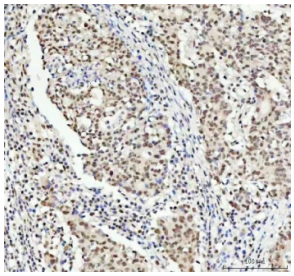
Availability	1-3 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q13148
RRID	AB_3754901
Localization	Nuclear, cytoplasmic
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml Immunoprecipitation: 2ug per 500ug of lysate
Limitations	This TARDBP antibody is available for research use only.



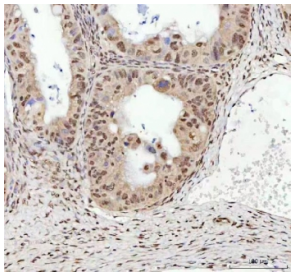
TARDBP Antibody Mouse Brain Tissue Immunohistochemistry. IHC staining of FFPE mouse brain tissue with TARDBP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



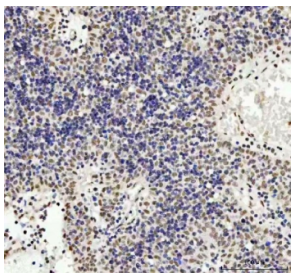
TARDBP Antibody Rat Brain Tissue Immunohistochemistry. IHC staining of FFPE rat brain tissue with TARDBP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



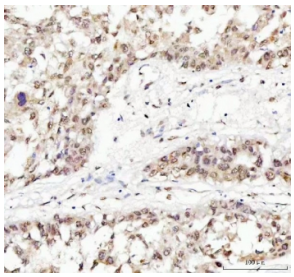
TARDBP Antibody Colorectal Adenocarcinoma Immunohistochemistry. IHC staining of FFPE human colorectal adenocarcinoma tissue with TARDBP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



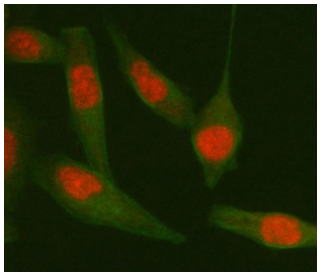
TARDBP Antibody Ovarian Cancer Immunohistochemistry. IHC staining of FFPE human ovarian cancer tissue with TARDBP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



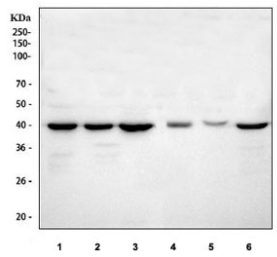
TARDBP Antibody Spleen Immunohistochemistry. staining of FFPE human spleen tissue with TARDBP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



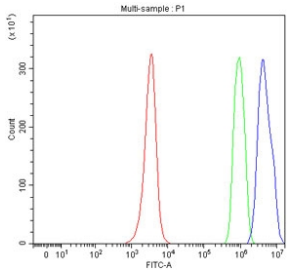
TARDBP Antibody Liver Cancer Immunohistochemistry. IHC staining of FFPE human liver cancer tissue with TARDBP antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



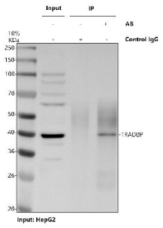
TARDBP Antibody HeLa Cell IF. Immunofluorescent staining of FFPE human HeLa cells with TARDBP antibody (red) and Beta Tubulin mAb (green). HIER: steam section in pH6 citrate buffer for 20 min.



TARDBP Antibody WB. Western blot testing of 1) human HeLa, 2) human Jurkat, 3) human HepG2, 4) rat C6, 5) mouse pancreas and 6) mouse Neuro-2a cell lysate with TARDBP antibody. Predicted molecular weight ~45 KDa, commonly observed at 43-45 kDa.



TARDBP Antibody JK Cell FACS. Flow cytometry testing of fixed and permeabilized human JK cells with TARDBP antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= TARDBP antibody.



TARDBP Antibody IP. Immunoprecipitation of TARDBP protein from 500ug of human HepG2 whole cell lysate with 2ug of TARDBP antibody.

Description

TARDBP antibody targets TAR DNA binding protein 43 (TARDBP), also known as TDP-43, a ubiquitously expressed RNA-binding protein that regulates multiple aspects of RNA metabolism. TARDBP localizes predominantly to the nucleus under basal conditions, with dynamic shuttling to the cytoplasm in response to cellular signaling and stress. The protein contains two RNA recognition motifs and a glycine-rich C-terminal domain that together enable binding to RNA and DNA targets involved in transcription, pre-mRNA splicing, RNA transport, and stability. Through these activities, TARDBP plays a central role in post-transcriptional gene regulation.

Functionally, TARDBP binds UG-rich RNA sequences and influences alternative splicing decisions, transcript maturation, and mRNA turnover across a wide range of genes. TARDBP expression is broadly detected across tissues, reflecting its fundamental role in maintaining normal cellular gene expression programs. The protein also participates in autoregulatory feedback loops that control its own mRNA levels, helping maintain appropriate intracellular TARDBP abundance. A TARDBP antibody supports studies examining RNA processing and gene expression control in diverse biological contexts.

TARDBP is highly dynamic and responsive to cellular stress. Under conditions such as oxidative stress or impaired RNA metabolism, TARDBP can redistribute to the cytoplasm and associate with stress granules, reflecting its involvement in adaptive RNA handling pathways. Persistent mislocalization or altered regulation of TARDBP disrupts RNA homeostasis and can affect cell viability. These features highlight the importance of tightly controlled TARDBP localization and function for cellular health and stress adaptation.

From a biological and disease-relevance perspective, TARDBP is extensively studied for its involvement in neurodegenerative disorders, where abnormal aggregation and cytoplasmic accumulation of TARDBP are hallmark features. Dysregulation of TARDBP-dependent RNA processing has been linked to altered neuronal gene expression and impaired cellular resilience. Beyond the nervous system, TARDBP also contributes to RNA regulatory networks in muscle, immune, and epithelial cells, underscoring its broad functional relevance.

At the molecular level, TARDBP is encoded by the TARDBP gene and produces a protein of approximately 414 amino acids. The proteinÃ¢Â€Â™s RNA recognition motifs mediate sequence-specific RNA binding, while the C-terminal region supports protein-protein interactions and functional regulation. TARDBP activity is influenced by post-translational modifications and cellular localization dynamics. A TARDBP antibody supports research applications focused on RNA biology, post-transcriptional regulation, and cellular stress responses, with NSJ Bioreagents providing reagents intended for research use.

For broader analysis of TDP-43 biology and RNA-processing pathways, explore our TARDBP Antibody / RNA Binding Protein Marker page featuring knockdown-validated western blot data together with multi-species and immunohistochemistry validation of endogenous TDP-43 expression.

Application Notes

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

Immunogen

An E.coli-derived human recombinant protein (amino acids M1-H264) was used as the immunogen for the TARDBP antibody.

Storage

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

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