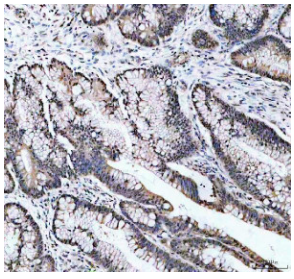
YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody (RQ6218)

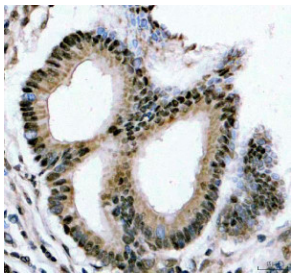
Catalog No.	Formulation	Size
RQ6218	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

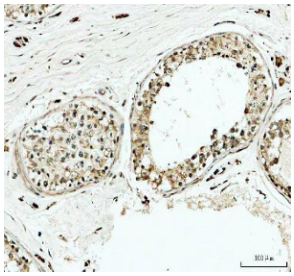
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q96MU7
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Immunoprecipitation : 2ug per 500ug of lysate Direct ELISA : 0.1-0.5ug/ml
Limitations	This YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody is available for research use only.



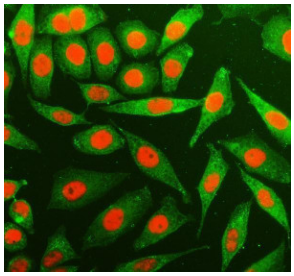
YTHDC1 Antibody Human Colon Cancer IHC. Immunohistochemical analysis of YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody in FFPE human colon cancer tissue. Following heat-induced epitope retrieval in pH 8.0 EDTA buffer, sections were stained with YTHDC1 antibody at 2 ug/ml and detected using an HRP-conjugated secondary antibody with DAB chromogen. Predominantly nuclear staining is observed in the malignant epithelial cells, consistent with the nuclear localization of YTHDC1 and its role as an m6A RNA reader that regulates RNA processing and gene expression. This YTHDC1 Antibody, a Nuclear m6A Reader Protein Antibody, is well suited for studies of epitranscriptomic regulation and YTHDC1 expression in cancer tissues.



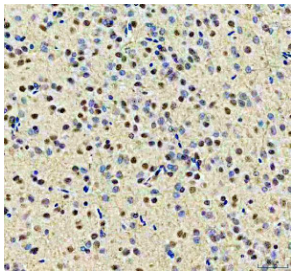
YTHDC1 Antibody Human Colon Adenocarcinoma IHC. Immunohistochemical analysis of YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody in FFPE human colon adenocarcinoma tissue. Following heat-induced epitope retrieval in pH 8.0 EDTA buffer, sections were stained with YTHDC1 antibody at 2 ug/ml and detected using an HRP-conjugated secondary antibody with DAB chromogen. Distinct nuclear staining is observed in the neoplastic glandular epithelial cells, consistent with the predominantly nuclear localization of YTHDC1 as an m6A RNA reader involved in RNA processing and gene expression. This YTHDC1 Antibody, a Nuclear m6A Reader Protein Antibody, is well suited for studies of epitranscriptomic regulation and YTHDC1 expression in colorectal cancer.



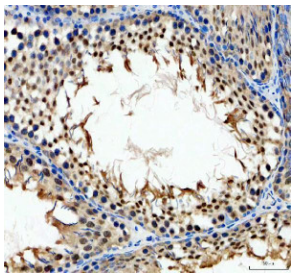
YTHDC1 Antibody Human Testicular Cancer IHC. Immunohistochemical analysis of YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody in FFPE human testicular cancer tissue. Following heat-induced epitope retrieval in pH 8.0 EDTA buffer, sections were stained with YTHDC1 antibody at 2 ug/ml and detected using an HRP-conjugated secondary antibody with DAB chromogen. Predominantly nuclear staining is observed in the neoplastic cells, with weaker cytoplasmic staining in some areas, consistent with the primary nuclear localization of YTHDC1 and its role as an m6A RNA reader involved in RNA processing and gene regulation. This YTHDC1 Antibody, a Nuclear m6A Reader Protein Antibody, is well suited for investigating epitranscriptomic regulation and YTHDC1 expression in testicular cancer tissues.



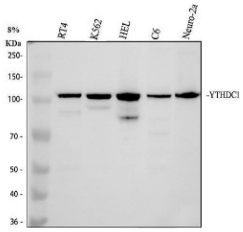
YTHDC1 Antibody SiHa Cell IF. Immunofluorescence analysis of YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody in SiHa cells. Cells were subjected to enzyme antigen retrieval, stained with YTHDC1 antibody at 5 ug/ml and co-labeled with an alpha tubulin antibody. YTHDC1 is shown in red, alpha tubulin in green and nuclei were counterstained with DAPI. The staining demonstrates predominant nuclear localization of YTHDC1, consistent with its role as a nuclear m6A reader that regulates RNA splicing, mRNA export and epitranscriptomic gene regulation. This YTHDC1 Antibody, a Nuclear m6A Reader Protein Antibody, is suitable for investigating subcellular localization and RNA processing pathways by immunofluorescence.



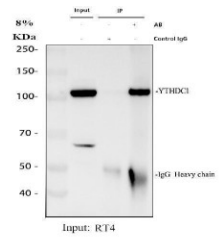
YTHDC1 Antibody Rat Brain IHC. Immunohistochemical analysis of YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody in FFPE rat brain tissue. Following heat-induced epitope retrieval in pH 8.0 EDTA buffer, sections were stained with YTHDC1 antibody at 2 ug/ml and detected using an HRP-conjugated secondary antibody with DAB chromogen. Strong nuclear staining is observed throughout the brain tissue, consistent with the predominantly nuclear localization of YTHDC1 as an m6A RNA reader involved in RNA processing and gene regulation. This YTHDC1 Antibody, a Nuclear m6A Reader Protein Antibody, is suitable for investigating nuclear RNA metabolism and epitranscriptomic regulation in tissue sections.



YTHDC1 Antibody Rat Testis IHC. Immunohistochemical analysis of YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody in FFPE rat testis tissue. Following heat-induced epitope retrieval in pH 8.0 EDTA buffer, sections were stained with YTHDC1 antibody at 2 ug/ml and detected using an HRP-conjugated secondary antibody with DAB chromogen. Strong predominantly nuclear staining is observed in spermatogenic cells within the seminiferous tubules, consistent with the nuclear localization of YTHDC1 and its established role in m6A-dependent RNA processing during germ cell development. This YTHDC1 Antibody, a Nuclear m6A Reader Protein Antibody, is well suited for studies of RNA methylation, spermatogenesis and epitranscriptomic regulation in reproductive tissues.



YTHDC1 Antibody Human, Rat and Mouse WB. Western blot analysis of YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody detected endogenous YTHDC1 in whole cell lysates. Lane 1: human RT4 cells; Lane 2: human K562 cells; Lane 3: human HEL cells; Lane 4: rat C6 cells; Lane 5: mouse Neuro-2a cells. A rabbit polyclonal YTHDC1 antibody was used at 0.5 ug/ml. A prominent band is detected at approximately 110 kDa, although the predicted molecular weight of YTHDC1 is approximately 85 kDa. The higher apparent molecular weight is consistent with the anomalous migration reported for YTHDC1. This YTHDC1 Antibody, a Nuclear m6A Reader Protein Antibody, demonstrates cross-species detection suitable for studies of RNA methylation, RNA processing and epitranscriptomic regulation.



YTHDC1 Antibody RT4 Cell IP. Immunoprecipitation of YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody from RT4 whole cell lysate followed by Western blot analysis. Lane 1: RT4 input lysate (30 ug); Lane 2: rabbit control IgG immunoprecipitation; Lane 3: YTHDC1 antibody immunoprecipitation using 2 ug antibody with 500 ug RT4 lysate. Immunoblot detection was performed using the same YTHDC1 antibody at 0.5 ug/ml. A specific band is detected at approximately 110 kDa, despite a predicted molecular weight of approximately 85 kDa, confirming efficient enrichment of endogenous YTHDC1. This YTHDC1 Antibody, a Nuclear m6A Reader Protein Antibody, is suitable for immunoprecipitation studies of m6A RNA-binding complexes and nuclear RNA processing.

Description

YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody recognizes YTH Domain Containing 1 (YTHDC1), a nuclear N6-methyladenosine (m6A) reader protein that binds methylated RNA to regulate multiple aspects of RNA metabolism. YTHDC1 selectively recognizes m6A-modified transcripts through its conserved YTH domain and coordinates processes including alternative RNA splicing, mRNA export and transcript stability. By linking RNA methylation to post-transcriptional gene regulation, YTHDC1 plays a central role in the rapidly expanding field of epitranscriptomics. Also known as YT521-B, the protein functions within nuclear RNA-processing complexes to ensure accurate regulation of gene expression. NSJ Bioreagents provides YTHDC1 antibodies for researchers investigating RNA biology, gene regulation and epitranscriptomic mechanisms.

YTHDC1 is predominantly localized within the nucleus, where it interacts with splicing factors, RNA-binding proteins and components of the mRNA export machinery. Through these interactions, YTHDC1 influences exon selection, transcript maturation and nuclear export of methylated messenger RNAs. The protein contributes to embryonic development, stem cell maintenance, gametogenesis and cellular differentiation by regulating the expression of genes required for normal growth and tissue homeostasis. Loss or dysregulation of YTHDC1 disrupts RNA processing and has been associated with altered cell fate decisions and disease-related transcriptional programs.

Current research has established YTHDC1 as an essential regulator of m6A-dependent RNA metabolism and nuclear gene expression. Investigators study its role in cancer progression, developmental biology, immune regulation and neurological function, where altered RNA methylation can profoundly influence cellular behavior. YTHDC1 also serves as an important model for understanding how epitranscriptomic modifications coordinate RNA processing with transcriptional control. Measuring YTHDC1 expression provides valuable insight into nuclear RNA biology, m6A signaling pathways and mechanisms that regulate transcript fate.

An YTHDC1 Antibody is a valuable reagent for detecting this nuclear m6A reader protein by Western blotting, immunohistochemistry, immunofluorescence, flow cytometry and related immunoassays. By enabling reliable analysis of protein expression and localization, a YTHDC1 Antibody supports investigations into RNA methylation, alternative splicing, mRNA export and epitranscriptomic regulation.

Researchers investigating nuclear RNA metabolism and gene regulation may also be interested in our Nuclear Marker

Antibodies page, which features antibodies against proteins localized to the nucleus for studies of transcription, RNA processing and nuclear function.

Application Notes

Optimal dilution of the YTHDC1 Antibody / Nuclear m6A Reader Protein Antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids S326-K651) was used as the immunogen for the YTHDC1 antibody.

Storage

After reconstitution, the YTHDC1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

YTHDC1 antibody, YTH Domain Containing 1 antibody, Nuclear m6A Reader Protein antibody, YT521-B antibody, YT521 antibody

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