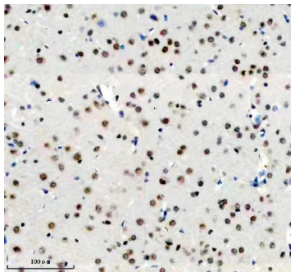
DDX17 Antibody / DEAD-box helicase 17 [clone 23D15] (FY13420)

Catalog No.	Formulation	Size
FY13420	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

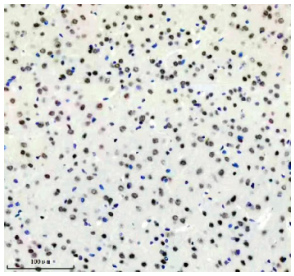
Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	23D15
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q92841
Localization	Nucleus, Cytoplasm
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200
Limitations	This DDX17 antibody is available for research use only.

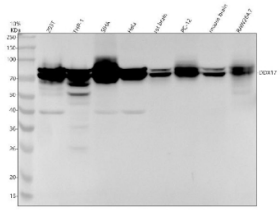


Immunohistochemical staining of FFPE rat brain tissue with DDX17 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Immunohistochemical staining of FFPE mouse brain tissue with DDX17 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunohistochemical staining of FFPE mouse brain tissue with DDX17 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis of DDX17 expression using anti-DDX17 antibody. Cell lysates include human 293T, THP-1, SH-SY5Y, HeLa, rat brain and PC-12, and mouse brain and RAW264.7 cells. A strong band is detected at approximately 70-72 kDa, consistent with the predicted molecular weight of DDX17. A weaker band near 75 kDa may represent a modified form of the protein, while a faint lower band observed in some human samples likely reflects partial proteolysis.

Description

DDX17 antibody targets DEAD-box helicase 17 (DDX17), a member of the DEAD-box RNA helicase family that plays a central role in RNA metabolism and gene expression regulation. DDX17 is predominantly localized to the nucleus, where it associates with chromatin and RNA-processing complexes, although cytoplasmic distribution has also been reported under certain cellular conditions. As an ATP-dependent RNA helicase, DDX17 participates in remodeling RNA secondary structures, a fundamental process required for efficient transcription, splicing, and RNA maturation. This functional versatility places DDX17 at the core of post-transcriptional regulatory networks.

Functionally, DDX17 is best characterized for its involvement in pre-mRNA splicing and transcriptional regulation. It acts as a co-regulator by interacting with transcription factors, RNA polymerase II, and components of the spliceosome, thereby influencing exon selection and transcript diversity. DDX17 can modulate alternative splicing events that are critical for cell-type specific gene expression programs. Through these activities, DDX17 contributes to the fine-tuning of gene expression in response to developmental cues and signaling pathways. A DDX17 antibody supports studies focused on RNA processing and transcriptional control mechanisms.

DDX17 is widely expressed across tissues and cell types, reflecting its essential role in fundamental cellular processes. Its expression and activity are dynamically regulated during differentiation and in response to cellular stress. DDX17 often functions in concert with closely related RNA helicases, forming regulatory complexes that integrate transcriptional and post-transcriptional control. Analysis of DDX17 expression patterns can provide insight into how RNA helicase activity contributes to cellular plasticity and adaptive gene regulation.

From a biological and disease-relevance perspective, DDX17 has been implicated in development, cancer biology, and cellular stress responses. Dysregulation of DDX17 expression or function has been associated with altered splicing patterns and transcriptional programs that may contribute to tumor progression and metastasis. DDX17 has also been linked to pathways governing cell proliferation and differentiation, making it an important target for studies investigating RNA-based regulatory mechanisms in disease contexts. Understanding how DDX17 integrates RNA helicase activity with

transcriptional control remains an active area of research.

At the molecular level, the DDX17 gene encodes a protein of approximately 72 kDa containing conserved DEAD-box motifs required for ATP binding and helicase activity. These motifs enable DDX17 to unwind RNA structures and facilitate RNA-protein interactions within regulatory complexes. Proper DDX17 function depends on coordinated interactions with RNA substrates and partner proteins. A DDX17 antibody enables detection and analysis of DDX17 expression in diverse experimental systems, supporting research into RNA biology, gene regulation, and disease-associated transcriptional dysregulation, with NSJ Bioreagents providing reagents intended for research use.

Application Notes

Optimal dilution of the DDX17 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human DEAD-box helicase 17 protein was used as the immunogen for the DDX17 antibody.

Storage

Store the DDX17 antibody at -20oC.