

**DDX41 Antibody(N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19450a****Specification**

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**DDX41 Antibody(N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9UJV9</a>
Other Accession	<a href="#">O91VN6</a> , <a href="#">NP_057306.2</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	69838
Antigen Region	141-169

**DDX41 Antibody(N-term) - Additional Information****Gene ID** 51428**Other Names**

Probable ATP-dependent RNA helicase DDX41, DEAD box protein 41, DEAD box protein abstract homolog, DDX41, ABS

**Target/Specificity**

This DDX41 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 141-169 amino acids from the N-terminal region of human DDX41.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

DDX41 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**DDX41 Antibody(N-term) - Protein Information****Name** DDX41

## Synonyms ABS

**Function** Multifunctional protein that participates in many aspects of cellular RNA metabolism. Plays pivotal roles in innate immune sensing and hematopoietic homeostasis (PubMed:[34473945](#)). Recognizes foreign or self-nucleic acids generated during microbial infection, thereby initiating anti-pathogen responses (PubMed:[23222971](#)). Mechanistically, phosphorylation by BTK allows binding to dsDNA leading to interaction with STING1 (PubMed:[25704810](#)). Modulates the homeostasis of dsDNA through its ATP-dependent DNA-unwinding activity and ATP-independent strand-annealing activity (PubMed:[35613581](#)). In turn, induces STING1- mediated type I interferon and cytokine responses to DNA and DNA viruses (PubMed:[35613581](#)). Selectively modulates the transcription of certain immunity-associated genes by regulating their alternative splicing (PubMed:[33650667](#)). Binds to RNA (R)-loops, structures consisting of DNA/RNA hybrids and a displaced strand of DNA that occur during transcription, and prevents their accumulation, thereby maintaining genome stability (PubMed:[36229594](#)). Also participates in pre-mRNA splicing, translational regulation and snoRNA processing, which is essential for ribosome biogenesis (PubMed:[36229594](#), PubMed:[36780110](#)).

## Cellular Location

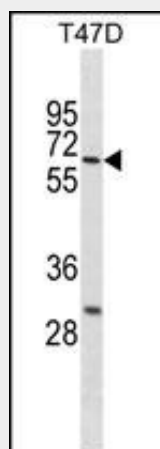
Nucleus. Cytoplasm Note=Predominantly present in the nucleus and traffics to the cytoplasm, specifically in the perinuclear region, after DNA stimulation.

## DDX41 Antibody(N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## DDX41 Antibody(N-term) - Images



DDX41 Antibody (N-term) (Cat. #AP19450a) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the DDX41 antibody detected the DDX41 protein (arrow).

## DDX41 Antibody(N-term) - Background

DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases. They are implicated in a number of cellular processes involving alteration of RNA secondary structure, such as translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, some members of the DEAD box protein family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. This gene encodes a member of this family. The function of this member has not been determined. Based on studies in *Drosophila*, the abstract gene is widely required during post-transcriptional gene expression.

#### **DDX41 Antibody(N-term) - References**

Wu, C., et al. Proteomics 7(11):1775-1785(2007)  
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :  
Olsen, J.V., et al. Cell 127(3):635-648(2006)  
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Nousiainen, M., et al. Proc. Natl. Acad. Sci. U.S.A. 103(14):5391-5396(2006)