

DDX41 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55524

Specification

DDX41 Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>O9UIV9</u>

Reactivity Rat, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 70 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

from human DDX41

Epitope Specificity 51-150/622

Isotype IgG
Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus

SIMILARITY Belongs to the DEAD box helicase family.

DDX41 subfamily. Contains 1 CCHC-type

zinc finger. Contains 1 helicase

ATP-binding domain. Contains 1 helicase

C-terminal domain.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

affinity purified by Protein A

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 abstrakt gene is widely required during post-transcriptional gene expression. [provided by RefSeq, Jul 2008]

DDX41 Polyclonal Antibody - Additional Information

Gene ID 51428

Other Names

Probable ATP-dependent RNA helicase DDX41, 3.6.4.13, DEAD box protein 41, DEAD box protein abstrakt homolog, DDX41, ABS



Dilution

WB~~1:1000<br \><span class
="dilution_IHC-P">IHC-P~~N/A<br \><span class
="dilution_IHC-F">IHC-F~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

DDX41 Polyclonal Antibody - 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 Polyclonal Antibody - Protocols

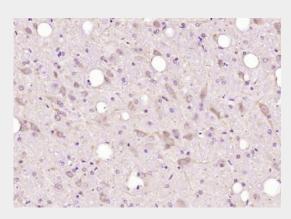
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

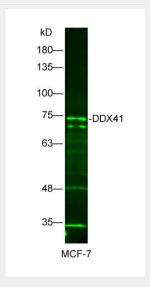


- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DDX41 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DDX41) Polyclonal Antibody, Unconjugated (bs-14326R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Sample: MCF-7 Cells Lysate at 25 ug

Primary: Anti-DDX41(bs-143126R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 70kD Observed band size: 70kD