

DDX41 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55524

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<u>Q9UJV9</u>
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69838

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=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50 0,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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.

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: <u>34473945</u>). Recognizes foreign or self-nucleic acids generated during microbial infection, thereby initiating anti-pathogen responses (PubMed: <u>23222971</u>). Mechanistically, phosphorylation by BTK allows binding to dsDNA leading to interaction with STING1 (PubMed: <u>25704810</u>). Modulates the homeostasis of dsDNA through its ATP-dependent DNA-unwinding activity and ATP-independent strand-annealing activity (PubMed: <u>35613581</u>). In turn, induces STING1- mediated type I interferon and cytokine responses to DNA and DNA viruses (PubMed: <u>35613581</u>). Selectively modulates the transcription of certain immunity-associated genes by regulating their alternative splicing (PubMed: <u>33650667</u>). 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:<u>36229594</u>). Also participates in pre-mRNA splicing, translational regulation and snoRNA processing, which is essential for ribosome biogenesis (PubMed:<u>36229594</u>, PubMed:<u>36780110</u>).

Cellular Location

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

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 (AP55524) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.