

**DDX41 (aa468-480) Antibody (internal region)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF4100a****Specification**

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**DDX41 (aa468-480) Antibody (internal region) - Product Information**

|                   |                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------|
| Application       | WB, IHC, Pep-ELISA                                                                                                 |
| Primary Accession | <a href="#">O9UJV9</a>                                                                                             |
| Other Accession   | <a href="#">NP_057306.2</a> , <a href="#">51428</a> , <a href="#">72935 (mouse)</a> , <a href="#">314336 (rat)</a> |
| Reactivity        | Human                                                                                                              |
| Predicted         | Mouse, Rat, Dog                                                                                                    |
| Host              | Goat                                                                                                               |
| Clonality         | Polyclonal                                                                                                         |
| Concentration     | 0.5 mg/ml                                                                                                          |
| Isotype           | IgG                                                                                                                |
| Calculated MW     | 69838                                                                                                              |

**DDX41 (aa468-480) Antibody (internal region) - 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  
IHC~~1:100~500  
Pep-ELISA~~N/A**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

DDX41 (aa468-480) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**DDX41 (aa468-480) Antibody (internal region) - 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:<a href="http://www.uniprot.org/citations/34473945" target="\_blank">34473945</a>). Recognizes foreign or self-nucleic acids generated during microbial infection, thereby initiating anti-pathogen responses (PubMed:<a href="http://www.uniprot.org/citations/23222971" target="\_blank">23222971</a>). Mechanistically, phosphorylation by BTK allows binding to dsDNA leading to interaction with STING1 (PubMed:<a href="http://www.uniprot.org/citations/25704810" target="\_blank">25704810</a>). Modulates the homeostasis of dsDNA through its ATP-dependent DNA-unwinding activity and ATP-independent strand-annealing activity (PubMed:<a href="http://www.uniprot.org/citations/35613581" target="\_blank">35613581</a>). In turn, induces STING1- mediated type I interferon and cytokine responses to DNA and DNA viruses (PubMed:<a href="http://www.uniprot.org/citations/35613581" target="\_blank">35613581</a>). Selectively modulates the transcription of certain immunity-associated genes by regulating their alternative splicing (PubMed:<a href="http://www.uniprot.org/citations/33650667" target="\_blank">33650667</a>). 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:<a href="http://www.uniprot.org/citations/36229594" target="\_blank">36229594</a>). Also participates in pre-mRNA splicing, translational regulation and snoRNA processing, which is essential for ribosome biogenesis (PubMed:<a href="http://www.uniprot.org/citations/36229594" target="\_blank">36229594</a>, PubMed:<a href="http://www.uniprot.org/citations/36780110" target="\_blank">36780110</a>).

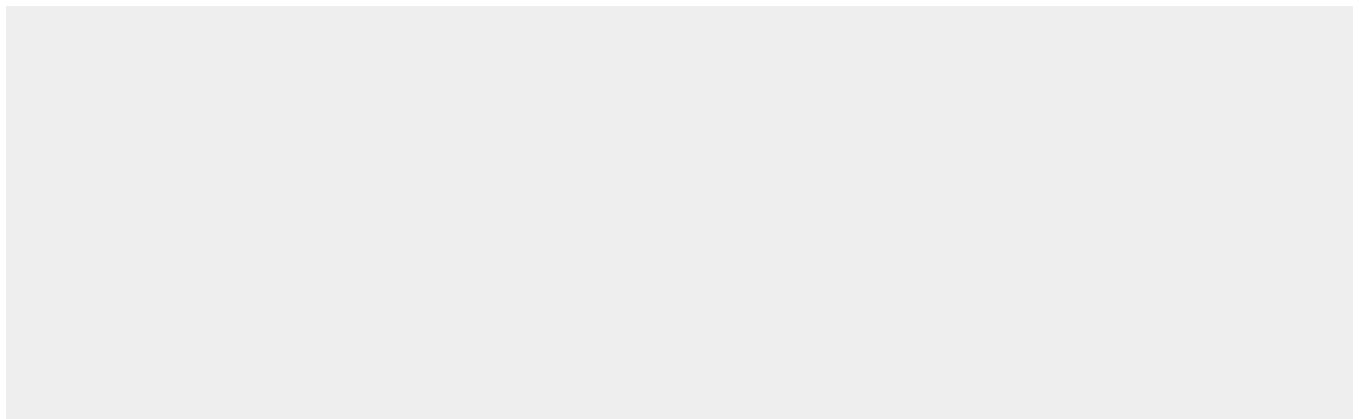
**Cellular Location**

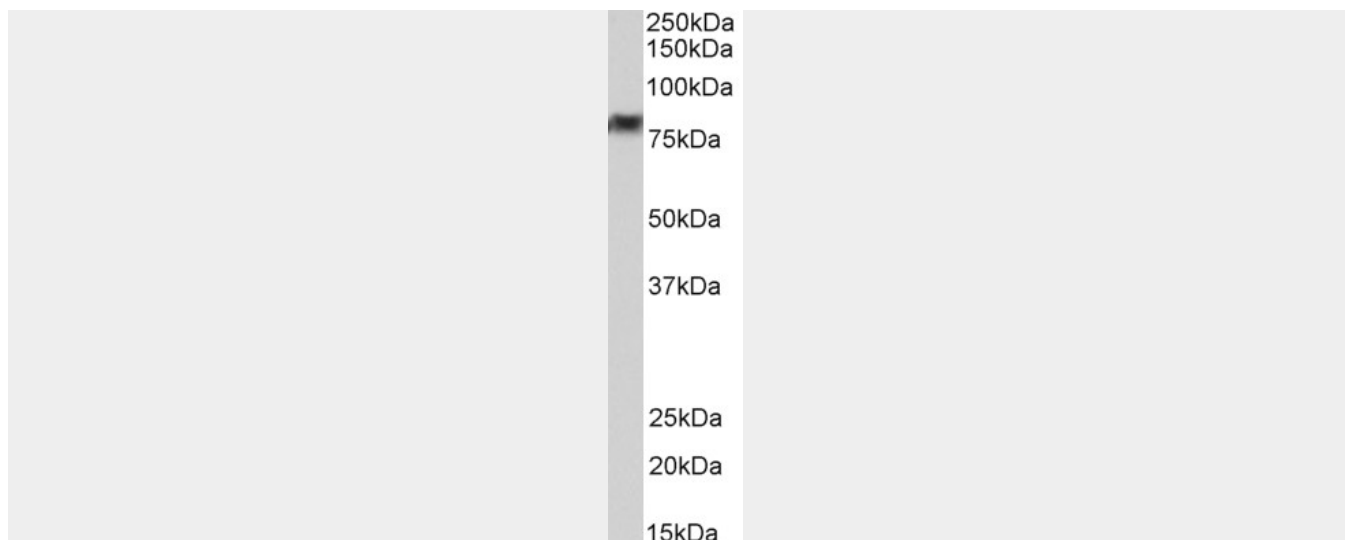
Nucleus. Cytoplasm Note=Predominantly present in the nucleus and traffics to the cytoplasm, specifically in the perinuclear region, after DNA stimulation.

**DDX41 (aa468-480) Antibody (internal region) - Protocols**

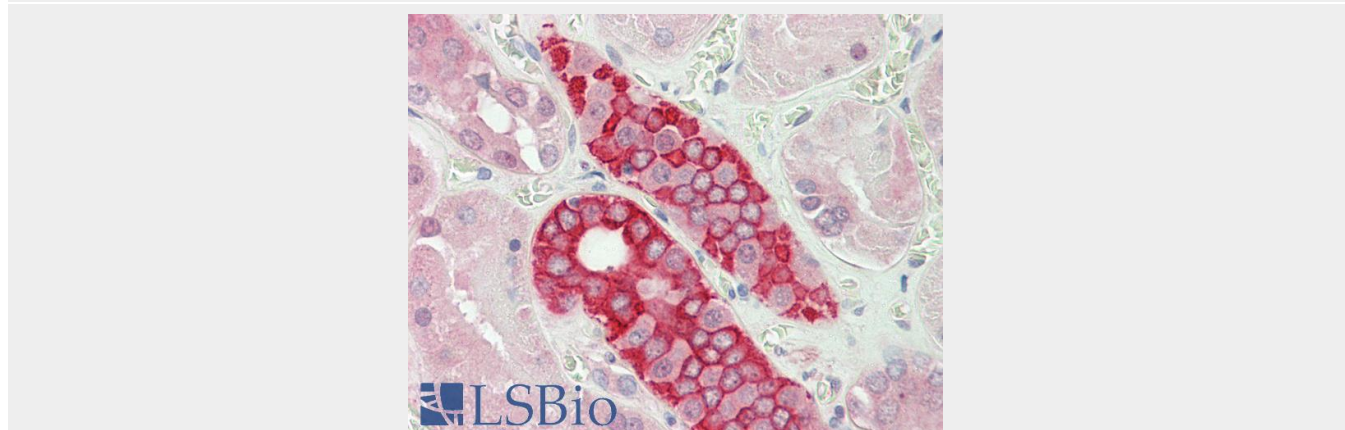
Provided below are standard protocols that you may find useful for product applications.

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

**DDX41 (aa468-480) Antibody (internal region) - Images**



AF4100a (0.5µg/ml) staining of Human Bone Marrow lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



AF4100a (5µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

#### **DDX41 (aa468-480) Antibody (internal region) - References**

The helicase DDX41 senses intracellular DNA mediated by the adaptor STING in dendritic cells. Zhang Z, Yuan B, Bao M, Lu N, Kim T, Liu YJ. Nature immunology 2011 Oct 12 (10): 959-65. PMID: 21892174