

## **DDX23 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4866c

#### Specification

# DDX23 Antibody (Center) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>O9BUO8</u> Human Rabbit Polyclonal Rabbit IgG 248-277

## **DDX23 Antibody (Center) - Additional Information**

Gene ID 9416

**Other Names** Probable ATP-dependent RNA helicase DDX23, 100 kDa U5 snRNP-specific protein, DEAD box protein 23, PRP28 homolog, U5-100kD, DDX23

**Target/Specificity** This DDX23 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 248-277 amino acids from the Central region of human DDX23.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

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** 

DDX23 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### DDX23 Antibody (Center) - Protein Information

Name DDX23 (<u>HGNC:17347</u>)

Function Involved in pre-mRNA splicing and its phosphorylated form (by SRPK2) is required for



spliceosomal B complex formation (PubMed:<u>18425142</u>). Independently of its spliceosome formation function, required for the suppression of incorrect R-loops formed during transcription; R-loops are composed of a DNA:RNA hybrid and the associated non-template single-stranded DNA (PubMed:<u>28076779</u>).

#### **Cellular Location**

Nucleus. Chromosome. Note=During transcription, accumulates at chromatin loci where unscheduled R-loops form and colocalizes with paused 'Ser-5'-phosphorylated POLR2A/RNA polymerase II and kinase SRPK2.

## DDX23 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### DDX23 Antibody (Center) - Images



Western blot analysis of DDX23 Antibody (Center) (Cat. #AP4866c) in 293 cell line lysates (35ug/lane). DDX23 (arrow) was detected using the purified Pab.





DDX23 Antibody (Center) (Cat. #AP4866c) IHC analysis in formalin fixed and paraffin embedded lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DDX23 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



DDX23 Antibody (Center) (Cat. #AP4866c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## DDX23 Antibody (Center) - Background

DDX23 encodes a member of the DEAD box protein family. 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 this family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. The protein is a component of the U5 snRNP complex; it may facilitate conformational changes in the spliceosome during nuclear pre-mRNA splicing.

## **DDX23 Antibody (Center) - References**

Mathew, R., et al. Nat. Struct. Mol. Biol. 15(5):435-443(2008) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) Olsen, J.V., et al. Cell 127(3):635-648(2006)