

## **DDX5 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7459c

## Specification

# **DDX5 Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>P17844</u> <u>O61656</u>, <u>O4R6M5</u> Human Monkey, Mouse Rabbit Polyclonal Rabbit IgG 69148 306-334

## **DDX5 Antibody (Center) - Additional Information**

Gene ID 1655

**Other Names** Probable ATP-dependent RNA helicase DDX5, DEAD box protein 5, RNA helicase p68, DDX5, G17P1, HELR, HLR1

#### Target/Specificity

This DDX5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 306-334 amino acids from the Central region of human DDX5.

**Dilution** IHC-P~~1:50~100 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### 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**

DDX5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## DDX5 Antibody (Center) - Protein Information



## Name DDX5

Synonyms G17P1, HELR, HLR1

**Function** Involved in the alternative regulation of pre-mRNA splicing; its RNA helicase activity is necessary for increasing tau exon 10 inclusion and occurs in a RBM4-dependent manner. Binds to the tau pre- mRNA in the stem-loop region downstream of exon 10. The rate of ATP hydrolysis is highly stimulated by single-stranded RNA. Involved in transcriptional regulation; the function is independent of the RNA helicase activity. Transcriptional coactivator for androgen receptor AR but probably not ESR1. Synergizes with DDX17 and SRA1 RNA to activate MYOD1 transcriptional activity and involved in skeletal muscle differentiation. Transcriptional coactivator for p53/TP53 and involved in p53/TP53 transcriptional response to DNA damage and p53/TP53- dependent apoptosis. Transcriptional coactivator for RUNX2 and involved in regulation of osteoblast differentiation. Acts as a transcriptional repressor in a promoter-specific manner; the function probably involves association with histone deacetylases, such as HDAC1. As component of a large PER complex is involved in the inhibition of 3' transcriptional termination of circadian target genes such as PER1 and NR1D1 and the control of the circadian rhythms.

### **Cellular Location**

Nucleus. Nucleus, nucleolus Nucleus speckle. Cytoplasm. Note=During the G0 phase, predominantly located in the nucleus. Cytoplasmic levels increase during the G1/S phase. During the M phase, located at the vicinity of the condensed chromosomes. At G1, localizes in the cytoplasm

# **DDX5 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>

DDX5 Antibody (Center) - Images



Western blot analysis of DDX5 antibody (Center) (Cat.# AP7459c) in Romas cell line lysates



(35ug/lane). DDX5 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain with DDX5 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### DDX5 Antibody (Center) - Background

DDX5 is putative RNA helicases. The protein is 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. This protein is a RNA-dependent ATPase, and also a proliferation-associated nuclear antigen, specifically reacting with the simian virus 40 tumor antigen.

## DDX5 Antibody (Center) - References

Ong S.E., Mittler G.Nat. Methods 1:119-126(2004) Daub H., Olsen J.V.Mol. Cell 31:438-448(2008)