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DDX5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7459c

Product Information

Application	WB, IHC-P, E
Primary Accession	P17844
Other Accession	Q61656, Q4R6M5
Reactivity	Human
Predicted	Monkey, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19600
Calculated MW	69148
Antigen Region	306-334

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	WB~~1:1000 IHC-P~~1:100~500 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.

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

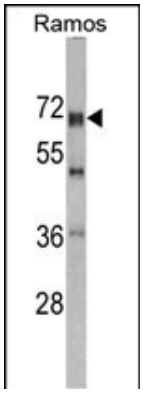
Background

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.

References

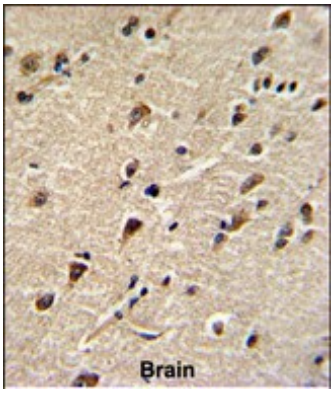
Ong S.E., Mittler G.Nat. Methods 1:119-126(2004)
Daub H., Olsen J.V.Mol. Cell 31:438-448(2008)

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.

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