

# **Product datasheet**

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ARG41712 anti-DDX5 / p68 RNA helicase antibody

Package: 100 μl Store at: -20°C

## **Summary**

Product Description Rabbit Polyclonal antibody recognizes DDX5 / p68 RNA helicase

Tested Reactivity Hu, Ms
Predict Reactivity Rat

Tested Application FACS, ICC/IF, IHC-P, IP, WB

**Host** Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name DDX5 / p68 RNA helicase

Species Human

Immunogen Synthetic peptide of Human DDX5 / p68 RNA helicase.

Conjugation Un-conjugated

Alternate Names Probable ATP-dependent RNA helicase DDX5; DEAD box protein 5; p68; HUMP68; EC 3.6.4.13; G17P1;

RNA helicase p68; HLR1

## **Application Instructions**

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:1000 - 1:5000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 65 kDa	

#### **Properties**

Form	Liquid	
Purification	Affinity purified.	
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.	
Preservative	0.02% Sodium azide	
Stabilizer	50% Glycerol	

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

DDX5

Gene Full Name

DEAD (Asp-Glu-Ala-Asp) box helicase 5

Background

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. This gene encodes a DEAD box protein, which is a RNA-dependent ATPase, and also a proliferation-associated nuclear antigen, specifically reacting with the simian virus 40 tumor antigen. This gene consists of 13 exons, and alternatively spliced transcripts containing several intron sequences have been detected, but no isoforms encoded by these transcripts have been identified. [provided by RefSeq, Jul 2008]

**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 estrogen receptor ESR1 and androgen receptor AR. Increases ESR1 AF-1 domain-mediated transactivation and ESR1 AF-1 and AF-2 domains transcriptional synergistic activity. 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 transcriptional repressor in a promoter-specicic manner; the function probbaly 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. [UniProt]

Calculated Mw

69 kDa

PTM

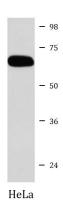
Arg-502 is dimethylated, probably to asymmetric dimethylarginine.

Sumoylated; sumoylation, promoted by PIAS1, promotes interaction with HDAC1 and transcriptional repression activity. Sumoylation also significantly increases stability, and reduces polyubiquitination.

Polyubiquitinated, leading to proteasomal degradation. [UniProt]

Cellular Localization

Nucleus, nucleolus. [UniProt]



# ARG41712 anti-DDX5 / p68 RNA helicase antibody WB image

Western blot: HeLa cell lysate stained with ARG41712 anti-DDX5  $\!\!/$  p68 RNA helicase antibody.