

Product datasheet

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ARG66687 anti-DDX5 / p68 RNA helicase phospho (Tyr593) antibody

Package: 100 μg Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes DDX5 / p68 RNA helicase phospho (Tyr593)

Tested Reactivity Hu

Tested Application ICC/IF, IHC-P

Specificity The antibody detects p68 RNA helicase protein only when phosphorylated at Tyr593.

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name DDX5 / p68 RNA helicase

Species Human

Immunogen Phosphospecific peptide around Tyr593 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
	ICC/IF	1:200 - 1:1000
	IHC-P	1:100 - 1:300
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol and 0.5% BSA

Concentration 1 mg/ml

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]

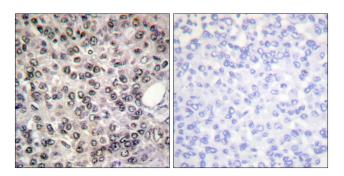
Images





ARG66687 anti-DDX5 / p68 RNA helicase phospho (Tyr593) antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG66687 anti-DDX5 / p68 RNA helicase phospho (Tyr593) antibody (green). The picture on the right is blocked with the phospho peptide.



ARG66687 anti-DDX5 / p68 RNA helicase phospho (Tyr593) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG66687 anti-DDX5 / p68 RNA helicase phospho (Tyr593) antibody. The picture on the right is blocked with the phospho peptide.