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DDX56 Rabbit pAb

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Catalog # AP55476

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9NY93
Predicted	Human, Mouse, Rat, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61590
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DDX56
Epitope Specificity	41-140/547
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus; nucleolus.
SIMILARITY	Belongs to the DEAD box helicase family. DDX56/DBP9 subfamily. Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene 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 encoded by this gene shows ATPase activity in the presence of polynucleotides and associates with nucleoplasmic 65S preribosomal particles. This gene may be involved in ribosome synthesis, most likely during assembly of the large 60S ribosomal subunit. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2012]

Additional Information

Gene ID	54606
Other Names	Probable ATP-dependent RNA helicase DDX56, 3.6.4.13, ATP-dependent 61 kDa nucleolar RNA helicase, DEAD box protein 21, DEAD box protein 56, DDX56, DDX21, NOH61

Target/Specificity	Detected in heart, brain, liver, pancreas, placenta and lung.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	DDX56
Synonyms	DDX21, NOH61
Function	Nucleolar RNA helicase that plays a role in various biological processes including innate immunity, ribosome biogenesis or nucleolus organization (PubMed:31340999, PubMed:33789112). Plays an essential role in maintaining nucleolar integrity in planarian stem cells (PubMed:33789112). Maintains embryonic stem cells proliferation by conventional regulation of ribosome assembly and interaction with OCT4 and POU5F1 complex (By similarity). Regulates antiviral innate immunity by inhibiting the virus-triggered signaling nuclear translocation of IRF3 (PubMed:31340999). Mechanistically, acts by disrupting the interaction between IRF3 and importin IPO5 (PubMed:31340999). May play a role in later stages of the processing of the pre-ribosomal particles leading to mature 60S ribosomal subunits. Has intrinsic ATPase activity.
Cellular Location	Nucleus, nucleolus
Tissue Location	Detected in heart, brain, liver, pancreas, placenta and lung

Background

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