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DDX39 Antibody (Center S152)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7451c

Product Information

Application	WB, E
Primary Accession	O00148
Other Accession	Q63413, Q29024, Q9Z1N5, Q13838, Q3T147
Reactivity	Human, Mouse
Predicted	Bovine, Mouse, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17937
Calculated MW	49130
Antigen Region	137-163

Additional Information

Gene ID	10212
Other Names	ATP-dependent RNA helicase DDX39A, DEAD box protein 39, Nuclear RNA helicase URH49, DDX39A, DDX39
Target/Specificity	This DDX39 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 137-163 amino acids from the Central region of human DDX39.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	DDX39 Antibody (Center S152) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DDX39A
Synonyms	DDX39

Function	Helicase that plays an essential role in mRNA export and is involved in multiple steps in RNA metabolism including alternative splicing (PubMed:33941617, PubMed:38801080). Regulates nuclear mRNA export to the cytoplasm through association with ECD (PubMed:33941617). Also involved in spliceosomal uridine-rich small nuclear RNA (U snRNA) export by stimulating the RNA binding of adapter PHAX (PubMed:39011894). Plays a role in the negative regulation of type I IFN production by increasing the nuclear retention of antiviral transcripts and thus reducing their protein expression (PubMed:32393512). Independently of the interferon pathway, plays an antiviral role against alphaviruses by binding to a 5' conserved sequence element in the viral genomic RNA (PubMed:37949067).
Cellular Location	Nucleus. Cytoplasm. Note=Can translocate to the cytoplasm in the presence of MX1 (PubMed:21859714). Accumulates in the cytoplasm upon infection with chikungunya virus (PubMed:37949067)
Tissue Location	Detected in testis, and at lower levels in brain, kidney, lung, thymus, spleen and salivary gland

Background

DDX39 is a member of the DEAD box protein family. These proteins are characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD) and 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 the DEAD box protein family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division.

References

Pryor A., Tung L., Yang Z.Nucleic Acids Res. 32:1857-1865(2004)
Lehner B., Semple J.I., Brown S.E.Genomics 83:153-167(2004)

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