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DDX42 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21874a

Product Information

Application	WB, E
Primary Accession	Q86XP3
Other Accession	Q810A7, Q5R7D1
Reactivity	Human, Mouse
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB54203
Calculated MW	102975

Additional Information

Gene ID	11325
Other Names	ATP-dependent RNA helicase DDX42, DEAD box protein 42, RNA helicase-like protein, RHELP, RNA helicase-related protein, RNAHP, SF3b DEAD box protein, Splicing factor 3B-associated 125 kDa protein, SF3b125, DDX42
Target/Specificity	This DDX42 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 104-138 amino acids from human DDX42.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	DDX42 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DDX42 {ECO:0000303|PubMed:16397294, ECO:0000312|HGNC:HGNC:18676}
Function	ATP-dependent RNA helicase that binds to partially double- stranded RNAs

(dsRNAs) in order to unwind RNA secondary structures (PubMed:16397294). Unwinding is promoted in the presence of single- strand binding proteins (PubMed:16397294). Also mediates RNA duplex formation thereby displacing the single-strand RNA binding protein (PubMed:16397294). ATP and ADP modulate its activity: ATP binding and hydrolysis by DDX42 triggers RNA strand separation, whereas the ADP- bound form of the protein triggers annealing of complementary RNA strands (PubMed:16397294). Required for assembly of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs: DDX42 associates transiently with the SF3B subcomplex of the 17S U2 SnRNP complex and is released after fulfilling its role in the assembly of 17S U2 SnRNP (PubMed:12234937, PubMed:36797247). Involved in the survival of cells by interacting with TP53BP2 and thereby counteracting the apoptosis- stimulating activity of TP53BP2 (PubMed:19377511). Relocalizes TP53BP2 to the cytoplasm (PubMed:19377511).

Cellular Location Cytoplasm. Nucleus

Tissue Location Expressed in several cell lines (at protein level). Expressed in liver, lung, tonsil, thymus, muscle and pancreatic islets

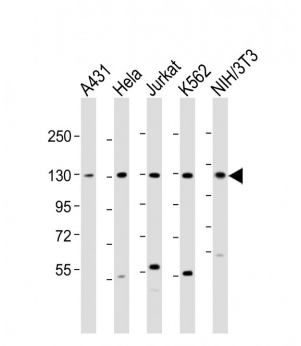
Background

ATP-dependent RNA helicase. Binds to partially double- stranded RNAs (dsRNAs) in order to unwind RNA secondary structures. Unwinding is promoted in the presence of single-strand binding proteins. Mediates also RNA duplex formation thereby displacing the single-strand RNA binding protein. ATP and ADP modulate its activity: ATP binding and hydrolysis by DDX42 triggers RNA strand separation, whereas the ADP-bound form of the protein triggers annealing of complementary RNA strands. Involved in the survival of cells by interacting with TP53BP2 and thereby counteracting the apoptosis-stimulating activity of TP53BP2. Relocalizes TP53BP2 to the cytoplasm.

References

Suk K.,et al.Biochim. Biophys. Acta 1501:63-69(2000).
Ikeda A.,et al.Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Zody M.C.,et al.Nature 440:1045-1049(2006).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images



All lanes : Anti-DDX42 Antibody (N-Term) at 1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: K562 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 103 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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