

DDX42 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21874a

Specification

DDX42 Antibody (N-Term) - Product Information

Application WB,E
Primary Accession Q86XP3

Other Accession
Reactivity

OSR7D1
Human, Mouse

Predicted Mouse
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 102975

DDX42 Antibody (N-Term) - 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.

DDX42 Antibody (N-Term) - 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

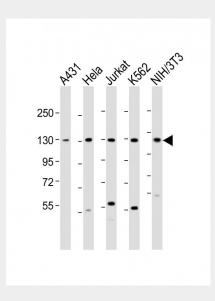
Expressed in several cell lines (at protein level). Expressed in liver, lung, tonsil, thymus, muscle and pancreatic islets

DDX42 Antibody (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

DDX42 Antibody (N-Term) - Images



All lanes: Anti-DDX42 Antibody (N-Term) at 1:2000 dilution Lane 1: A431 whole cell lysate Lane



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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.

DDX42 Antibody (N-Term) - 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.

DDX42 Antibody (N-Term) - 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/DDBI databases.