

Product datasheet for RC202320

DDX46 (NM_014829) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDX46 (NM_014829) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DDX46
Synonyms:	Prp5; PRPF5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202320 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTCGGGAGTCACGCCACTATCGAAAACGATCGGCATCCCGGGTTCGCTCTGGAAGTCGGTCTAGAA
GTCGCTCACCCCTCAGACAAAAGAAGTAAACGTGGAGATGACAGACGGTCTAGAAGTAGAGATAGAGATAG
GAGGAGAGAGAGGTCTCGTAGCAGGGATAAAGAAGATCTCGGTCAAGGGACAGGAAGCGTCTGAGACGT
TCCAGAAGTAGAGAGAGACAGAAGCCGAGAGCGAAGAAGATCTCGAAGTAGAGACAGGAGACGCTCAA
GGAGTAGAAGCCGGGGCCGGCGATCCCGATCCTCCAGTCTGAAATAAAAGCAAGAAAAGTGAAGATAG
ATCTAGGTCCAAAGAGAAAAGTATGTTGGGAAAGTTCTAAAGAGAAGAAAAAGACAAAAGATGACAAG
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AAGAAAGAGTAGAAAAATGGCGAGAAGACAACGTAAGAAAGGCTATGGAAAACATAGGAGAACTGAAAA
GGAAATCGAAGAGATGAAACAAGGGAAAAAGTGGAGTTTATAGAGGACGATGATGATGACGAAGATGATCCT
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AAGTGAAGAGGAAGTAAAAAATTTAACATGAGAAGTGTAAAGGTGGTGGGGAAATGAAAAGAAGTC
TGGGCCAACGGTCACAAAAGTTGCTACTGTTGTGACAACCAAAAAAGCAGTTGTGGATTCTGATAAGAAG
AAAGGTGAGCTGATGGAGAATGACCAGGATGCCATGGAGTATTCTCAGAGGAGGAAGAAGTTGATCTTC
AGACAGCCCTTACAGGGTATCAAACAAAACAGCGAAAGCTTCTAGAACCAGTTGATCATGAAAAAATTTGA
GTATGAGCCATTTAGAAAAACTTCTATGTTGAAGTTCAGAACTAGCAAAAATGTCTCAAGAAGAGGTA
AATGTGTTTCGATTGAAATGGAGGGCATTACAGTTAAAGGAAAAGTTGCCCAACCAATTAATCCT
GGGTCCAGTGTGGAATTTCCATGAAGATCTTAAATCCCTCAAGAAGCATGGCTATGAAAAGCCACGCC
CATCCAAACCAAGCTATTCTGCTATAATGTCTGGACGAGATTTGATTGGCATTGCCAAAACAGGAAGT
GGAAAGACCATTGCTTTCTGTTGCCATGTTTAGACACATCATGGATCAGAGGTCATTAGAGGAAGGAG
AGGGGCCAATAGCTGTCATCATGACTCCAACGAGAAGTGGCTTACAGATTACTAAAGAGTGTAAAGAA
GTTTTCCAAGACTTTGGGACTTAGAGTGGTCTGTGTTACGGAGGAACAGGAATCAGTGACGAGATTGCT



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GAGCTGAAAAGAGGTGCTGAAATTATTGTTTGCACACCTGGTCTGAATGATTGACATGTTAGCCGCTAACAGTGGTCCGGTACAAAATCTTGAAGAGTGACATATGTTGTTTTAGATGAAGCAGACAGAATGTTTGACATGGGTTTTGAACCCAGGTCATGCGCATCGTGGATAATGTTTCGCTGATCGACAGACGGTTATGTTTTCAGCTACTTTCCCCAGAGCTATGGAGGCTTTGGCTCGCAGGATCCTCAGTAAACCTATTGAAGTACAAGTTGGAGGCAGGAGTGGTTTGTCTAGATGTGGAGCAACAAGTGATTGTGATTGAAGAAGAAAAGAAATCTTGAAGTTACTTGAGCTTCTAGGCCATTATCAAGAGTCAGGATCTGTCATTATATTTGTGGATAAGCAGGAAATGCTGATGGTCTTCTTAAGGATTTAATGAGAGCATCTTATCCTTGCATGCTCTTCATGGAGGCATTGATCAATATGACAGAGATAGCATCATAAATGACTTTAAGAATGGGACCTGCAAACTTCTTGTGGCTACCTCTGTTGCTGCCCGAGGTCTAGATGTGAAACATCTGATTCTTGTAGTAAATTATAGCTGCCCAACCATTATGAGGATTATGTACACAGAGCAGGGCGGACTGGAAGAGCAGGAAACAAGGGTTATGCTTATACTTTTTATCACAGAGGATCAAGCTCGCTATGCTGGTGACATAATTAAGCTCTTGAATTGCAGGGACTGCAGTACCTCTGTGATTTAGAGAACTGTGGAGTGATTTCAAAGATCAGCAGAAAGCTGAGGGGAAAATAATAAAAAGAGTAGTGGTTCTCTGGTAAGGGATTCAAGTTTGTGAAACAGAACAAGCTTTGGCTAATGAGAGGAAGAAGTACAAAAAGCAGCTCTTGGTCTACAAGATTCAGATGATGAGGATGCTGCAGTTGATATTGATGAGCAAATGAAAGCATGTTAATTCAAAGAAGAGAGTAAAGGATATGGCTGCTCCTGGAACATCAAGTTCCTGCTCCAAGTGCAGGAAATGCTGAGAAATTAGAAATGCTAAGAGATTGGCTCTTAGAATCAATGCCCAGAAGAATTTGGGCATCGAGTCTCAGGATGTGATGCAGCAGGCCCAATGCAATCTTAGGGGTGCCACCATTCTGGCTCCCCTGTTTCTGCAAAAACCATTGCAGAACTTCTGTAAGATCAATGCCAAGCTCAATTATGTGCCGTTAGAGAAAACAAGAAGAAGAGAGACAGGATGGTGGACAGAATGAATCTTTAAGAGATATGAAGAAGATTAGAGATCAATGACTTCCCACAGACTGCTAGGTGGAAAGTTACCTCTAAGGAAGCTCTGCAGAGAATCAGTGAATACTCTGAAGCCGAATTAACAATCAGAGGAACCTACTTCCCTCTGGCAAAGAACCCAAGGAAGCGAGCGGAAGATTTACTTGGCAATTGAAAGTGCCAATGAACTGGCTGTGCAGAAAAGCAAAGGCAGAAATCACCAAGCTCATAAAAAGAGAGCTGATCCGGCTGCAAAATTCATACCAACCAACAAATAAAGGAAGATACAAAAGTCTTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202320 protein sequence
 Red=Cloning site Green=Tags(s)

MGRESRHYRKRASRGRSGRSRSPDKRSKRGDGRRSRRDRRRRERSRSDKRKRSRDRKRLRRSRSRERDRSRERRRSRRDRRRSRSRGRRRSSSPGNKSKKTENRSRSEKTDGGESSKEKKDKDDKEDKEKEDAGNFDQNKLEEMRKRKERVEKWREEQRKKAMENIGELKKEIEEMKQKKWSLEDDDDDDDDP AEAEKEGNEMEGEELDPLDAYMEEVKKEVKKFNMRSVKGGGNEKKS GPTVTKVTVVTTKKA VVDSDDKKGELMENDQDAMEYSSEEEVDLQ TAL TGYQTKQRKLLPVDHGKIEYEPFRKNFYVEPELAKMSQEEV NVFRLEMEGITVKGKCPKPIKSWVQCGISMKILNSLKKHGYEKP TPIQTQAIPAIMSGRDLIGIAKTGS GKTIAFLLPMFRHIMDQSL EEEGPIAVIMPTRELALQITKECKKFSKTLGLRVVVCVYGGTGI SEQIA ELKRGAEIIVCTPGRMIDMLAANSGRVTNLRVTVYVVLDEADRMFDMGFEPQVMRIVDNVRPDRQTVMFS ATFPRAEALARRILSKPIEVQVGGRSVVCSDVEQQVIVIEEEKFLKLELLELGHYQESGSVIFV DQKQHADGLLKDLMRASYPMSLHGGIDQYDRDSIINDFKNGTKLLVATSVAARGLDVKHLILVVNYSCP NHY EDYVHRAGRTGRAGNKGYAYTFIT EDQARYAGDIKALELSGTAVPPDLEKLWSDFKDQQAEGKIIKKS SGFSGKGFKFDETE QALANERKKLQKAALGLQSDDEDAVDIDEQIESMFNSKRVKDMAAPGTSSVPA PTAGNAEKLEIAKRLALRINAQKNL GIESQDVMQQATNAILRGGTILAPT VSAKTAIEQLAEKINAKLNY VPLEKQEEERQDGGQNESFKRYEELEINDFPQTARWKVTSKEALQRISEYSEAAITIRGTYPFGKEPK EGERKIYLAIESANELAVQKAKAEITRLIKEELIRLQNSYQPTNKGRYKVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6676_b08.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_014829

ORF Size: 3093 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_014829.4](#)

RefSeq Size: 5747 bp

RefSeq ORF: 3096 bp

Locus ID: 9879

UniProt ID: [Q7L014](#)

Cytogenetics: 5q31.1

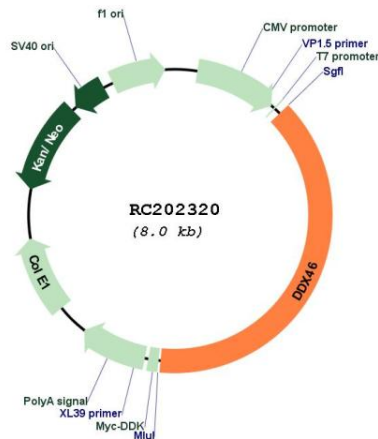
Domains: DEAD, helicase_C

Protein Pathways: Spliceosome

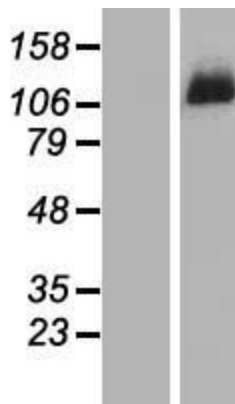
MW: 117.4 kDa

Gene Summary: 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 is a component of the 17S U2 snRNP complex; it plays an important role in pre-mRNA splicing. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2014]

Product images:



Circular map for RC202320



Western blot validation of overexpression lysate (Cat# [LY415033]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202320 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).