

Product datasheet for **RG202320**

DDX46 (NM_014829) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDX46 (NM_014829) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DDX46
Synonyms:	Prp5; PRPF5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202320 representing NM_014829 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTCGGGAGTCACGCCACTATCGAAAACGATCGGCATCCCGGGTTCGCTCTGGAAGTCGGTCTAGAA
GTCGCTCACCCCTCAGACAAAAGAAGTAAACGTGGAGATGACAGACGGTCTAGAAGTAGAGATAGAGATAG
GAGGAGAGAGAGGTCTCGTAGCAGGGATAAAGAAGATCTCGGTCAAGGGACAGGAAGCGTCTGAGACGT
TCCAGAAGTAGAGAGAGAGACAGAAGCCGAGAGCGAAGAAGATCTCGAAGTAGAGACAGGAGACGCTCAA
GGAGTAGAAGCCGGGGCCGGCGATCCCGATCCTCCAGTCTGAAATAAAAAGCAAGAAAAGTGAAGATAG
ATCTAGGTCCAAAGAGAAAAGTATGTTGGGAAAGTTCTAAAGAGAAGAAAAAGACAAAAGATGACAAG
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AAGAAAGAGTAGAAAAATGGCGAGAAGACAACGTAAGAAAGGCTATGGAAAACATAGGAGAACTGAAAA
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GCAGAAGCTGAAAAGGAGGAAATGAAATGGAGGGTGGAGGTTAGATCCATTAGATGCTTACATGGAAAG
AAGTGAAGAGGAAGTAAAAAATTTAACATGAGAAGTGTAAAGGTGGTGGGGAAATGAAAAGAAGTC
TGGGCCAACGGTCACAAAAGTTGCACTGTTGTGACAACCAAAAAAGCAGTTGTGGATTCTGATAAGAAG
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GTATGAGCCATTTAGAAAAACTTCTATGTTGAAGTCCAGAAGTCCAGAAAATGTCTCAAGAAGAGGTA
AATGTGTTTCGATTGAAATGGAGGGCATTACAGTTAAAGGAAAAGGTTGCCCAAACCAATTAATCCT
GGGTCCAGTGTGGAATTTCCATGAAGATCTTAAATCCCTCAAGAAGCATGGCTATGAAAAGCCACGCC
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AGGGGCCAATAGCTGTCATCATGACTCCAACGAGAAGTGGCTTACAGATTACTAAAGAGTGTAAAGAA
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GAGCTGAAAAGAGGTGCTGAAATTATTGTTTGCACACCTGGTCTGAATGATTGACATGTTAGCCGCTAACAGTGGTCCGGTACAAAATCTTGAAGAGTGACATATGTTGTTTTAGATGAAGCAGACAGAATGTTTGACATGGGTTTTGAACCCAGGTCATGCGCATCGTGGATAATGTTTCGCTGATCGACAGACGGTTATGTTTTCACTACTTTCCCCAGAGCTATGGAGGCTTTGGCTCGCAGGATCCTCAGTAAACCTATTGAAGTACAAGTTGAGGCAGGAGTGTGGTTTGTCTAGATGTGGAGCAACAAGTGATTGTGATTGAAGAAGAAAAGAAATCTTGAAGTTACTTGAGCTTCTAGGCCATTATCAAGAGTCAGGATCTGTCATTATATTTGTGGATAAGCAGGAAATGCTGATGGTCTTCTTAAGGATTTAATGAGAGCATCTTATCCTTGCATGCTCTTCATGGAGGCATTGATCAATATGACAGAGATAGCATCATAAATGACTTTAAGAATGGGACCTGCAAACTTCTTGTGGCTACCTCTGTTGCTGCCCGAGGTCTAGATGTGAAACATCTGATTCTTGTAGTAAATTATAGCTGCCCAACCATTATGAGGATTATGTACACAGAGCAGGGCGGACTGGAAGAGCAGGAAACAAGGGTTATGCTTATACTTTTTATCACAGAGGATCAAGCTCGCTATGCTGGTGACATAATTAAGCTCTTGAATTGCAGGGACTGCAGTACCTCTGATTTAGAGAACTGTGGAGTGATTTCAAAGATCAGCAGAAAGCTGAGGGGAAAATAATAAAAAGAGTAGTGGTTCTCTGGTAAGGGATTCAAGTTTGTGAAACAGAAAGCTTTGGCTAATGAGAGGAAGAAGTACAAAAAGCAGCTCTTGGTCTACAAGATTCAGATGATGAGGATGCTGCAGTTGATATTGATGAGCAAATGAAAGCATGTTAATTCAAAGAAGAGAGTAAAGGATATGGCTGCTCCTGGAACATCAAGTTCCTGCTCCAAGTGCAGGAAATGCTGAGAAATTAGAAATGCTAAGAGATTGGCTCTTAGAATCAATGCCCAGAAGAATTTGGGCATCGAGTCTCAGGATGTGATGCAGCAGGCCCAATGCAATCTTAGGGGTGCCACCATTCTGGCTCCCCTGTTTCTGCAAAAACCATTGCAGAACTTCTGAAAAGATCAATGCCAAGCTCAATTATGTGCCGTTAGAGAAAACAAGAAGAAGAGAGACAGGATGGTGGACAGAATGAATCTTTAAGAGATATGAAGAAGATTAGAGATCAATGACTTCCCACAGACTGCTAGGTGAAAGTTACCTCTAAGGAAGCTCTGCAGAGAATCAGTGAATACTCTGAAGCCGCAATTAACAATCAGAGGAACCTACTTCCCTCTGGCAAAGAACCCAAGGAAGCGAGCGGAAGATTTACTTGGCAATTGAAAGTGCCAATGAACTGGCTGTGCAGAAAAGCAAAGGCAGAAATCACCAAGGCTCATAAAAAGAAGAGCTGATCCGGCTGCAAAATTCATACCAACCAACAAATAAAGGAAGATACAAAAGTCTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG202320 representing NM_014829
 Red=Cloning site Green=Tags(s)

MGRESRHYRKRASRGRSGRSRSPDKRSKRGDRRRSRDRDRRRERSRSDKRKRSRDRKRLRR
 SRSRERDRSRERRRSRDRRRSRSRGRRRSRSSPGNKSKKTENRSRKEKTDGGESSKEKKDKDDK
 EDEKEKDAGNFDQNKLEEEEMRKRERVEKWREEQRKKAMENIGELKKEIEEMKQGKKWSLEDDDDDDDDP
 AEAEKEGEMEGEELDPLDAYMEEVKKEVKKFNMRSVKGGGNEKKS GPTVTKVVTVVTTKAVVSDKK
 KGELMENDQDAMEYSSEEEVDLQ TAL TGYQTKQRKLLPVDHGKIEYEPFRKNFYVEPELAKMSQEEV
 NVFRLEMEGITVKGKCPKPIKSWVQCGISMKILNSLKKHGYEKPTPIQTQAIPAIMSGRDLIGIAKTGS
 GKTIAFLLPMFRHIMDQRSLEEGEPIAVIMPTRELALQITKECKKFSKTLGLRVVVCVYGGTGISEQIA
 ELKRGAEIIVCTPGRMIDMLAANSRVTNLRRTYVVLDEADRMFDMGFEPQVMRIVDNVRPDRQTVMFS
 ATFPRAMEALARRILSKPIEVQVGGRSVVCSDVEQQVIVIEEEKFLKLELLGHYQESGSVIIIFVDKQE
 HADGLLKDLMRASYPMSLHGGIDQYDRDSIINDFKNGTCKLLVATSVAARGLDVKHLILVVNYSCPNHY
 EDYVHRAGRTGRAGNKGYAYTFITEDQARYAGDIKALEL SGTAVPPDLEKLWSDFKDQQAEGKIIKKS
 SGFSGKGFKFDETE QALANERKKLQKAALGLQSDDEDAVDIDEQIESMFNSKKRVKDMAAPGTSSVPA
 PTAGNAEKLEIAKRLALRINAQKNL GIESQDVMQATNAILRGGTILAPTVS AKTIAEQLAEKINAKLNY
 VPLEKQEEERQDGGQNESFKRYEELEINDFPQTARWKVTSKEALQRISEYSEAAITIRGTYPFGKEPK
 EGERKIYLAIESANELAVQKAKAEITRLIKEELIRLQNSYQPTNKGRYKVL

TRTRPLE - GFP Tag - V

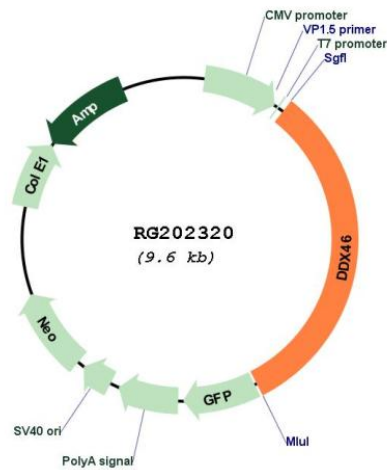
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



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:	<ol style="list-style-type: none">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:	5695 bp
RefSeq ORF:	3096 bp
Locus ID:	9879
UniProt ID:	Q7L014
Cytogenetics:	5q31.1
Domains:	DEAD, helicase_C
Protein Pathways:	Spliceosome
Gene Summary:	<p>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]</p>