

Product datasheet for **RC200917**

DDX21 (NM_004728) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDX21 (NM_004728) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DDX21
Synonyms:	GUA; GURDB; RH-II/GU; RH-II/GuA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC200917 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCGGGAAAACCCGTAGTGACGCTGGTTTGGAAATCAGACACCCGAATGAAAAAGGGGAGACTGCG
 GAAAGCAAACCGAGGAGAAAGAGAAAAAGAGAAGCCAAAATCTGATAAGACTGAAGAGATAGCAGAAGA
 GGAAAGAACTGTTTTCCCAAGCTAAACAAGTTAAAAAGAAAGCAGAGCCTTCTGAAGTTGACATGAAT
 TCTCTAAATCCAAAAAGGCAAAAAAGAAAGAGGAGCCATCTCAAAATGACATTTCTCTAAAAACAAAA
 GTTTGAGAAAGAAAAAGGAGCCATTGAAAAGAAAGTGGTTTCTCTAAAAACAAAAAGTGACAAAAAA
 TGAGGAGCCTTCTGAGGAAGAAATAGATGCTCCTAAGCCCAAGAAGATGAAGAAAGAAAGGAAATGAAT
 GGAGAACTAGAGAGAAAAGCCCAAACTGAAGAATGGATTTCTCATCTGAACCGGACTGTAACCCCA
 GTGAAGCTGCCAGTGAAGAAAGTAACAGTGAGATAGAGCAGGAAATACCTGTGGAACAAAAAGAAGCGC
 TTTCTCTAATTTTCCCATATCTGAAGAACTATTAACCTTCTCAAAGGCCGAGGAGTGACCTTCTATTT
 CCTATACAAGCAAAGACATTCCATCATGTTTACAGCGGGAAGGACTTAATTCACAGGCACGGACAGGAA
 CTGGGAAGACATTCTCCTTTGCCATCCCTTTGATTGAGAAACTTCATGGGAACTGCAAGACAGGAAGAG
 AGGCCGTGCCCTCAGGTAAGTGGTTCTTGCACCTACAAGAGAGTTGGCAAATCAAGTAAGCAAAGACTTC
 AGTGACATCACAAAAAGCTGTCAGTGGCTTGTTTTATGGTGGAACTCCCTATGGAGGTCAATTTGAAC
 GCATGAGGAATGGGATTGATATCCTGGTTGGAACACCAGGTGCGTATCAAAGACCACATACAGAATGGCAA
 ACTAGATCTCACAAACTTAAGCATGTTGTCCTGGATGAAGTGGACCAGATGTTGGATATGGGATTTGCT
 GATCAAGTGGAAAGAGATTTAAGTGTGGCATAAAGAAAGATTCTGAAGACAATCCCAAAACATTGCTTT
 TTTCTGCAACTTGCCCTCATTGGGTATTTAATGTTGCCAAGAAATACATGAAATCTACATATGAACAGGT
 GGACCTGATTGGTAAAAAGACTCAGAAAACGGCAATAAAGTGGAGCATCTGGCTATTAAGTGCCACTGG
 ACTCAGAGGGCAGCAGTTATTGGGGATGTCATCCGAGTATATAGTGGTCAAGGACGCACTATCATCT
 TTTGTGAAACCAAGAAAGAACGCCAGGAGCTGTCCAGAAATTCAGCTATAAAGCAGGATGCTCAGTCCTT
 GCATGGAGACATTCCACAGAAGCAAAGGAAATCACCTGAAAGGTTTTAGAAATGGTAGTTTTGGAGTT
 TTGGTGGCAACCAATGTTGCTGCACGTGGGTTAGACATCCCTGAGGTTGATTTGGTTATACAAAGCTCTC
 CACCAAAGGATGTAGAGTCTACATTATCGATCCGGCGGACAGGCAGAGCTGGAAGGACGGGGGTGTG
 CATCTGCTTTTATCAGCACAAGGAAGAATATCAGTTAGTACAAGTGGAGCAAAAAGCGGGAATTAAGTTC
 AAACGAATAGGTGTTCTTCTGCAACAGAAATAATAAAAGCTTCCAGCAAAGATGCCATCAGGCTTTTGG
 ATTCGGTCCCTCCCACTGCCATTAGTCACTTCAAACAATCAGCTGAGAAGCTGATAGAGGAGAAGGGAGC
 TGTGGAAGCTCTGGCAGCAGCACTGGCCCATATTTAGGTCACGTCCTGATAGACCAGCGCTCCTTGATC
 AACTCAAATGTGGGTTTTGTGACCATGATCTTGCAGTGCTCAATTGAAATGCCAAATATTAGTTATGCTT
 GGAAAGAACTTAAGAGCAGCTGGGCGAGGAGATTGATTCAAAGTGAAGGGAAATGGTTTTTCTCAAAGG
 AAAGCTGGGTGTTTGTGTTGATGTACCTACCGCATCAGTAACAGAAATACAGGAGAAATGGCATGATTCA
 CGACGCTGGCAGCTCTCTGTGCCACAGAGCAACCAGAACTGGAAGGACCACGGGAAGGATATGGAGGCT
 TCAGGGGACAGCGGAAGGCAGTCGAGGCTTTCAGGGGACAGCGGGACGGAAACAGAAAGATTGAGAGGACA
 CGGGGAAGGCAGTAGAGGCCCGAGAGGACAGCGATCAGGAGGTGGCAACAAAAGTAACAGATCCCAAAAC
 AAAGGCCAGAAGCGGAGTTTCAGTAAAGCATTTGGTCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200917 protein sequence
Red=Cloning site Green=Tags(s)

MPGKLRS DAGLESDTAMKKGETLRKQTEEEKKKEPKSDKTEEIAEEEETVFPKAKQVKKKAEPSEVDMN
SPKSKKAKKKEEPSQNDISPKTKSLRKKKEPIEKKVSSKTKKVTKNEEPSEEEIDAPKPKMKKKEKEMN
GETREKSPKLNKNGFPHPEPDCNPSEAASEESNSEIEQEIPVEQKEGAFSNFPISEETIKLLKGRGVTFLF
PIQAKTFHHVYSGKDLIAQARTGTGKTFSAIPLIEKLHGELQDRKRGRAPQVLVLAPTRELANQVSKDF
SDITKKLSVACFYGGTPYGGQFERMRNGIDILVGTGRIKDHIQNGKLDLTKLKHVVLDEVDMQMLDMGFA
DQVEEILSVAYKKDSEDNPQTLLFSATCPHWVFNVAKKYMKSTYEQVDLIGKKTQKTAITVEHLAIKCHW
TQRAAVIGDVIRVYSGHQGRTIIFCETKKEAQELSQNSAIKQDAQSLHGDIPQKQREITLKGFRNGSFGV
LVATNVAARGLDIPEVDLVIQSSPPKDVESYIHRSGRTGRAGRTGVCICFYQHKEEYQLVQVEQKAGIKF
KRIGVPSATEI IKASSKDAIRLLDSVPPTAISHFQSAEKLIEEKGAVALAAAALAHISGATSVDRSLI
NSNVGFVTMILQCSIEMPNISYAWKELKEQLGEEIDSKVKGMVFLKGKLGVCFDVPTASVTEIQEKWHDS
RRWQLSVATEQPELEGPREGYGGFRGQREGSRGFRGQRDGNRRFRGQREGSRGPRGQRSGGNGKSNRSQN
KGQKRSFSKAFGQ

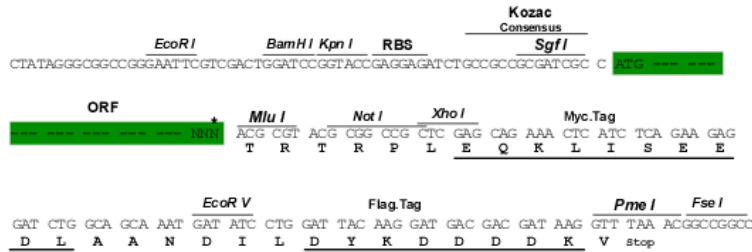
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6291_b08.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004728

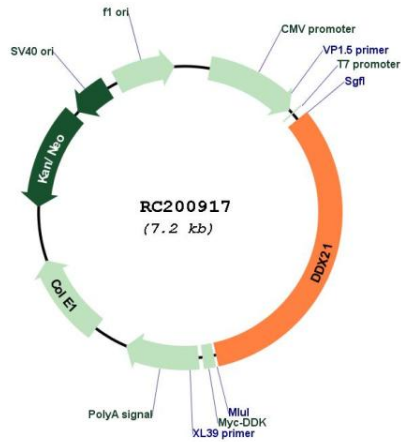
ORF Size: 2349 bp

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.

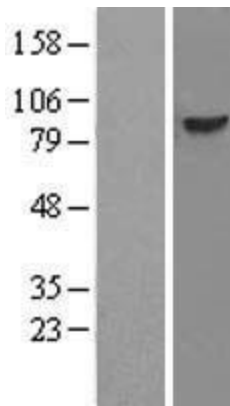
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004728.4
RefSeq Size:	4720 bp
RefSeq ORF:	2352 bp
Locus ID:	9188
UniProt ID:	Q9NR30
Cytogenetics:	10q22.1
Domains:	DEAD, helicase_C
MW:	87.3 kDa
Gene Summary:	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. This gene encodes a DEAD box protein, which is an antigen recognized by autoimmune antibodies from a patient with watermelon stomach disease. This protein unwinds double-stranded RNA, folds single-stranded RNA, and may play important roles in ribosomal RNA biogenesis, RNA editing, RNA transport, and general transcription. [provided by RefSeq, Jul 2008]

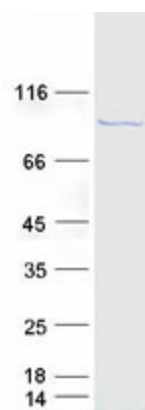
Product images:



Circular map for RC200917



Western blot validation of overexpression lysate (Cat# [LY417798]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200917 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DDX21 protein (Cat# [TP300917]). The protein was produced from HEK293T cells transfected with DDX21 cDNA clone (Cat# RC200917) using MegaTran 2.0 (Cat# [TT210002]).