

Product datasheet for **RC201477**

DDX56 (NM_019082) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDX56 (NM_019082) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DDX56
Synonyms:	DDX21; DDX26; NOH61
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC201477 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGACTCTGAAGCACTGGGCTTCAACACATGGGCCTCGATCCCCGGCTCCTTCAGGCTGTACCCG
 ATCTGGGCTGGTCGCGACCTACGCTGATCCAGGAGAAGGCCATCCCACTGGCCCTAGAAGGGAAGGACCT
 CCTGGCTCGGGCCCGCACGGGCTCCGGGAAGACGGCCGCTTATGCTATTCGGATGCTGCAGCTGTTGCTC
 CATAGGAAGGCGACAGGTCGGTGGTAGAACAGGCAGTGAGAGGCCTTGTCTTGTCTACCAAGGAGC
 TGGCACGGCAAGCACAGTCCATGATTACAGCAGCTGGCTACCTACTGTGCTCGGGATGTCGAGTGGCCAA
 TGTCTCAGCTGCTGAAGACTCAGTCTCTCAGAGAGCTGTGCTGATGGAGAAGCCAGATGTGGTAGTAGGG
 ACCCCATCTCGCATATTAAGCCACTTGCAGCAAGACAGCCTGAACTTCGTGACTCCCTGGAGCTTTTGG
 TGGTGGACGAAGCTGACCTTCTTTTCTTTGGCTTTGAAGAAGAGCTCAAGAGTCTCCTCTGTCACTT
 GCCCCGGATTTACCAGGCTTTTCTCATGTGAGCTACTTTAACGAGGACGTACAAGCACTCAAGGAGCTG
 ATATTACATAACCCGGTTACCCTTAAGTTACAGGAGTCCCAGCTGCCTGGGCCAGACCAGTTACAGCAGT
 TTCAGGTGGTCTGTGAGACTGAGGAAGCAAAATTCCTCCTGCTGTATGCCTGCTCAAGCTGTCATTGAT
 TCGGGGCAAGTCTCTGCTCTTTGTCAACTCTAGAACGGAGTTACCGGCTACGCTGTTCTTGGAAACAG
 TTCAGCATCCCCACCTGTGTGCTCAATGGAGAGCTTCCACTGCGCTCCAGGTGCCACATCATCTCACAGT
 TCAACCAAGGCTTCTACGACTGTGTATAGCAACTGATGCTGAAGTCTGGGGGGCCAGTCAAGGGCAA
 GCGTCGGGGCCGAGGGCCAAAGGGGACAAGGCCCTCTGATCCGGAAGCAGGTGTGGCCGGGGCATAGAC
 TTCCACCATGTGTCTGCTGTGCTCAACTTTGATCTTCCCCAACCCCTGAGGCCTACATCCATCGAGCTG
 GCAGGACAGCACGCGCTAACAACCCAGGCATAGTCTTAACCTTTGTGCTTCCCACGGAGCAGTTCCACTT
 AGGCAAGATTGAGGAGCTTCTCAGTGGAGAGAACAGGGGCCCATTCGTCTCCCTACCAGTTCGGGATG
 GAGGAGATCGAGGGCTTCCGCTATCGCTGCAGGGATGCCATGCGCTCAGTACTAAGCAGGCCATTCGGG
 AGGCAAGATTGAAGGAGATCAAGGAAGAGCTTCTGCATTCTGAGAAGCTTAAGACATACTTTGAAGACAA
 CCCTAGGGACCTCCAGCTGCTGCGGCATGACCTACCTTTGCACCCCGCAGTGGTGAAGCCCCACCTGGGC
 CATGTTCTGACTACCTGGTTCCTCTGCTCTCCGTGGCCTGGTACGCCCTCACAAGAAGCGGAAGAAGC
 TGTCTTCTCTTGTAGGAAGCCAAGAGAGCAAAGTCCCAGAACCCTGCGCAGCTTCAAGCACAAAGG
 AAAGAAATTCAGACCCACAGCCAAGCCCTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201477 protein sequence
 Red=Cloning site Green=Tags(s)

MEDSEALGFEHMGLDPRLLQAVTDLGWSRPTLIQEKAIPLALEGKDLLARARTGSGKTAAYAIPMLQLLL
 HRKATGPVVEQAVRGLVLPVKELARQAQSMIQQLATYCARDVRVANVSAEDSVSQRAVLMKPDVVVG
 TPSRILSHLQQDSLKLKRDSELELLVVDEADLLFSFGFEEELKSLCHLPRIYQAFMSATFNEDVQALKEL
 ILHNPVTLKLQESQLPGPDQLQQFQVVCETEEDKFLLLYALLKLSLIRGKSLLFVNTLERSYRLRLFLEQ
 FSIPTCVLNGELPLRSRCHIIISQFNQGFYDCVIATDAEVLGAPVKGKRRGRGPKGDKASDPEAGVARGID
 FHHVSAVLNFDLPPTPEAYIHRAGRTARANNPGIVLTFVLPTEQFHLGKIEELLSGENRGPILLPYQFRM
 EEIEGFRYRCRDAMRSVTKQAIREARLKEIKEELLHSEKLTIFYEDNPRDLQLLRHDLPLHPAVVKPHLG
 HVPDYLVPPALRGLVRPHKRRKLLSSSCRKAKRAKSNPLRSFKHKGKFRPTAKPS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6300_g07.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

ACCN: NM_019082

ORF Size: 1641 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:

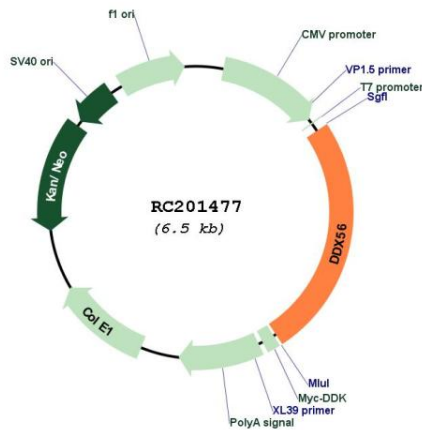
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_019082.3](#)

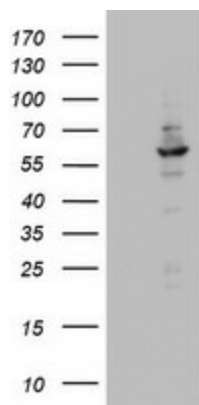
RefSeq Size: 2889 bp
RefSeq ORF: 1644 bp
Locus ID: 54606
UniProt ID: [Q9NY93](#)
Cytogenetics: 7p13
Domains: DEAD, helicase_C
MW: 61.6 kDa

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 shows ATPase activity in the presence of polynucleotides and associates with nucleoplasmic 65S preribosomal particles. This gene may be involved in ribosome synthesis, most likely during assembly of the large 60S ribosomal subunit. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2012]

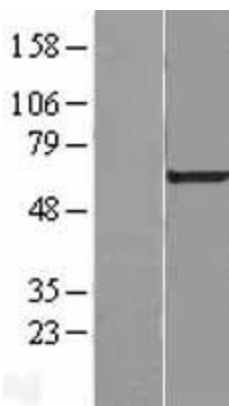
Product images:



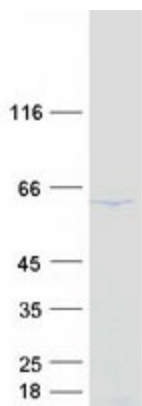
Circular map for RC201477



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DDX56 (Cat# RC201477, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DDX56 (Cat# [TA802815]). Positive lysates [LY412765] (100ug) and [LC412765] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412765]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201477 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DDX56 protein (Cat# [TP301477]). The protein was produced from HEK293T cells transfected with DDX56 cDNA clone (Cat# RC201477) using MegaTran 2.0 (Cat# [TT210002]).