OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC202912

DHX16 (NM_003587) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DHX16 (NM_003587) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DHX16
Synonyms:	DBP2; DDX16; NMOAS; PRO2014; Prp2; PRP8; PRPF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202912 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCGACGCCGGCGGGTCTGGAGCGCTGGGTTCAGGACGAGCTGCACTCGGTGTTGGGGCTGAGCGAGC GGCACGTCGCCCAGTTTCTGATCGGTACCGCACAGCGCTGCACCTCTGCCGAGGAGTTCGTGCAGCGCCT ACGAGACACTGATACCTTGGATCTCAGTGGGCCGGCCCGGGACTTCGCCCTGAGACTCTGGAACAAGGTA CCACGAAAGGCAGTGGTAGAAAAGCCAGCTCGGGCAGCAGAGCGAGAGGCCCGGGCCCTGCTGGAGAAGA ACCGATCTTATAGGTTACTGGAAGACAGTGAAGAGAGCAGTGAGGAGACTGTGAGTAGGGCTGGAAGCAG CCTCCAGAAGAAACGTAAAAAGCGGAAACACCTCAGGAAGAAGCGTGAGGAAGAAGAGGAGGAAGAGGCT TCTGAGAAAGGGAAGAAGAAAACAGGGGGGAGTAAACAGCAGACAGAGAAGCCAGAGTCGGAAGATGAGT GGGAACGGACAGAGCGTGAACGCCTTCAGGACCTGGAGGAGCGTGATGCCTTTGCTGAGCGGGTTCGACA GCGGGACAAGGATCGGACTCGAAATGTCCTGGAACGGTCAGACAAGAAGGCTTATGAAGAGGCTCAGAAG CGCCTCAAGATGGCCGAGGAAGACCGGAAGGCCATGGTCCCTGAGCTGCGGAAGAAATCTCGCCGAGAGT ACCTGGCTAAGCGGGAGCGAGAGAAGCTTGAGGACCTGGAGGCGGAGCTGGCTGATGAGGAGTTCCTTTT TGGGGACGTGGAGCTGAGCCGGCACGAGCGGCAGGAGCTCAAATATAAGCGGCGAGTGCGGGATCTCGCC CGGGAGTACCGGGCAGCTGGGGAGCAGGAGAAGCTGGAGGCCACCAATCGCTACCACATGCCCAAGGAAA CCCGAGGACAGCCAGCCCGAGCTGTGGATCTAGTGGAGGAGGAATCAGGAGCCCCTGGGGAGGAGCAGCG GCGCTGGGAGGAGGCGCGGCTTGGGGCAGCGTCCCTGAAGTTTGGGGCCCGAGATGCTGCCTCTCAGGAG CCCAAGTATCAACTGGTGCTGGAGGAGGAGGAGACCATTGAGTTTGTCCGGGCCACTCAGCTCCAGGGTG ATGAGGAGCCGTCAGCTCCACCCACTTCAACTCAGGCCCAGCAGAAAGAGTCCATCCAGGCCGTCCGCCG CAGCCTCCCGGTGTTCCCATTTCGAGAGGAGCTCCTGGCTGCTATTGCAAATCACCAAGTCCTCATCATT GAAGGCGAGACAGGCTCAGGGAAGACCACCCAGATCCCGCAGTATCTCTTTGAGGAGGGTTATACAAACA AGGGTATGAAGATTGCCTGCACCCAACCCCGGAGAGTGGCTGCCATGAGTGTGGCCGCCCGAGTGGCCCG GGAGATGGGTGTGAAGCTTGGGAATGAGGTTGGCTACAGCATCCGCTTTGAGGACTGCACATCAGAGCGA

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Protein Sequence:

>RC202912 protein sequence
Red=Cloning site Green=Tags(s)

MATPAGLERWVQDELHSVLGLSERHVAQFLIGTAQRCTSAEEFVQRLRDTDTLDLSGPARDFALRLWNKV
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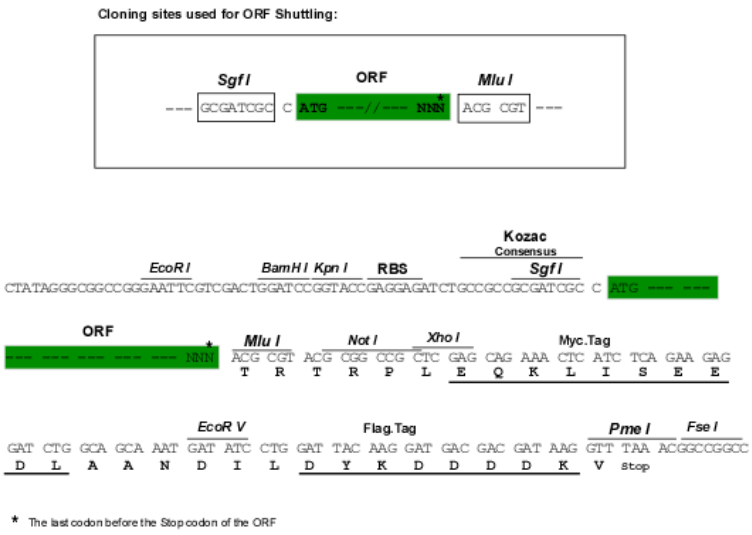
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6680_b07.zip

Restriction Sites: SgfI-MluI

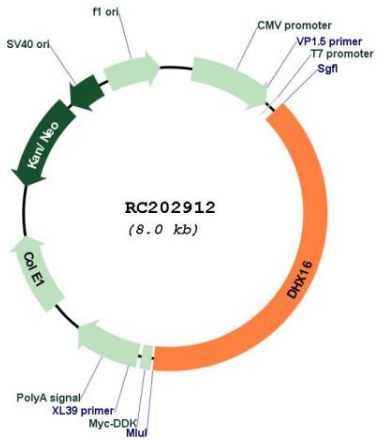
Cloning Scheme:



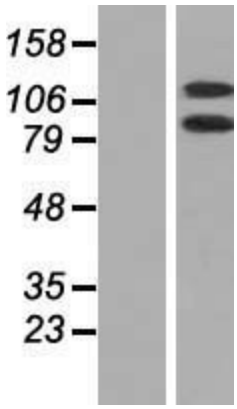
ACCN:	NM_003587
ORF Size:	3126 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_003587.5
RefSeq Size:	3477 bp
RefSeq ORF:	3126 bp
Locus ID:	8449
UniProt ID:	O60231

Cytogenetics:	6p21.33
Domains:	DEAD, helicase_C, HA2
Protein Pathways:	Spliceosome
MW:	119.4 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 a functional homolog of fission yeast Prp8 protein involved in cell cycle progression. This gene is mapped to the MHC region on chromosome 6p21.3, a region where many malignant, genetic and autoimmune disease genes are linked. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2018]

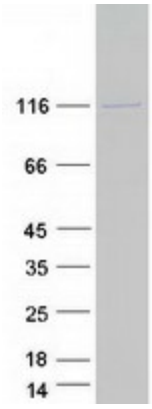
Product images:



Circular map for RC202912



Western blot validation of overexpression lysate (Cat# [LY418557]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202912 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DHX16 protein (Cat# [TP302912]). The protein was produced from HEK293T cells transfected with DHX16 cDNA clone (Cat# RC202912) using MegaTran 2.0 (Cat# [TT210002]).