

Product datasheet for **RC226957**

DDX4 (NM_001136034) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDX4 (NM_001136034) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DDX4
Synonyms:	DEAD (Asp-Glu-Ala-Asp) box polypeptide 4; DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 4; MGC111074; OTTHUMP00000122546; VASA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC226957 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCCATGGGAGATGAAGATTGGGAAGCAGAAATCAACCCTCATATGTCTTCTATGTTCCCATATTTGAGAAGG
ATAGGTATTCTGGAGAAAATGGAGACAATTTAACAGGACTCCAGCTTCATCATCAGAAAATGGATGATGG
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GGTGAGTGAATAAGCGAGATAATACATCCACAATGGGTGGTTTTGGAGTTGAAAGAGTTTTGGAAACA
GAGTTTTTCAAACAGCAGGTTTGAAGATGGTGATAGCTCTGGTTTTCTGGAGAGAGTCTAGTAATGACTG
CGAAGATAATCCAACACGGAACAGAGGGTTTTCCAAGAGAGGCGGCTATCGAGATGGAAAATATTCAGAA
GCTTCAGGGCCATACAGAAGAGGTGGAAGAGGTAGTTCCGAGGTTGCCGTGGAGGATTTGGTCTAGGAA
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GAGAAAAGTAGTACTCAAGGACCAAAAAGTGACCTACATACCCCTCCTCCACCTGAGGATGAGGACTC
CATCTTTGCACATTATCAGACAGGCATAAACTTCGACAAATACGACACTATTCTGTGGAAGTGTCTGGA
CATGATGCACCACCAGCAATTCTGACTTTTGAAGAAGCTAATCTCTGTCAGACACTGAATAACAACATTG
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ACTGGTCGTTGTGGGAATACTGGCAGAGCAATTTCTTTTTTGTCTTGAATCGGATAACCATTTAGCAC
AGCCTCTAGTAAAAGTATTGACAGATGCTCAACAGGATGTTCTGATGTTTGGAAAGAAATTCGCTTTAG
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AAGAGCACTTTGAACACAGCTGGGTTTTCTTCTTCAAGCTCCCAATCCAGTAGATGATGAGTCATGGG
ATACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATGAGTTTAA

Protein Sequence: >RC226957 protein sequence
 Red=Cloning site Green=Tags(s)

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MGDEDWEAEINPHMSSYVPIFEKDRYSGENDNFNRTPASSEMDDGPSRRDHFMSKGFASGRNFGNRDA
GECNKRDNTSTMGGFVVGKSFGNRGSNSRFEDGDSSGFWRESSNDCEDNPTNRNGFSKRGGYRDGNNSE
ASGPYRRGGRGSFRGCRGGFGLGSPNNDLPDECMQRTGGLFGSRRPVLSGTGNGDTSQSRSGSGSERGG
YKGLNEEVITGSGKNSWKSEAEGGESSDTQGPKVTYIPPPPEDEDSIFAHYQTGINFDKYDTILVEVSG
HDAPPAILTFEEANLCQTLNNNIAKAGYTKLTPVQKYSIPIILAGRDLMACAQTGSGKTAFFLLPILAHM
MHDGITASRFKELQEPECIIVAPTRELVNQIYLEARKFSFGTCVRAVVIYGGTQLGHSIRQIVQGCNILC
ATPGRMLDIIGKEKIGLKQIKYLVLDEADRMLDMGFGPEMKKLISCPGMPKSKEQRQTLMFSAFPPEIQR
LAAEFLKSNYLFVAVGQVGGACRDVQQTVLVQVQFQSKREKLVEILRNIGDERTMVFVETKKKADFIATFL
CQEKISTTSIHGDREQREREQALGDFRFGKCPVLVATVSAARGLDIENVQHVINFDPSTIDEYVHRIGR
TGRCGNTGRAISFFDLESDNHLAQPLVKVLTDAQQDVPALWEEIAFSTYIPGFSGSTRGNVFAVSDTRKG
KSTLNTAGFSSSQAPNPVDESVD
  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6586_d12.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001136034

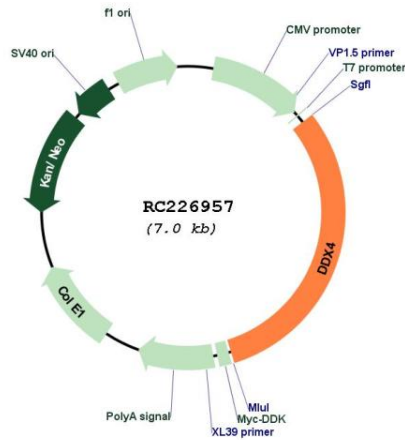
ORF Size: 2172 bp

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](#)

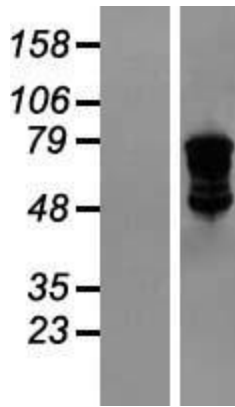
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_001136034.1, NP_001129506.1</u>
RefSeq Size:	2880 bp
RefSeq ORF:	2174 bp
Locus ID:	54514
Cytogenetics:	5q11.2
MW:	79.3 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 a homolog of VASA proteins in Drosophila and several other species. The gene is specifically expressed in the germ cell lineage in both sexes and functions in germ cell development. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

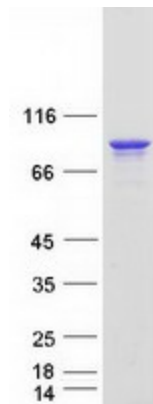
Product images:



Circular map for RC226957



Western blot validation of overexpression lysate (Cat# [LY427781]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226957 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DDX4 protein (Cat# [TP326957]). The protein was produced from HEK293T cells transfected with DDX4 cDNA clone (Cat# RC226957) using MegaTran 2.0 (Cat# [TT210002]).