

## Product datasheet for **RC208769**

### **DDX1 (NM\_004939) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	DDX1 (NM_004939) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DDX1
Synonyms:	DBP-RB; UKVH5d
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC208769 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGCCTTCTCCGAGATGGGTGTAATGCCTGAGATTGCACAAGCTGTGGAAGAGATGGATTGGCTCC  
 TCCCAACTGATATCCAGGCTGAATCTATCCATTGATCTTAGGAGGAGGTGATGACTTATGGCTGCAGA  
 AACAGGAAGTGGCAAACTGGTGCTTTTAGTATCCAGTTATCCAGATAGTTTATGAAACTCTGAAAGAC  
 CAACAGGAAGGCAAAAAGGAAAAACAACAATAAACTGGTGCTTCAGTGCTGAACAAATGGCAGATGA  
 ACCCATATGACAGAGGATCTGCTTTTGAATTGGGTGAGATGGTCTTTGTTGTCAAAGCAGAGAAGTAAA  
 GGAATGGCATGGGTGTAGAGCTACTAAAGGATTAATGAAAGGGAAACACTACTATGAAGTATCCTGTCAT  
 GACCAAGGTTATGCAGGGTCGGTGGTCTACCATGCAGGCTCTTTGGACCTAGGTACTGACAAGTTG  
 GATTTGGCTTTGGTGAACAGGAAAGAAATCCCATAAACAATTTGATAATTATGGAGAGGAATTCAC  
 TATGCATGATACCATTGGATGTTACCTGGATATAGATAAGGGACATGTCAAGTTCTCCAAAAATGGAAAA  
 GATCTTGGTCTGGCATTGAAATACCACCACATATGAAAAACCAAGCCCTCTTCTGCCTGTGTTTGA  
 AGAATGCTGAACTGAAATTTAACTTCGGTGAAGAGGAATTTAAGTTTCCACCAAAAAGATGGCTTGTTC  
 TCTTCCAAAGGCACCGGATGGTTACATTGTCAAATCACAGCACTCAGGTAATGCACAGGTGACACAAACA  
 AAGTTTCTCCCAATGCTCCGAAAGCTCTCATTGTTGAACCTTCCCGGGAGTTAGCTGAACAAACTTTGA  
 ACAACATCAAGCAGTTTAAAGAAATACATTGATAATCCTAAATTAAGGGAGCTTCTGATAATTGGAGGTGT  
 TGCAGCCCGGATCAGCTCTCTGTTTTGAAAAATGGAGTAGATATAGTTGTAGGTACTCCGGGAAGACTA  
 GATGACTTGGTGTCAACTGGAAGCTGAACCTTCTCAAGTTAGATTCTGGTCTGGATGAAGCTGATG  
 GGCTTCTTTCTCAAGTTATTCTGATTTTATAAATAGGATGCACAATCAGATTCCTCAGTTACCTGATG  
 TGGAAAAAGACTTCAGGTGATTGTTGCTCTGCCACTTTGCATTCTTTCGATGTAAGAAACTGTCCGAG  
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 ATCCTGAAAGGGAGTATGCTGTCCGGCAATCAAGGAACATAAGATGGATCAAGCAATTATCTTCTGTA  
 GAACCAAAATTGACTGTGATAACTTGGAGCAGTACTTTATACAACAAGGAGGAGGACCTGATAAAAAAGG  
 ACACCAGTTCTCATGTGTTTGTCTTCATGGTGACAGAAAGCCTCATGAGAGAAAGCAAAACTTGGAAAGA  
 TTTAAGAAAGGAGATGTAAGATTCTTGATTTGCACAGATGTAGCTGCTAGAGGAATTGATATCCACGGTG  
 TTCCTTATGTTATAAATGTCACCTGCCCCGATGAAAAGCAAACTACGTACATCGAATTGGCAGAGTAGG  
 AAGAGCTGAAAGGATGGGTCTGGCAATTTCCCTGGTGGCAACAGAAAAAGAAAAGTTTGGTACCATGTA  
 TGTAGCAGCCGTGAAAAGGGTGTATAACACAAGACTCAAGGAAGATGGAGGCTGTACCATATGGTACA  
 ACGAGATGCAGTTACTATCTGAGATAGAAGAACCTGAACTGTACCATTTCTCAGTTGAGCCGGATAT  
 AAAGGTACCAGTGGATGAATTTGATGGGAAAGTTACCTACGGTCAGAAAAGGGCTGCTGGTGGTGGAAAGC  
 TATAAAGGCCATGTGGATATTTGGCACCTACTGTTCAAGAGTTGGCTGCCCTTGGAAAGGAGGCGCAGA  
 CATCTTCTGCATCTTGGCTACCTTCTAACCCAGCTGTTCAGAACCTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC208769 protein sequence  
Red=Cloning site Green=Tags(s)

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MAAFSEMGVMP EIAQAVEEMDWLLPTDIQAESIPLILGGGDVLMMAETGSGKTGAFSIPVIQIVYETLKD
QQEGKKGKTTIKTGASVLNKGWQMNQPYDRGSAFAIGSDGLCCQSREVKWEHGCRA TKGLMKGKHYYEVSCH
DQGLCRVGWSTMQASLDLGTDFGFGGGTGKSHNKQFDNYGEEFTMHDITIGCYLDIDKGHVKFSKNGK
DLGLAFEIPPHMKNQALFPACV LKNAELKFNFGEEEFKFPKDG FVALSKAPDGYIVKSQHSQNAQVTQT
KFLPNAPKALIVEPSRELAEQTLNNIKQFKKYIDNPKLRELLIIGGVAARDQLSVLENGVDIVVGTGRL
DDL VSTGKLNLSQVRFLVLDEADGLLSQGYSDFINRMHNQIPQVTS DGKRLQVIVCSATLHSDVKKLSE
KIMHFPTWVDLKGEDSV PDTVHHVVVVPNPKTDRLWERLKGSHIRTD DVHAKDNTRPGANSPEMWSEAIK
ILKGEYAVRAIKEHKMDQAIIFCR TKIDCDNLEQYFIQQGGGPDKKGHQFSCVCLHGDRK PHERKQNLER
FKKGDVRF LICTDVAARGIDIHGVPYVINVTLPDEKQNYVHRIGRVGRAERMGLAISLVATEKEKVYHV
CSSRKGKGCYNTRLKEDGGCTI WYNEMQLLSEIEEHLNCTISQVEPDIKVPVDEFD GKVTYQGKRAAGGS
YKGHVDILAPTVQELAALEKEA QTSFLHLGYLPNQLFR TF
    
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6230\\_d07.zip](https://cdn.origene.com/chromatograms/mk6230_d07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_004939

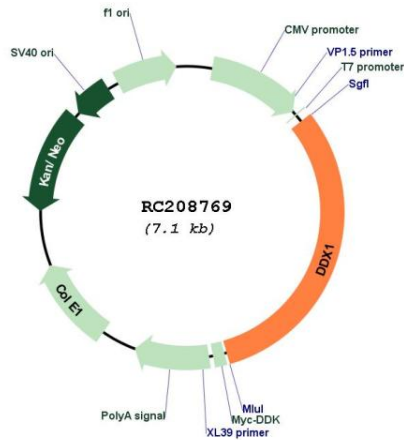
**ORF Size:** 2220 bp

**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](#)

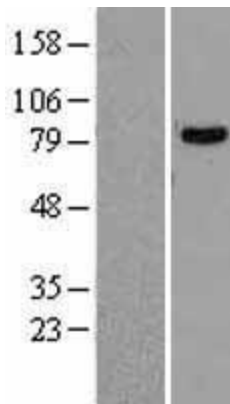
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_004939.3</a>
<b>RefSeq Size:</b>	2755 bp
<b>RefSeq ORF:</b>	2223 bp
<b>Locus ID:</b>	1653
<b>UniProt ID:</b>	<a href="#">Q92499</a>
<b>Cytogenetics:</b>	2p24.3
<b>Domains:</b>	DEAD, helicase_C, SPRY
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	82.4 kDa
<b>Gene Summary:</b>	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 of unknown function. It shows high transcription levels in 2 retinoblastoma cell lines and in tissues of neuroectodermal origin. [provided by RefSeq, Jul 2008]

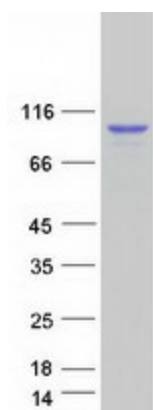
Product images:



Circular map for RC208769



Western blot validation of overexpression lysate (Cat# [LY417641]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208769 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DDX1 protein (Cat# [TP308769]). The protein was produced from HEK293T cells transfected with DDX1 cDNA clone (Cat# RC208769) using MegaTran 2.0 (Cat# [TT210002]).