

Product datasheet for **MR226456**

Ddx4 (NM_010029) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ddx4 (NM_010029) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ddx4
Synonyms:	AV206478; Mvh; VASA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MR226456 representing NM_010029
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGAGATGAAGATTGGGAGGCAGAAATACTCAAACCTCACGTGTCTTCTATGTTCTCTGATTTTGAGA
 AGGATAAATATTCTTCTGGAGCAAATGGAGACACTTTTAAACAGGACTTCAGCTTCATCAGATATTGGCGA
 GTCTAGTAAAAAAGAGAACACATCTACAACCTGGTGGCTTTGGAAGAGGAAAGGGCTTTGGAACAGAGGT
 TTTTTAAATAACAAGTTTGAAGAAGGTGATAGCTCTGGTTTCTGGAAAGAGTCTAATAATGACTGTGAAG
 ATAATCAGACTCGAAGCAGAGGGTTTTCCAAGCGAGGTGGCTGCCAAGATGGAACGATTGAGAAGCATC
 AGGCCCGTTGAGAAGAGGGGAAGAGGCAGTTCCGAGGCTGCCGTGGAGGATTTGGTCTAGGAAGACCA
 AATAGTGAATCTGACCAAGATCAGGGGACACAGCGTGGTGGTGGCCTTTTTGGTTCTAGGAAACCAGCAG
 CAAGTGATTGAGCAATGGTGACACTTACCAAAGCAGAAGTGAAGTGGTCGAGGTGGTTACAAAGTTTT
 AAATGAAGAAGTAGTAACAGGTTCTGGAAGAATTCTTGAAGTCAGAACTGAAGGAGGTGAAAGCAGT
 GATAGTCAAGGTCCAAAAGTGACATATATACCCCTCCTCCACCAGAGGATGAGGACTCCATCTTTGCAC
 ATTATCAGACAGGCATAAACTTTGATAAATATGACACCATACTTGTGAAAGTATCTGGACATGATGCACC
 ACCGGCAATTTTGACTTTTGAAGAAGCTAATCTCTGTGACACTGAATAACAACATTGCTAAAGCTGGC
 TATACTAAGCTTACTCTGTGCAGAAGTACAGCATTCCCATTGTATTAGCAGGACGAGATTTGATGGCTT
 GTGCTCAAACAGGGTCTGGGAAGACTGCAGTTTTCTCTTGCCTATTTGGCTCATATGATGCGGGATGG
 AATAACTGCCAGTCGCTTAAAGAACTGCAGGAACCAGAGTGTATTATTGTAGCACCAACTCGAGAACTG
 ATCAACCAAATTTACTTGAAGCCAGAAAATTTCTTTGGGACTGTGTAAAGCTGTGGTTCATATATG
 GAGGAACCCAGTTTGGTCATTGATTCGACAGATAGTACAAGGGTGTAAACATATTGTGTGCTACTCCAG
 GAGGCTGATGGACATCATAGGCAAAGAAAAGATTGGCCTCAAACAAGTCAAGTACTTAGTTTTGGATGAA
 GCTGATCGAATGTTGGATATGGTTTTGGACCAGAGATGAAGAACTAATTTCTGTCCAGGAATGCCAT
 CAAAGGAACAACGCCAAACCTTTTATTAGTGTACTTTCCAGAAGAAATCCAGAGGTTGGCTGGGGA
 CTTTCTAAAGTCCAGTTACTTGTGTCGCTGTTGGGCAAGTGGGAGGAGCTTGCAGAGATGTTGAGCAG
 ACGATCCTTCAAGTTGGCCAGTATCAAAAAGAGAAAAGCTTGTGAGATTCTACGAAACATAGGTGATG
 AAAGAACTATGGTCTTTGTTGAAACCAAGAAAAAAGCCGATTTTCATTGCAACTTTTCTTTGTCAAGAAA
 AATATCAACTACAAGTATTCATGGTGTGCGGAGCAGAGGGAGAGAGCAAGCTCTGGAGATTTTCGC
 TGTGAAAGTGCCAGTCTTGTGCTACTTCAGTGGCTGCCAGAGGGCTTGATATTGAAAATGTTCAAC
 ATGTTATCAATTTGACCTTCTTCTACCATTTGATGAGTATGTTTCATCGAATTGGACGCACTGGCCGCTG
 TGGAAATACTGGCAGAGCGATTTCTTTTTTGTACTGACTCTGATAATCATTAGCACAGCCTCTAGTT
 AAAGTACTGTGACAGCTCAACAGGATGTCCCGCATGGCTAGAAGAGATTGCCTTCAGTACCTATGTGC
 CTCCCAGCTTCAGTAGCAGCACAAGAGGGGGGCTGTGTTGATCTGTTGACACGAGGAAGAATTACCA
 GGGCAAGCACACGTTGAATACAGCGGGGATTTCTTCTTCAAGCTCCCAATCCAGTTGATGACGAGTCA
 TGGGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

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_010029.2](#), [NP_034159.1](#)

RefSeq Size: 2772 bp

RefSeq ORF: 2109 bp

Locus ID: 13206

UniProt ID: [Q61496](#)

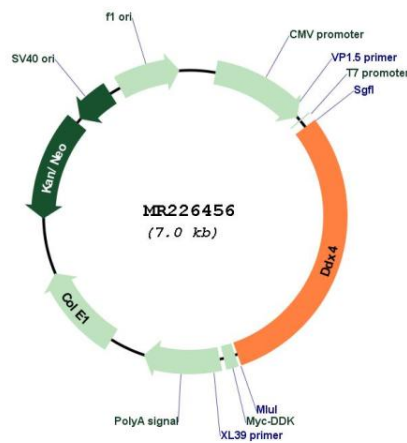
Cytogenetics: 13 63.87 cM

MW: 76.5 kDa

Gene Summary:

ATP-dependent RNA helicase required during spermatogenesis to repress transposable elements and preventing their mobilization, which is essential for the germline integrity (PubMed:20439430, PubMed:28633017). Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons (PubMed:20439430, PubMed:28633017). Involved in the secondary piRNAs metabolic process, the production of piRNAs in fetal male germ cells through a ping-pong amplification cycle (PubMed:20439430, PubMed:28633017). Required for PIWIL2 slicing-triggered piRNA biogenesis: helicase activity enables utilization of one of the slice cleavage fragments generated by PIWIL2 and processing these pre-piRNAs into piRNAs (PubMed:28633017).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226456