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Product datasheet for MC221072

Ddx4 (NM_001145885) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ddx4 (NM_001145885) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ddx4
Synonyms:	AV206478; Mvh; VASA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

>MC221072 representing NM_001145885
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGAGATGAAGATTGGGAGGCAGAAATACTCAAACCTCACGTGTCTTCCTATGTTCCTGTATTTGAGA
AGGATAAATATTCTTCTGGAGCAAATGGAGACACTTTTAACAGGACTTCAGCTTCATCAGAAATGGAAGA
TGGGCCTTCTGGAAGAGATGATTTCATGAGAAGTGGGTTTCCTTCTGGAAGAAGTTTAGGAAGCAGAGAT
ATTGGCGAGTCTAGTAAAAAAGAGAACACATCTACAACTGGTGGCTTTGGAAGAGGAAAGGGCTTTGGAA
ACAGAGGTTTTTTAAATAACAAGTTTGAAGAAGGTGATAGCTCTGGTTTCTGGAAAGAGTCTAATAATGA
CTGTGAAGATAATCAGACTCGAAGCAGAGGGTTTTCCAAGCGAGGTGGCTGCCAAGATGGAAACGATTCA
GAAGCATCAGGCCCGTTCAGAAGAGGGGGAAGAGGCAGTTTCCGAGGCTGCCGTGGAGGATTTGGTCTAG
GAAGACCAAATAGTGAATCTGACCAAGATCAGGGGACACAGCGTGGTGGTGGCCTTTTTGGTTCTAGGAA
ACCAGCAGCAAGTGATTCAGGCAATGGTGACACTTACCAAAGCAGAAGTGGAAGTGGTCGAGGTGGTTAC
AAAGGTTTAAATGAAGAAGTAGTAACAGGTTCTGGAAAGAATTCTTGGAAGTCAGAAACTGAAGGAGGTG
AAAGCAGTGATAGTCAAGGTCCAAAAGTGACATATATACCCCCTCCTCCACCAGAGGATGAGGACTCCAT
CTTTGCACATTATCAGACAGGCATAAACTTTGATAAATATGACACCATACTTGTTGAAGTATCTGGACAT
GATGCACCACCGGCAATTTTGACTTTTGAAGAAGCTAATCTCTGTCAGACACTGAATAACAACATTGCTA
AAGCTGGCTATACTAAGCTTACTCCTGTGCAGAAGTACAGCATTCCCATTGTATTAGCAGGACGAGATTT
GATGGCTTGTGCTCAAACAGGGTCTGGGAAGACTGCAGCTTTTCTCTTGCCTATTTTGGCTCATATGATG
CGGGATGGAATAACTGCCAGTCGCTTTAAAGAACTGCAGGAACCAGAGTGTATTATTGTAGCACCAACTC
GAGAACTGATCAACCAAATTTACTTGGAAGCCAGAAAATTTTCTTTTGGGACTTGTGTAAGAGCTGTGGT
CATATATGGAGGAACCCAGTTTGGTCATTCAGTTCGACAGATAGTACAAGGGTGTAACATATTGTGTGCT
ACTCCAGGGAGGCTGATGGACATCATAGGCAAAGAAAAGATTGGCCTCAAACAAGTCAAGTACTTAGTTT
TGGATGAAGCTGATCGAATGTTGGATATGGGTTTTGGACCAGAGATGAAGAAACTAATTTCTTGTCCAGG
AATGCCATCAAAGGAACAACGCCAAACCCTTTTATTCAGTGCTACTTTTCCAGAAGAAATCCAGAGGTTG
GCTGGGGACTTTCTAAAGTCCAGTTACTTGTTTGTCGCTGTTGGGCAAGTGGGAGGAGCTTGCAGAGATG
TTCAGCAGACGATCCTTCAAGTTGGCCAGTATTCAAAAAGAGAAAAGCTTGTTGAGATTCTACGAAACAT
AGGTGATGAAAGAACTATGGTCTTTGTTGAAACCAAGAAAAAAGCCGATTTCATTGCAACTTTTCTTTGT
CAAGAAAAAATATCAACTACAAGTATTCATGGTGATCGGGAGCAGAGGGAGAGAGAGCAAGCTCTTGGAG
ATTTTCGCTGTGGAAAGTGCCCAGTTCTTGTTGCTACTTCAGTGGCTGCCAGAGGGCTTGATATTGAAAA
TGTTCAACATGTTATCAATTTTGACCTTCCTTCTACCATTGATGAGTATGTTCATCGAATTGGACGCACT
GGCCGCTGTGGAAATACTGGCAGAGCGATTTCTTTTTTTGATACTGACTCTGATAATCATTTAGCACAGC
CTCTAGTTAAAGTACTGTCAGACGCTCAACAGGATGTCCCCGCATGGCTAGAAGAGATTGCCTTCAGTAC
CTATGTGCCTCCCAGCTTCAGTAGCAGCACAAGAGGGGGGGCTGTGTTTGCATCTGTTGACACGAGGAAG
AATTACCAGGGCAAGCACACGTTGAATACAGCGGGGATTTCTTCTTCACAAGCTCCCAATCCAGTTGATG
ACGAGTCATGGGATTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja2156_a05.zip

Restriction Sites: SgfI-MluI

ACCN: NM_001145885

Insert Size: 2187 bp

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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

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_001145885.1, NP_001139357.1

RefSeq Size: 2850 bp

RefSeq ORF: 2187 bp

Locus ID: 13206

Cytogenetics: 13 63.87 cM

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]
Transcript Variant: This variant (1) represents the longer transcript and it encodes the longer protein (isoform 1).

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