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Product datasheet for MG226455

Ddx4 (NM_001145885) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ddx4 (NM_001145885) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ddx4
Synonyms:	AV206478; Mvh; VASA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG226455 representing NM_001145885
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGAGATGAAGATTGGGAGGCAGAAATACTCAAACCTCACGTGTCTTCCTACGTTCCTGTATTTGAGA
AGGATAAATATTCTTCTGGAGCAAATGGAGACACTTTTAACAGGACTTCAGCTTCATCAGAAATGGAAGA
TGGGCCTTCTGGAAGAGATGATTTCATGAGAAGTGGGTTTCCTTCTGGAAGAAGTTTAGGAAGCAGAGAT
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CTGTGAAGATAATCAGACTCGAAGCAGAGGGTTTTCCAAGCGAGGTGGCTGCCAAGATGGAAACGATTCA
GAAGCATCAGGCCCGTTCAGAAGAGGGGGAAGAGGCAGTTTCCGAGGCTGCCGTGGAGGATTTGGTCTAG
GAAGACCAAATAGTGAATCTGACCAAGATCAGGGGACACAGCGTGGTGGTGGCCTTTTTGGTTCTAGGAA
ACCAGCAGCAAGTGATTCAGGCAATGGTGACACTTATCAAAGCAGAAGTGGAAGTGGTCGAGGTGGTTAC
AAAGGTTTAAATGAAGAAGTAGTAACAGGTTCTGGAAAGAATTCTTGGAAGTCAGAAACTGAAGGAGGTG
AAAGCAGTGATAGTCAAGGTCCAAAAGTGACATATATACCCCCTCCTCCACCAGAGGATGAGGACTCCAT
CTTTGCACATTATCAGACAGGCATAAACTTTGATAAATATGACACCATACTTGTTGAAGTATCTGGACAT
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GCTGGGGACTTTCTAAAGTCCAGTTACTTGTTTGTCGCTGTTGGGCAAGTGGGAGGAGCTTGCAGAGATG
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GGCCGCTGTGGAAATACTGGCAGAGCGATTTCTTTTTTTGATACTGACTCTGATAATCATTTAGCACAGC
CTCTAGTTAAAGTACTGTCAGACGCTCAACAGGATGTCCCCGCATGGCTAGAAGAGATTGCCTTCAGTAC
CTATGTGCCTCCCAGCTTCAGTAGCAGCACAAGAGGGGGGGCTGTGTTTGCATCTGTTGACACGAGGAAG
AATTACCAGGGCAAGCACACGTTGAATACAGCGGGGATTTCTTCTTCACAAGCTCCCAATCCAGTTGATG
ACGAGTCATGGGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226455 representing NM_001145885
Red=Cloning site Green=Tags(s)

MGDEDWEAEILKPHVSSYVPVFEKDKYSSGANGDTFNRTSASSEMEDGPSGRDDFMRSGFPSGRSLGSRD
IGESSKKENTSTTGGFGRGKGFGNRGFLNNKFEEGDSSGFWKESNNDCEDNQTRSRGFSKRGGCQDGNDS
EASGPFRRGGRGSFRGCRGGFGLGRPNSESDQDQGTQRGGGLFGSRKPAASDSGNGDTYQSRSGSGRGGY
KGLNEEVVTGSGKNSWKSETEGGESSDSQGPKVTYIPPPPPEDEDSIFAHYQTGINFDKYDTILVEVSGH
DAPPAILTFEEANLCQTLNNNIAKAGYTKLTPVQKYSIPIVLAGRDLMACAQTGSGKTAAFLLPILAHMM
RDGITASRFKELQEPECIIVAPTRELINQIYLEARKFSFGTCVRAVVIYGGTQFGHSVRQIVQGCNILCA
TPGRLMDIIGKEKIGLKQVKYLVLDEADRMLDMGFGPEMKKLISCPGMPSKEQRQTLLFSATFPEEIQRL
AGDFLKSSYLFVAVGQVGGACRDVQQTILQVGQYSKREKLVEILRNIGDERTMVFVETKKKADFIATFLC
QEKISTTSIHGDREQRERERQALGDFRCGKCPVLVATSVAARGLDIENVQHVINFDLPSTIDEYVHRIGRT
GRCGNTGRAISFFDTDSDNHLAQPLVKVLSDAQQDVPAWLEEIAFSTYVPPSFSSSTRGGAVFASVDTRK
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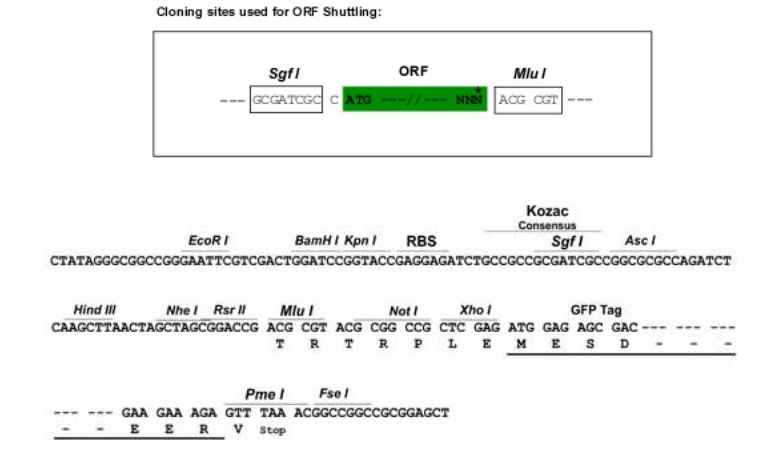
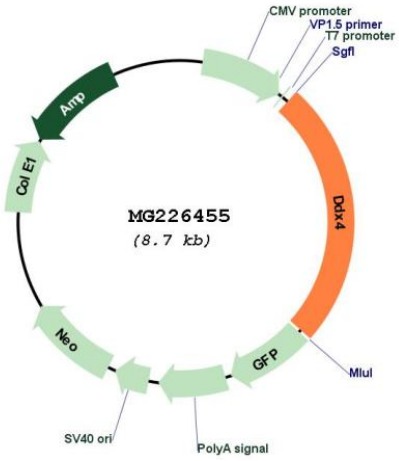
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001145885
ORF Size:	2184 bp
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_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]