

Product datasheet for **RR212003**

Ehd2 (NM_001024897) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ehd2 (NM_001024897) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ehd2
Synonyms:	MGEPS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RR212003 representing NM_001024897
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTTTCAGCTGGCTGAAGAAGGGTGGGGCTCGGGCCAGCGATCTGAGGCCATCCGACCCGTGACCTCGT
 CTCTCAAGGAGCTGTATCGCACAAAGCTTCTGCCCTGGAGGAACACTACCGTTTCGGGTCTTCCATT
 ACCAGCCCTCGAAGATGCTGACTTCGATGGTAAACCCATGGTGGTGGCTGGCCAGTATAGCACCGGC
 AAAACCAGCTTCAACAGTACCTCTGGAGCAGGAGGTCCCTGGCTCCCGCTGGGTCTGAGCCACCA
 CCGACTGCTTCGTGGCTGTATGCACGGCAGACAGGGTACCGTGCCTGAAATGCTCTCGTTGTGGA
 CCCAGAGAAGCCCTTCGCAAACTCAACCTTTTGAAACACTTCTCAACAGGTTTATGTGTGCCAA
 CTCCCAACCAGGTCTGGAGAGCATCAGCATCATCGACACGCCCGCATCTATCAGGTGCCAAGCAGA
 GAGTGAGCCGGGCTACGACTTCCAGCTGTCTTGCCTGGTTTGGTGGAGCGGTGGACCTCATCATCTT
 GCTCTTTGACGCCACAAGCTGGAGATTTCTGATGAATCTCAGAGGCCATTGGTGCCTTGGTGGCCAC
 GAGGACAAGATCCGCGTGGTACTCAACAAGGCAGACATGGTGGAGACACAGCAGCTGATGCGCGTCTATG
 GGGCGCTCATGTGGCGCTGGGCAAGTGGTGGGCACGCCTGAAGTCCTTCGTGTCTACATCGGCTCCTT
 CTGGTCCCAGCCGCTCCTTGTGCCAGACAACCGCGCTCTTTCGAGCTGGAGGAACAGGACCTTCCGT
 GATATCCAAGGCCTACCGCGCCACGCGCGCTGCGGAAGCTCAATGACCTAGTGAAGCGGGCGCGCTGG
 TGCGGGTGCACGCTTACATCATCAGCTACCTGAAGAAGGAGATGCCCTCGGTGTTTCGAAAGGAAAA
 AAAGAAGCAGCTGATCTCAAGCTGCCTGTCATCTTCGCAAGATCCAGCTAGAGCACCACATCTCCCA
 GGAGACTTCCCTGACTGCCAGAAGATGCAGGAGCTGCTGATGCCACATGACTTACCAAGTCCACTCCC
 TAAAGCCGAAGCTGCTGGAGCGCTGGACGAGATGCTGACCCACGACATTGCCAAGCTTATGCCGCTGCT
 TCGGCAGGAGGAGCTGGAGAGTGTGAGGCTGGCGTGCAGGGTGGTGCCTTTGAGGGCACCCGCATGGC
 CCCTTCGTGGAGCGGGCCCTGACGAAGCAATAGAAGATGGCGAGGAGGCTCAGAAGATGATGCCGAAT
 GGGTGGTACCAAGGACAAGTCCAAATACGATGAAATCTTCTACAATTTAGCGCTGCTGATGGCAAGCT
 GAGTGGCTCTAAGGCCAAAACCTGGATGGTGGCACCAAGCTACCCAACCTCCGTGCTGGGGCGAATCTGG
 AAGCTGAGCGATGTGACCGAGATGGCATGCTGGATGATGAGGAGTTCGCCCTGGCCAGCCACCTCATTG
 AGGCTAAGCTCGAAGCCATGGCTACCCACCAACCTACCCCGCCGCTGGTCCACCTTCTAAGCGACG
 ACAGAAGGGCTCTGCTGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR212003 representing NM_001024897
 Red=Cloning site Green=Tags(s)

MFSWLKKGARGQRSEAIRTVTSSLKELYRTRKLLPLEEHYRFGSFHSPALEDADFDGKPMVLVAGQYSTG
 KTSFIQYLLEQEVPGSRVGPPTTDCFVAVMHGETEGTVPGNALVVDPEKPFKLNPFNTFLNRFMCAQ
 LPNQVLESISIIDTPGILSGAKQVRSGYDFPAVLRWFAERVDLIILLFDAHKLEISDEFSEAIGALRGH
 EDKIRVVLNKAADMVETQQLMRVYGALMWALGKVVGTPEVLRVYIGSFWSQPLLVPDNRRLFEEEQDLFR
 DIQGLPRHAALRKLNDLVKRRLVRVHAYIISYLKEMPSVFGKENKKQLIFKLPVIFAKIQLEHHISP
 GDFPDCQKMQELLMAHDFTKFHSLKPKLLEALDEMLTHDIAKLMPLLRQEELSVVAGVQGGAFEGTRMG
 PFVERGPDEAIEDGEEGEDDAEWVTKDKSKYDEIFYNLAPADGKLSGSKAKTWMVGTKLPNSVLGRIW
 KLSVDVDRDGLDDEEFALASHLIEAKLEHGHLPTNLPRLVPPSKRRRQKGSAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001024897

ORF Size: 1629 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.

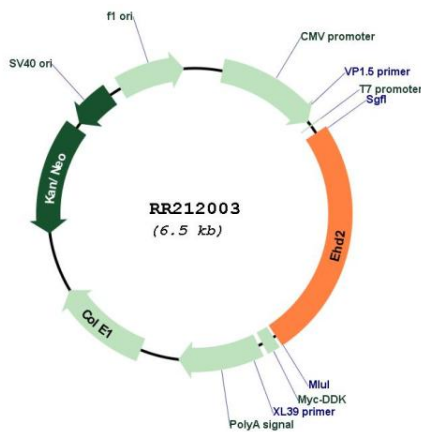
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_001024897.1](#), [NP_001020068.1](#)
RefSeq Size: 2057 bp
RefSeq ORF: 1632 bp
Locus ID: 361512
UniProt ID: [Q4V8H8](#)
Cytogenetics: 1q21
MW: 61.2 kDa

Gene Summary: ATP- and membrane-binding protein that controls membrane reorganization/tubulation upon ATP hydrolysis. Plays a role in membrane trafficking between the plasma membrane and endosomes. Important for the internalization of GLUT4. Required for fusion of myoblasts to skeletal muscle myotubes. Required for normal translocation of FER1L5 to the plasma membrane. Regulates the equilibrium between cell surface-associated and cell surface-dissociated caveolae by constraining caveolae at the cell membrane.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR212003