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Product datasheet for RC224659

EN1 (NM_001426) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EN1 (NM_001426) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EN1
Synonyms:	ENDOVESLB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC224659 representing NM_001426
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAGAACAGCAGCCGGAACCTAAAAGTCAGCGCGACTCGGCCCTCGGCGGCGCGGCGGCGGCGACTC
CGGGCGGCCTCAGCCTGAGCCTCAGTCCGGGCGCCAGCGGCAGCAGCGGCAGCGGCAGCGATGGAGACAG
CGTGCCGGTGTCCCCGCAGCCTGCGCCCCCCTCGCCGCCCGCGGCGCCTTGCCTGCCGCCCCTGGCCCAC
CACCCGCACCTCCCCCCACACCCCCCGCCCCCGCCGCCTCAGCATCTCGCGGCGCCTGCTCACCAGCCGC
AGCCAGCGGCCCAGCTGCACCGCACCACCAACTTTTTCATCGACAACATCCTGAGGCCGGACTTCGGCTG
CAAAAAGGAGCAGCCGCCACCGCAGCTTCTGGTGGCTGCGGCGGCCAGAGGAGGCGCAGGAGGAGGAGGC
CGGGTCGAGCGTGACAGAGGCCAGACTGCCGCAGGTAGAGACCCTGTCCACCCGTTGGGCACCCGGGCGC
CAGGCGCTGCCTCGCTCCTGTGCGCCCCGGACGCGAACTGTGGCCCACCCGACGGCTCCCAGCCAGCCGC
CGCCGGCGCGGGCGCGTCTAAAGCTGGGAACCCGGCTGCGGCGGCGGCGGCGGCCGCGGCGGCAGTGGCG
GCGGCGGCGGCGGCCGCAGCAGCCAAGCCCTCGGACACCGGTGGCGGCGGCAGTGGAGGCGGCGCGGGGA
GCCCCGGAGCGCAGGGCACCAAATACCCGGAGCACGGCAACCCGGCTATCCTACTTATGGGCTCAGCCAA
CGGCGGGCCCGTGGTCAAAACTGACTCGCAGCAGCCTCTCGTATGGCCCGCCTGGGTGTACTGCACACGT
TATTCGGATCGTCCATCCTCCGGTCCGCGCACCAGGAAGCTGAAGAAGAAGAAGAACGAGAAGGAGGACA
AGCGGCCGCGGACCGCGTTCACGGCCGAGCAGCTGCAGAGACTCAAGGCGGAGTTCCAGGCAAACCGCTA
CATCACGGAGCAGCGGCGGCAGACCCTGGCCCAGGAACTCAGCCTCAACGAGTCCCAGATCAAGATCTGG
TTCCAGAACAAGCGCGCCAAGATCAAGAAAGCCACAGGCATCAAGAACGGCCTGGCGCTGCACCTCATGG
CCCAGGGACTGTACAACCACTCCACCACCACGGTCCAGGACAAAGACGAGAGCGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224659 representing NM_001426
Red=Cloning site Green=Tags(s)

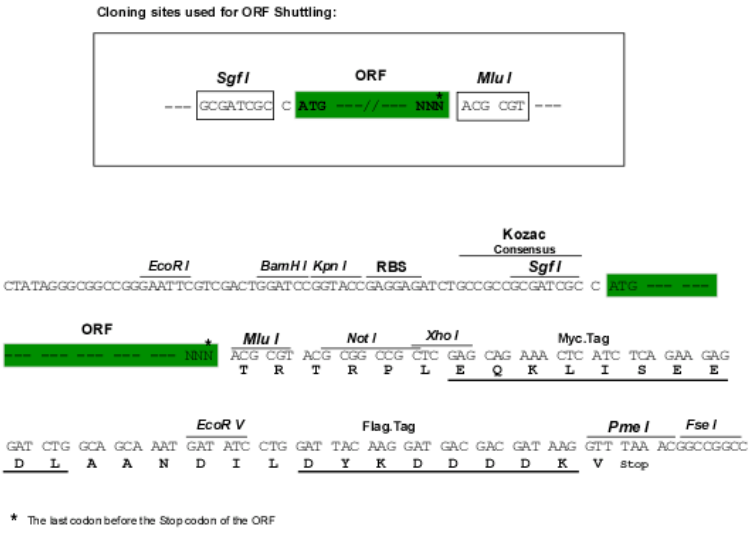
MEEQQPEPKSQRDSALGGAAAATPGGLSLSLSPGASGSSGSGSDGDSVPVSPQPAPPSPPAAPCLPPLAH
HPHLPPHPPPPPPQHLAAPAHQPQPAAQLHRTTNFFIDNILRPDFGCKKEQPPPQLLVAAAARGGAGGGG
RVERDRGQTAAGRDPVHPLGTRAPGAASLLCAPDANCGPPDGSQPAAAGAGASKAGNPAAAAAAAAAAVA
AAAAAAAAKPSDTGGGGSGGGAGSPGAQGTKYPEHGNPAILLMGSANGGPVVKTDSQQPLVWPAWVYCTR
YSDRPSSGPRTRKLKKKKNEKEDKRPRTAFTAEQLQRLKAEFQANRYITEQRRQTLAQELSLNESQIKIW
FQNKRAKIKKATGIKNGLALHLMAQGLYNHSTTTVQDKDESE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8007_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001426

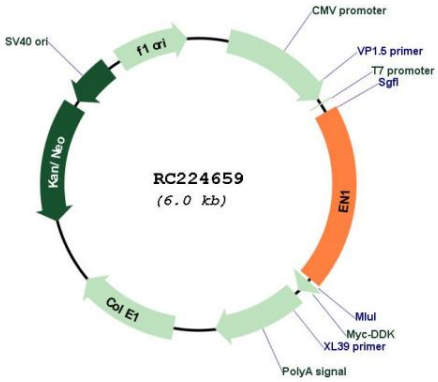
ORF Size: 1176 bp

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.

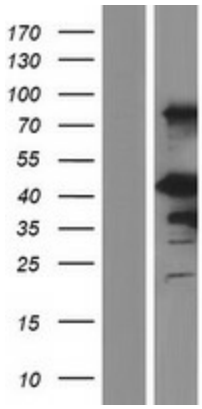
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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_001426.2, NP_001417.2
RefSeq Size:	2943 bp
RefSeq ORF:	1179 bp
Locus ID:	2019
UniProt ID:	Q05925
Cytogenetics:	2q14.2
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS
MW:	39.9 kDa
Gene Summary:	Homeobox-containing genes are thought to have a role in controlling development. In Drosophila, the 'engrailed' (en) gene plays an important role during development in segmentation, where it is required for the formation of posterior compartments. Different mutations in the mouse homologs, En1 and En2, produced different developmental defects that frequently are lethal. The human engrailed homologs 1 and 2 encode homeodomain-containing proteins and have been implicated in the control of pattern formation during development of the central nervous system. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC224659



Western blot validation of overexpression lysate (Cat# [LY419942]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224659 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).