

Product datasheet for RC233212

DEPDC5 (NM_001242897) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DEPDC5 (NM_001242897) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DEPDC5
Synonyms:	DEP.5; FFEVF; FFEVF1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC233212 representing NM_001242897 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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AGGAAGTGAGGAGCCAGGCTTCTGACGACAGCTCCCTAGGCAAGAGTGCCAACATCCTGATGATCCCACA
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Protein Sequence: >RC233212 representing NM_001242897
 Red=Cloning site Green=Tags(s)

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 PEADIDRRDEGDVQMTAQVFEFICQRLMQGYQIIVQPKTQKPNPAVPPPLSSSPLYSRGLVSRNRPEE
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 RKWFEVAFVAEELVHSEIPAFLLPWLPSRPASYASRHSSFSRSFSGRSQAAALLAATVPEQRTVTLVDV
 NNRTDRLEWCSCYYHGNFSLNAAFEIKLHWMVTA AVL FEMVQGWHRKATSCGFLLVVLEGPALPSYL
 YGDPLRAQLFIPLNISCLLKEGSEHLFDSFEPETYWDRMHLFQEAIAHRFGFVQDKYSASAFNFP AENKP
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 D RLLKDFDFCINRDNRLVTFWTSCKLEKMHASAP

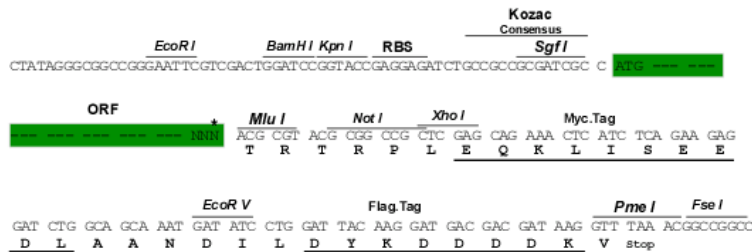
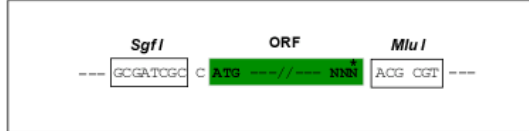
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

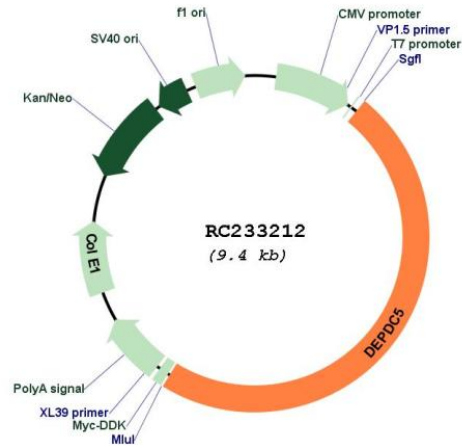
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001242897

ORF Size: 4509 bp

OTI Disclaimer: 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_001242897.2](#)

RefSeq Size: 5155 bp

RefSeq ORF: 4512 bp

Locus ID: 9681

UniProt ID: [O75140](#)

Cytogenetics: 22q12.2-q12.3

MW: 171 kDa

Gene Summary: This gene encodes a member of the IML1 family of proteins involved in G-protein signaling pathways. The mechanistic target of rapamycin complex 1 (mTORC1) pathway regulates cell growth by sensing the availability of nutrients. The protein encoded by this gene is a component of the GATOR1 (GAP activity toward Rags) complex which inhibits the amino acid-sensing branch of the mTORC1 pathway. Mutations in this gene are associated with autosomal dominant familial focal epilepsy with variable foci. A single nucleotide polymorphism in an intron of this gene has been associated with an increased risk of hepatocellular carcinoma in individuals with chronic hepatitis C virus infection. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]