

## Product datasheet for MR212021

### Depdc5 (NM\_001025426) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Depdc5 (NM_001025426) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Depdc5
Synonyms:	AV016528
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR212021 representing NM_001025426 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAGAACCACAAAGGTCTACAACTTGTTCATCCACAAGAAGGGCTTTGGGGCAGTGATGATGAGCTAG  
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GTACAGTCTTTGCTTTTGAAGTCAAGTCGCTTAAGGAAGATTTACAGAAAGAACTATCAGTGTGGAC  
CAGACTGTGACTCAAGTATTCGGCTAAGACCTTATCAAGATGTCTATGTGAATGTTGTAGACCCCAAGG  
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AGGAAGTGAGGAGCCAGGCTTCTGATGACAGCTCCCTGGGCAAGAGCACCAACATCCTGATGATCCCTAA  
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Protein Sequence: >MR212021 representing NM\_001025426  
 Red=Cloning site Green=Tags(s)

MRTTKVYKLVIIHKKGFGGSDDELVVNPKVFPHIKLGDIVIAHPNDEYSPLLLQVKSLEDLQKETISVD  
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 AGELWVKNEKVMCGYISEETRNVFRSTSAMVYIFIQMSCEMWFDFIYGDLYFEKAVNGFLADLFTKWKEK  
 NCSHEVTVVLFSRTFYDAKSIDFPEINRSIQEDHKGRFYEDFYKVVVQNERREWTSLLVTIKKLFIQ  
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 SRKSASSCDVSSSPSLSRALPTEEVRSQASDDSSLGKSTNILMIPNPHLHQYEVSSSLGYTSTRDVLEN  
 MIEPPQRDSSAPGRFHVGSAESMLHVRPGGYTPQRALINPFAPSRMPMKLTSNRRRWMTFPVGPGEAI  
 QIHQTRQNMAELQGSQRDPHTSSAELLELAYHEAAGRHSTRQPGDSMSLNFSGTEELSVSLLSNSST  
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 EGCYDLLPEADMRRDEEGVQMTAQQVFEFICQRLMQGYQIIIVQPKTQKPNTTVPPLSSPLYSRGLV  
 SRNRPEEEGQYWL SMGRTFHKVTLKDKMITVTRYL PKYPYESAQIHYTSLCPSHSDSEFVSCWVDFCHE  
 RLEEYKWNLYLDQYICSA GSEDFSLIESLKFWRTRFLLL PACVTATKRITGEVHCDIYGDKPRADEDEWQ  
 LLDGFI R FVEGLNRI RRRHRSDRMIRKGTAMKGLQMTGPI SAHSL E AAGPPV GKGKTSALSALLEMEASQ  
 KSLGEQQT TVHGKSS TQPAENSSVAMTPT YVDS PRKDGAF FMEF VRSRPT ASSAF YPQASVDQTAPLVLD  
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 FGGRSQAALLAATVPEQRTVTLDVDVNNRTDRLEWCSCYYHGNFSLNAAFEIKLHWMVA TATVLFEMVQ  
 GWHRKATSCGFLLVPVLEGP FALPSYLYGDPLRAQLFIPLNLSCLLKEGSEHLFDL DLCKINILSPLL T  
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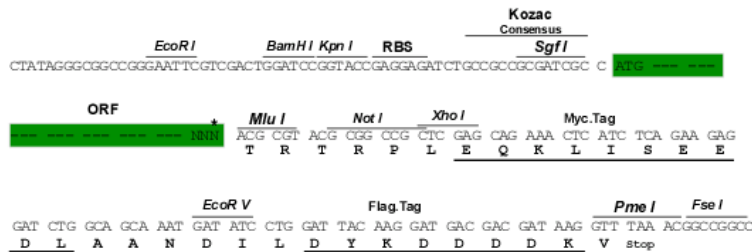
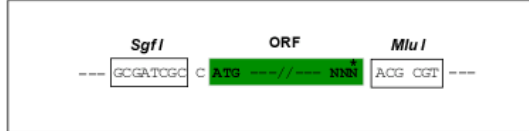
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

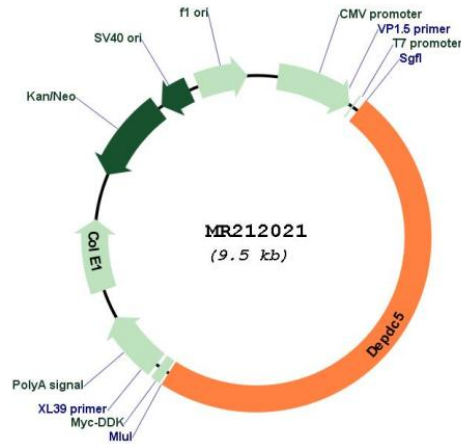
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



**ACCN:** NM\_001025426

**ORF Size:** 4590 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\\_001025426.2](#), [NP\\_001020597.1](#)

**RefSeq Size:** 8213 bp

**RefSeq ORF:** 4593 bp

**Locus ID:** 277854

**Cytogenetics:** 5 17.35 cM

**MW:** 172.2 kDa

**Gene Summary:** As a component of the GATOR1 complex functions as an inhibitor of the amino acid-sensing branch of the TORC1 pathway. The GATOR1 complex strongly increases GTP hydrolysis by RRAGA and RRAGB within RRAGC-containing heterodimers, thereby deactivating RRAGs, releasing mTORC1 from lysosomal surface and inhibiting mTORC1 signaling. The GATOR1 complex is negatively regulated by GATOR2 the other GATOR subcomplex in this amino acid-sensing branch of the TORC1 pathway.[UniProtKB/Swiss-Prot Function]