

Product datasheet for MR215873

Depdc5 (NM_177786) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Depdc5 (NM_177786) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Depdc5
Synonyms:	AV016528
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR215873 representing NM_177786 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGAACCACAAAGGTCTACAACTTGTCCATCCACAAGAAGGGCTTTGGGGCAGTGATGATGAGCTAG
TCGTGAACCCCTAAAGTATTTCTCACATCAAACCTGGAGACATTTGGAGATTGCTCACCCCAATGATGA
GTACAGTCCTTTGCTTTTGAAGTCAAGTCGTTAAGGAAGATTTACAGAAAGAACTATCAGTGTGGAC
CAGACTGTGACTCAAGTATTCGGCTAAGACCTTATCAAGATGTCTATGTGAATGTTGTAGACCCCAAGG
ATGTGACTCTTGACCTGGTGAATTGACTTTTAAAGGATCAGTATATTGGCCGTGGGGATATGTGGCGACT
AAAGAAAAGTTTGGTGAGCACCTGTGCCTATATCACTCAAAAAGTGAATTTGCTGGCATCAGGGCACAG
GCTGGTGAGCTGTGGGTCAAGAATGAGAAGGTCATGTGTGGTTACATTAGTGAAGAGACCAGGGTGGTGT
TCCGTTCTACGTCGGCTATGGTTTACATATTTATTTCAGATGAGCTGTGAAATGTGGGATTTTGATATTTA
TGGGGTCTGTACTTTGAGAAAGCTGTGAACGGTTTCTCGCCGACCTGTTTACTAAATGGAAGGAGAAG
AACTGTAGTCATGAAGTACTGTGGTCTGTTTCCAGAACTTTCTATGATGCAAAATCTATTGATGAAT
TTCCTGAAATAAACCGAGCTTCAATTCAAGAGGATCACAAAGGGAGATTCTATGAGGACTTTTACAAAGT
GGTGGTGCAGAATGAGAGAAGGGAAGAGTGGACTTCACCTCGTGACCATTAACCAACTTTTATCCAG
TATCCAGTGTGGTGCGACTGGAACAGGCAGGGGCTTTTCTCAAGGAGACAATTTACCTCAGCACAAG
GAAACTACCTAGAGGCCATCAACTTGCAATTCAATGTGTTTGACAAGCACTACATCAACCGAAACTTTGA
CCGAACTGGGCAGATGTCTGTGGTGATCACGCCGGGGTGGTGTCTTTGAAGTGACCCTACTCATG
ATCTTGACCAAGCAGCGGATGATTGATAATGGAATTGGTGTGGACTTAGTGTGCATGGGAGAGCAGCCAC
TACATGCTGTGCCATTATTCAAGCTACATAACCGGAGTGTCCGAGGGATTCTCGACTGGGTGATGATTA
TAATATTCCTCACTGGATAAACCATAGTTTCTACACATCCAAAAGCCAGCTCTTTTGAACAGTTTCACT
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GGACTCCAAAGGAATCTGAAAACACCTTCCCATCCAAGTAGATTATGATGCCTACGATGCTCAAGTGT
CAGGCTGCCTGGCCCATCCGGGCTCAGCGCTCGCCACCTGCAGGTCTGTGAGAGAACAGGAGAATCAC



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AGTCGCAAAAGTCAAGCTCCTGTGATGTCTCATCCAGCCCTTCCTGCCAAGCCGTGACTGCCCACTG
 AGGAAGTGAGGAGCCAGGCTTCTGATGACAGCTCCCTGGGCAAGAGCACCAACATCTGATGATCCCTAA
 CCCCCACTGCACCAGTATGAAGTCAGCAGCTCACTGGGCTACACCAGCACCCGAGATGTCTGGAGAAC
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 CAGGCTTCTGTTGCACAGTTGGAGTGGATTGGAAGTCTTACTACTCTGATGCCTTCCCCTCACCAC
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 ACCCCATTGAGCAGTAGCCACTCTATAGCAGAGGCCTGTGTCCGAAATCGCCTGAGGAGGAAGGC
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 TTAGATCAGTATATTTGTTCTGCTGGCTCTGAAGACTTCACTTAAATCGAGTCTCTGAAGTTCTGGAGAA
 CCCGATTTTACTACTGCCAGCCTGTGTTACTGCCACCAAGCGCATCACAGAAGGGGAGGTGCACTGTGA
 CATCTATGGGGACAAACCCCGTGCAGATGAAGTGAAGTGGCAGCTTCTAGATGGCTTTATTCGCTTTGTA
 GAGGGCTTAAATCGCATCCGACGGCCACCCTCAGACCGCATGATTCCGAAGGGGACTGCCATGAAAG
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 AACCTCAGCTCTGTCTGCCCTGCTGGAGATGGAAGTGTGAGATGAGCAGAGCCATAGGAGAACAGCAGCAGT
 GTGCACGGAAAAAGCTCCACTCAGCCAGCTGAGAACAGCAGTGTGCCATGACTCCACCTATGTGGACA
 GCCACGCAAGGTGCAGCATGTGACCCGCACAGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR215873 representing NM_177786
 Red=Cloning site Green=Tags(s)

MRTTKVYKLVIIHKKFGGSDDELVVNPKVFPHIKLDIVEIAHPNDEYSPLLLQVKSLKEDLQKETISVD
 QVTQVFRRLRPYQDVVYVNVDPKDVTLDELVELTFKDQYIGRGMWRLKSLVSTCAYITQKVEFAGIRAQ
 AGELWVKNKVMCGYISEETRVVFRSTSAMVYIFIQMSCEMWFDIYGDLYFEKAVNGFLADLFTKWKKEK
 NCSHEVTVVLFSRTFYDAKSIDFPEINRASIQEDHKGRFYEDFYKVVVQNERREEWTSLLVTIKKLFIQ
 YPVLVRLEQAGGFPGDNSTSAQGNYLEAINLSFNVFDKHYINRNFDRTGQMSVVIPTGCVGFVDRLLM
 ILTKQRMIDNGIGVDLVCMEQPLHAVPLFKLHNRSVPRDSRLGDDYNIHPWINHSFYTSKSQLFCNSFT
 PRIKLAGKKSASEKTKNGRDTSLGTPKESENTLPIQVDYDAYDAQVFRPLGPSRAQRLATCRSVREQENH
 SRKSASSCDVSSPSLPSRALPTEEVRSQASDDSSLGKSTNILMIPNPHLHQYEVSSSLGYTSTRDVLEN
 MIEPPQRDSSAPGRFHVGSAESMLHVRPGGYTPQRALINPFAPSRMPMKLTSNRRRWMTTFVPGSGEAI
 QIHHQTRQNMAELQGSQRDPHTSSAELLELAYHEAAGRSTSRQPGDSMLNFSGTEELSVSLLSNSST
 GVNPRQTKNDSLEDSVSTSPDPMPGFCTVGVWDKSLTTPACLPLTTDYFPDRQGLQNDYTEGCYDLLPE
 ADMDRRDEEGVQMTAQQVFEFICQRLMQGYQIIVQPKTQKPNTPVPPLSLSSPLYSRGLVSRNRPEEEG
 QYWL SMGRTFHKVTLKDKMITVTRYLPKYPIESAQIHYTYSLCPSHSDEFVSCWVDFCHERLEEYKWNV
 LDQYICSAAGSEDFSLIESLKFWRTRFLLLPACVTATKRITGEVHCDIYGDKPRADEWQLLDGFIKRV
 EGLNRIRRRHRSRDMIRKGTAMKGLQMTGPI SAHSLEAAGPPVGGKGTSSALLLEMEASQKSLGEQTT
 VHKSSTQPAENSSVAMTPTYVDSRPRKQHVTRTD

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_177786

ORF Size: 3255 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_177786.4](#), [NP_808454.2](#)

RefSeq Size: 3569 bp

RefSeq ORF: 3258 bp

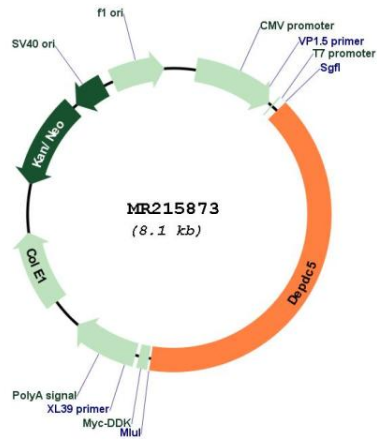
Locus ID: 277854

Cytogenetics: 5 17.35 cM

MW: 123.5 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]

Product images:



Circular map for MR215873