

Product datasheet for **RG233214**

DEPDC5 (NM_001242896) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DEPDC5 (NM_001242896) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DEPDC5
Synonyms:	DEP.5; FFEVF; FFEVF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG233214 representing NM_001242896 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGAACAACAAAGGTCTACAACTCGTCATCCACAAGAAGGGCTTTGGGGCAGTGATGATGAGCTAG
TTGTGAACCCCAAAGTGTCCCTCACATCAAGCTTGGAGACATTGTAGAGATTGCACACCCCAACGATGA
ATACAGCCCTCTGCTTTTGCAGGTCAAGTCTCTTAAGGAAGATTTACAGAAGGAACTATCAGTGTGGAC
CAGACTGTGACTCAAGTGTCCGGCTGAGACCTTATCAGGATGTCTATGTTAATGTCGTAGACCCTAAGG
ATGTGACCCTTGACCTAGTGAATTAACTTTTAAGGATCAGTATATTGGCCGTGGGGATATGTGGCGACT
AAAGAAAAGTTTGGTCAGCACATGTGCCTATATACCCAGAAGGTGGAGTTTGTGGCATCAGAGCACAG
GCTGGTGAAGTGTGGGTTAAGAATGAGAAGGTCATGTGTGGCTACATCAGTGAAGATACCGGGTGGTGT
TTCTGTTTACGTCGGCTATGGTTTACATATTTATTTCAGATGAGCTGTGAAATGTGGGATTTTGATATTTA
TGGGGATTTGTATTTGAGAAAGCTGTGAATGGTTTCTTGTCTATTTTACCAAGTGGAAAGGAGAAG
AACTGTAGTCATGAAGTGACAGTGGTCTGTTTCTAGAACTTTCTATGATGCAAAATCTGTTGATGAAT
TTCCTGAAATAAACCGAGCCTCAATTCGACAGGATCACAAGGGGAGATTCTATGAAGACTTTTACAAAGT
GGTGGTGCAGAATGAGAGAAGAGAAGAATGGACTTCACCTCTCGTAACCATTAACCAACTCTTATCCAG
TATCCAGTGTGGTGGCAGTGGAAACAGGCAGAGGGCTTTTCTCAAGGAGATAATTCTACCTCAGCACAAG
GAAACTACCTGGAGGCCATCAATCTGTCAATTCAATGTGTTTGTAAAGCACTACATCAACCGCAACTTTGA
CCGAAGTGGGCAGATGTCAAGTGGTGTACACGCCGGGGTGGTGTCTTTGAAGTGGACCGCCTACTCATG
ATCCTGACCAAGCAGCGGATGATAGATAATGGAATTGGTGTGGATTTGGTGTGCATGGGAGAGCAACCGT
TACATGCTGTCCATTGTTCAAGCTCCATAATCGGAGTGTCTCCCGTGATTCTCGTCTGGGCGATGACTA
TAATATCCCTCACTGGATAAACACAGTTTCTACACATCCAAAAGCCAGCTCTTTTGAATAGTTTCACC
CCAGAAATAAACTGGCAGGAAAGAAGCCCGCTCTGAGAAAGCAAAAAATGGCCGTGATACATCTCTCG
GGAGTCCAAAAGAATCTGAGAACGCCCTCCCATCCAAGTAGATTATGACGCCTATGACGCTCAAGTGT
CAGGCTGCCCGGCCATCCCGGGCCAGTGCCTACCACCTGCAGATCTGTGCGAGAGCGAGAGAGTCCAC



[View online »](#)

AGTCGAAAGAGTGCCAGCTCCTGTGATGTTTCATCCAGCCCTTCCTACCAAGCCGCACACTGCCCACTG
 AGGAAGTGAGGAGCCAGGCTTCTGACGACAGCTCCCTAGGCAAGAGTGCCAAATCCTGATGATCCACACA
 CCCCCACTGCACCAGTATGAAGTCAGCAGCTCCTTGGGATACACCAGCACTCGAGATGTCTGGAGAAC
 ATGATGGAGCCACCACAGCGAGACTCCAGTGCACCAGGGAGGTTTACGTTGGCAGTGCAGAATCCATGC
 TGCATGTTGACCTGGTGGATACACGCCCCAGAGAGCACTGATTAACCCCTTCGCTCCCTCTCGGATGCC
 CATGAAGCTTACGTCCAACAGAAGGCGCTGGATGCACACTTTTCTGTGGGGCCATCCGGAGAAGCCATC
 CAGATCCACCACCAGACCCGACAGAATATGGCGGAGCTACAAGGCAGCGGGCAGAGGGATCCAACACT
 CCTCTGCAGAGCTGCTGGAGTTAGCATATCATGAAGCTGCTGGAAGGCACAGCAATTCCCGCCAGCCTGG
 TGACGGCATGTCTTCTTGAACCTCAGTGGAAACAGAGGAGCTTTCTGTCCGCCTGCTTAGCAACAGTGGT
 GCAGGTATGAATCCTAGGACCCAGAATAAGGATTCTCTAGAGGACAGTGTCTTCTACCTCTCCAGACCCAA
 TTCTGACACTGTCTGCTCCCCCTGTAGTGCCAGGCTTCTGTTGCACAGTTGGAGTGGACTGGAAGTCTCT
 CACTACTCCGGCGTGCCTCCCCCTTACCACCGACTACTTCCCTGACCGCCAGGGCCTGCAGAATGACTAC
 ACAGAGGGCTGTTATGATCTCCTCCAGAAGCAGACATCGACAGGAGGGACGAAGATGGTGTGCAGATGA
 CAGCCCAGCAGGTATTTGAAGAGTTTATTTGCCAACGTCTCATGCAGGGCTACCAATCATAGTGCAGCC
 CAAGACACAGAAACCAATCCTGTGTCCCGCCCCGCTGAGCAGTAGCCACTCTATAGCCGAGGCCTT
 GTGTCCCGAAACCGCCCTGAGGAGGAGGACCAGTATTGGCTGAGTATGGGCAGAACGTTCCACAAAGTGA
 CGCTGAAGGATAAGATGATCACAGTGCAGCGATACCTTCCCAAGTATCCTTATGAATCTGCCAGATCCA
 CTACACCTACAGCCTCTGTCTTCCCCTCAGACTCAGAGTTCGTCTCCTGCTGGGTGGAATTCTCCAC
 GAACGGCTGGAGGAGTACAAGTGAATTACTTAGATCAGTATATCTGTTCTGCCGGCTCTGAAGACTTCA
 GCTTAATTGAGTCCCTGAAGTCTGGAGGACCCGCTTCTGCTGCTGCCAGCCTGTGTACCAGCCACCAA
 GCGCATCACGGAGGGGGAGGCCACTGCGACATCTATGGGGACAGGCCCGTGCAGACGAGGACGAGTGG
 CAACTCCTGGATGGTTTTGTCCGCTTTGTGGAGGGCTTGAATCGCATTGCAGGCCGCATCGCTCGGATC
 GCATGTGCGGAAAGGGACCCCATGAAAGGCTTGCAGATGACTGGGCCATTTCACAGCATTCTCTGGA
 GTCAACTGCACCCCAAGTGGGGAAGAAGGGAACCTCAGCTCTCTGTCCCTGTTGGAGATGGAGGCCAGT
 CAGAAGTGCCTGGGAGAACAGCAGGCAGCTGTGCATGGTGGGAAGAGCTCCGCCAGTACGCCGAGAGCA
 GCAGCGTGGCATGACTCCCACCTACATGGACAGCCACGAAAGGACGGGGCCTTCTTTATGGAGTTTGT
 CCGCAGCCACGCACAGCATCGTCCGCCTTCTACCCTCAGGTATCTGTGGACCAACAGCCACTCCTATG
 TTGGACGGCACCAGTTTGGGCATATGCACAGGCCAATCCATGGACAGAGGCAACAGCCAGACCTTTGGGA
 ACTCCCAGAACATAGGAGAACAGGGCTACTCCTCCAAACTCCAGTGCAGCAGCTCTCAGCAGCTGGT
 GGCAAGCTCCTTGACCTCATCTCTACCCTGACAGAGATCCTGGAAGCCATGAAGCACCCCTCGACAGGA
 GTCAGCTGCTCTGTAACAGAAGGGCCTCTACCGTACTGCTTATCAGCGCGAGGTGGTACACTGGT
 TGGTGAACCACGTGGAGGGGATCCAGACACAGGCGATGGCCATTGACATCATGCAGAAAATGCTGGAAGA
 GCAGCTCATCACATGCATCTGGCGAAGCCTGGCGGACCTTCTATCTACGGCTTCTATTTCTACAAGATA
 GTAACGGACAAAGAGCCCGACCGAGTGGCCATGCAGCAGCCCGCCACCACCTGGCACACAGCAGGAGTGG
 ACGACTTCGCCAGCTTCCAGCGCAAGTGGTTTGGAGTGGCCTTTGTGGCAGAAGAGCTCGTGCACCTGA
 GATTCCTGCCTTCTCCTGCCCTGGTGCCTAGCCGGCCAGCCTCCTATGCAAGTAGGCACAGCTCCTTT
 AGCCGAAGTTTTGGAGGACGGAGCCAGGCGGCAGCACTTTAGCTGCCACTGTCCAGAGCAGAGGACTG
 TGACCTTGGATGTTGACGTGAACAACCGCACAGACCGGCTGGAGTGGTGCAGCTGTTATTACCATGGCAA
 CTTTTCTGAAATGCAGCCTTTGAGATCAAGCTGCACTGGATGGCGGTGACCCGACAGTACTCTTCGAG
 ATGGTCCAAGGTTGGCATCGGAAAGCCACCTCCTGTGGCTTCTTGTTAGTCCAGTTTTGGAGGGCCTT
 TTGCACTGCCAGTTACCTGTATGGCGACCCCTTCGTGCCAGCTTCTATCCCCTCAACATCAGCTG
 CTTGCTCAAGGAGGGCAGCGAGCACCTGTTTGTAGCTTTGAACCCGAAACGTAAGTGGGATCGAATGCAC
 CTCTTCCAGGAAGCCATTGCACACAGGTTTGGGTTTGTACAAGATAAATATTCTGCCTCTGCTTTAACT
 TCCCTGCTGAGAACAAGCCTCAGTATATCCACGTTACAGGAACAGTGTCTTCTGCAGCTGCCCTACTCCA
 GCGCAAGTTCTCAGGGCAGCAGCGCGGCGGCGGAACTCCACCAGCTCCACCAACCAGAACATGTTCTGC
 GAGGAGCGGGTCGGCTACAACCTGGGCTACAACACCATGCTCACAAAACATGGCGCTCCAGCGCCACAG
 GGGATGAAAAGTTTGTGATCGGCTGCTGAAGGACTTACGGACTTCTGCATCAACCGTGACAACCGGCT
 GGTACGTTCTGGACAAGTTGCCTGGAGAAGATGCATGCCAGTGCCCCG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

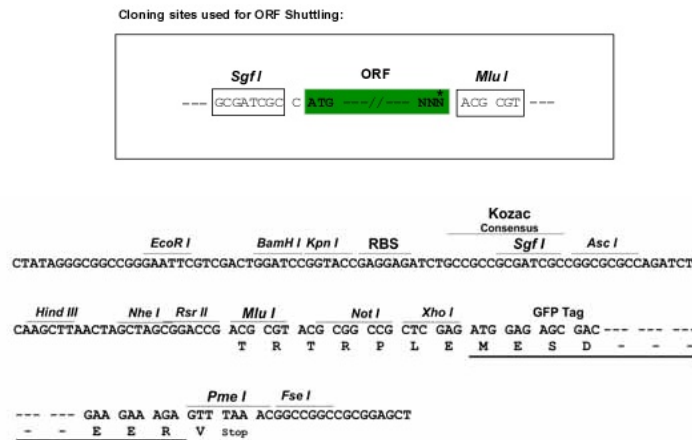
Protein Sequence: >RG233214 representing NM_001242896
 Red=Cloning site Green=Tags(s)

MRTTKVYKLVIIHKKGFGGSDELVVNPKVFPHIKLGDIVIAHPNDEYSPLLLQVKSLEDLQKETISVD
 QTVTQVFLRPYQDVYVNVVDPKDVTLDELVELTFKDQYIGRDMWRLKSLVSTCAYITQKVEFAGIRAQ
 AGELWVKNEKVMCGYISEDTRVFRSTSAMVYIFIQMSCEMWFDIYGDLYFEKAVNGFLADLFTKWKEK
 NCSHEVTVVLFSRTFYDAKSVDEFPEINRASIRQDHKGRFYEDFYKVVVQNERREWTSLLVTIKKLFIQ
 YPVLVRLEQAEGFPQGDNSTSAQGNYLEAINLSFNVDKHYINRNFDRTGQMSVVIPTGVGVFEVDRLM
 ILTKQRMIDNGIGVDLVCMEQPLHAVPLFKLHNRSAPRDSRLGDDYNIPHWINHSFYTSKSQLFCNSFT
 PRIKLAGKPPASEKAKNGRDTSLGSPKESENALPIQVDYDAYDAQVFLPGPSRAQCLTTCRSVRERESH
 SRKSASSCDVSSSPSLPRTLPTEEVRSQASDDSSLGKSANILMIPPHLHQYEVSSSLGYTSTRDVLEN
 MMEPPQRDSSAPGRFHVGSAESMLHVRPGGYTPQRALINPFAPSRMPMKLTSNRRRWMTFPVGPGEAI
 QIHQTRQNMAELQSGQRDPHTSSAELLELAYHEAAGRHSNSRQPGDGMFLNFSGTEELSVGLLSNSG
 AGMNPRTQNKDSLEDSVSTSPDILTLTAPPVVPGFCTVGVVWVSLTTPACLPLTDDYFPDRQGLQNDY
 TEGCYDLLPEADIDRRDEGVMQTAQQVFEEFICQRLMQGYQIIIVQPKTKPNPVPVPLSSSPLYSRGL
 VSRNRPEEEDQYWSMGRTFHKVTLKDKMITVTRYLPKYPYESAQIHYTYSLCPSHSDSEFVSCWVEFSH
 ERLEEYKWNLYDQYICSGSEDFSLIESLKFWRTRFLLLPACVTATKRITEGEAHCDIYGDPRADEDEW
 QLLDGFVRFVEGLNRIRRRHRSRDMRKGAMKGLQMTGPISTHSLESTAPPVGGKGSALSALLEMEAS
 QKCLGEQQAAVHGGKSSAQSAESSVAMTPTYMDSRDKGAFMFVRSRPTASSAFYPQVSDQTATPM
 LDGTSLGICTGQSMDRGNSQTFGNSQNIQEGQYSSNSTSSSSQQLVASSLTSSTLLEILEAMKHPSTG
 VQLLSEQKGLSPYCFISAEVVHVLVNHVEGIQTQAMAIDIMQKMLEEQLITHASGEAWRTFIYGFYFYKI
 VTDKEPDRVAMQQPATTTHTAGVDDFAFQKWFVFAVFAEELVHSEIPAFLLPWLPSRPASYASRHSSF
 SRSFGGRSQAAALLAATVPEQRTVTLVDVNNRTRDRLEWCSCYHGNFSLNAAFEIKLHWMVTAAVLFE
 MVQGWHRKATSCGFLLVPLVEGPFALPSYLYGDLPLAQFLIPLNISCLLKEGSEHLFDSFEPETYWDRMH
 LFQEAIAHRFGFVQDKYSASAFNFAENKPYIHVTGTVFLQLPYSKRKFSGQRRRRNSTSSTNQNMFC
 EERVGNWAYNTMLTKTWRSSATGDEKFAADRLKDFDTFCINRDNRLVTFWTSCLKMHASAP

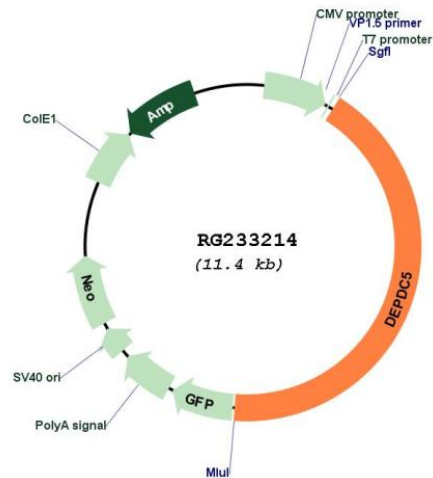
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001242896

ORF Size: 4809 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_001242896.3](#)

RefSeq Size: 5551 bp

RefSeq ORF: 4812 bp

Locus ID: 9681

UniProt ID: [O75140](#)

Cytogenetics: 22q12.2-q12.3

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]