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CN: techsupport@origene.cn

Product datasheet for RG226342

DCTN1 (NM_001135041) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DCTN1 (NM_001135041) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DCTN1
Synonyms:	DAP-150; DP-150; P135
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG226342 representing NM_001135041
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGAGACAGGCACCGACAGCCCGAAAGACCACAACTCGGCGACCCAAGCCCACGCGCCCAGCCAGTA
CTGGGGTGGCTGGGGCCAGTAGCTCCCTGGGCCCCTCTGGCTCAGCGTCAGCAGGTGAGCTGAGCAGCAG
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GGAGCAGTCCCCCCGCTTCCTTCCCCATCCAAGGAGGAGGAGGGACTAAGGGCTCAGGTGCGGGACCTGG
AGGAGAAACTAGAGACCCTGAGACTGAAACGGGCAGAAGACAAAGCAAAGCTAAAAGAGCTGGAGAAACA
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GCAGCAGGAGGTGGAGGCACTGAAGGAGCGGGTGGACGAGCTCACTACTGACTTAGAGATCCTCAAGGCT
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GGACCATGACTGCGTTCTGGTGCTGTTGCTCATGCCTCGTCTCATTTGCAAGGCAGAGCTGATCCGGAAG

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CAGGCCCAGGAGAAGTTTGAACTAAGTGAGAACTGTTCAGAGCGGCCTGGGCTGCGAGGAGCTGCTGGGG
AGCAACTCAGCTTTGCTGCTGGACTGGTGTACTCGCTGAGCCTGCTGCAGGCCACGCTACACCGCTATGA
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GGAGCAGCAGGATGACACAGTCTACATGGGCAAAGTGACCTTCTCATGTGCGGCTGGTTTTGGACAGCGA
CACCGGCTGGTGCTGACCCAGGAGCAGCTGCACCAGCTTCACAGTCGCCTCATCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG226342 representing NM_001135041
Red=Cloning site Green=Tags(s)

MMRQAPTARKTTTRRPKPTRPASTGVAGASSSLGPSGSASAGELSSSEPSTPAQTPLAAPIIPTPVLTSP
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RLKEARKEAKEALEAKERYMEEMADTADAIEMATLDKEMAEERAESLQQEVEALKERVDELTTDLEILKA
EIEEKGSDGAASSYQLKQLEEQNARLKDALVRMRDLSSSEKQEHVKLQKLMEKKNQELEVVRQQRERLQE
ELSQAESTIDELKEQVDAALGAEEMVEMLTDRNLNLEEKVRELRETVGDLEAMNEMNDELQENARETELE
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HERSLDFLIELLHKDQLDETVNVEPLTKAIKYYQHLYSIHLAEQPEDCTMQLADHIKFTQSALDCMSVEV
GRLRAFLQGGQEATDIALLLRDLETSCSDIRQFCKKIRRRMPGTDAPGIPAALAFGPQVSDTLLDCRKHL
TWVVAVLQEVAAAAAQLIAPLAENEGLLVAALEELAFKASEQIYGTPSSSPYECLRQSCNILISTMNKLA
TAMQEGEYDAERPPSKPPPVELRAAALRAEITDAEGLGLKLEDRETVIKELKKSLKIKGEELSEANVRLS
LLEKKLDSAAKDADERIEKVQTRLEETQALLRKKEKEFEETMDALQADIDQLEAEKAELKQRLNSQSKRT
IEGLRGPPPSGIATLVSGIAGGAIPGQAPGSVPGPGLVKDSPLLLQQISAMRLHISQLQHENSILKGAQM
KASLASLPPLHVAKLSHEGPGSELPAGALYRKTSQLLETLNQLSTHTHVVDITRTSPAAKSPSAQLMEQV
AQLKSLSDTVEKLKDEVLKETVSQRPGATVPTDFATFPSSAFLRAKEEQQDDTVYMGKVTFSCAAGFGQR
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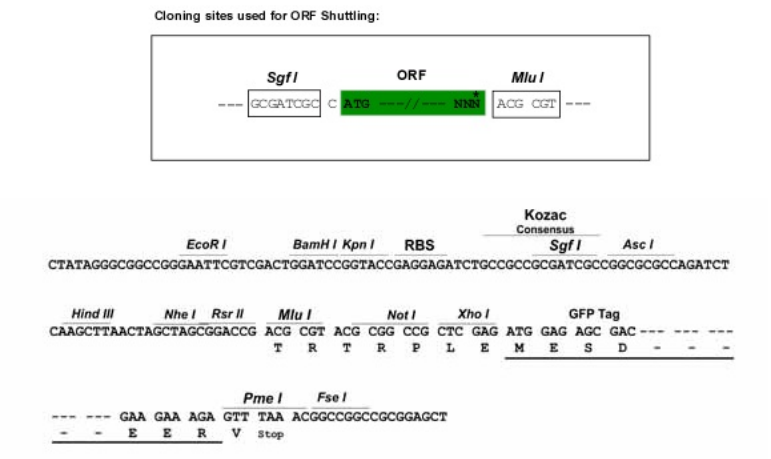
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



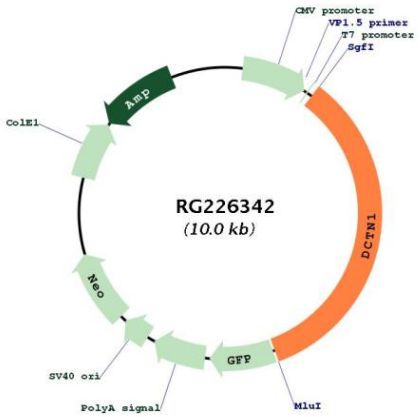
ACCN: NM_001135041

ORF Size: 3417 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_001135041.3
RefSeq Size:	4166 bp
RefSeq ORF:	3420 bp
Locus ID:	1639
UniProt ID:	Q14203
Cytogenetics:	2p13.1
Protein Families:	Druggable Genome
Protein Pathways:	Huntington's disease

Gene Summary: This gene encodes the largest subunit of dynactin, a macromolecular complex consisting of 10 subunits ranging in size from 22 to 150 kD. Dynactin binds to both microtubules and cytoplasmic dynein. Dynactin is involved in a diverse array of cellular functions, including ER-to-Golgi transport, the centripetal movement of lysosomes and endosomes, spindle formation, chromosome movement, nuclear positioning, and axonogenesis. This subunit interacts with dynein intermediate chain by its domains directly binding to dynein and binds to microtubules via a highly conserved glycine-rich cytoskeleton-associated protein (CAP-Gly) domain in its N-terminus. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. Mutations in this gene cause distal hereditary motor neuronopathy type VIIB (HMN7B) which is also known as distal spinal and bulbar muscular atrophy (dSBMA). [provided by RefSeq, Oct 2008]

Product images:



Circular map for RG226342