

## Product datasheet for **SC325396**

### DCTN1 (NM\_001135041) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DCTN1 (NM_001135041) Human Untagged Clone
Tag:	Tag Free
Symbol:	DCTN1
Synonyms:	DAP-150; DP-150; P135
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001135041, the custom clone sequence may differ by one or more nucleotides

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ATGATGAGACAGGCACCGACAGCCCGAAAGACCACAACCTCGGCGACCCAAGCCCACGCGC
CCAGCCAGTACTGGGGTGGCTGGGGCCAGTAGCTCCCTGGGCCCTCTGGCTCAGCGTCA
GCAGGTGAGCTGAGCAGCAGTGAGCCCAGCACCCCGGCTCAGACTCCGCTGGCAGCACCC
ATCATCCCCACGCCGGTCTCACCTCTCCTGGAGCAGTCCCCCGCTTCTTCCCCATCC
AAGGAGGAGGAGGACTAAGGGCTCAGGTGCGGGACCTGGAGGAGAACTAGAGACCCTG
AGACTGAAACGGGCAGAAGACAAAGCAAAGCTAAAAGAGCTGGAGAAACAAAAATCCAG
CTGGAGCAGGTGCAGGAATGGAAGAGCAAATGCAGGAGCAGCAGGCCGACTGCAGCGG
CGCCTCAAGGAGGCGAGAAAGGAAGCCAAGGAGGCGCTGGAGGCAAGGAACGCTATATG
GAGGAGATGGCTGATACTGCTGATGCCATTGAGATGGCCACTTTGGACAAGGAGATGGCT
GAAGAGCGGGCTGAGTCCCTGCAGCAGGAGGTGGAGGCACTGAAGGAGCGGGTGGACGAG
CTCACTACTGACTTAGAGATCCTCAAGGCTGAGATTGAAGAGAAGGGCTCAGATGGCGCT
GCATCCAGTTATCAGCTCAAGCAGCTTGAGGAGCAGAATGCCCGCTGAAGGATGCCCTG
GTGAGGATGCGGGATCTTCTTCTCAGAGAAGCAGGAGCATGTGAAGCTCCAGAAGCTC
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GAGCTAAGCCAGGCAGAGAGCACCATTTGATGAGCTCAAGGAGCAGGTGGATGCTGCTCTG
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CGGGTTCTGTGAGGCCAGAACGCTGTGGAGGCAGCCAGGAGACGGTTGCAGACTACCAG
CAGACCATCAAGAAGTACCGCCAGCTGACCGCCCATCTACAGGATGTGAATCGGGAAGT
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CAGATGGAGGTGGCCAGGCCAATCGACACATGTCCCTGCTGACAGCCTTCATGCCTGAC
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CTCATTTGCAAGGCAGAGCTGATCCGGAAGCAGGCCCAGGAGAAGTTGAACTAAGTGAG
AACTGTTGAGAGCGGCTGGGCTGCGAGGAGCTGCTGGGGAGCAACTCAGCTTTGCTGCT
GGACTGGTGTACTCGCTGAGCCTGCTGCAGGCCACGCTACACCGCTATGAGCATGCCCTC
TCTCAGTGCAGTGGATGTGTATAAGAAAAGTGGGCAGCCTGTACCCTGAGATGAGTGCC
CATGAGCGCTCCTTGATTTCTCATTGAACTGCTGCACAAGGATCAGCTGGATGAGACT

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GTCAATGTGGAGCCTCTACCAAGGCCATCAAGTACTATCAGCATCTGTACAGCATCCAC
CTTGCCGAACAGCCTGAGGACTGTACTATGCAGCTGGCTGACCACATTAAGTTCACGCAG
AGTGCTCTGGACTGCATGAGTGTGGAGGTAGGACGGCTGCGTGCCTTCTTGCAGGGTGGG
CAGGAGGCTACAGATATTGCCCTCTGTCCGGGATCTGGAACTTCATGCAGTGACATC
CGCCAGTTCTGCAAGAAGATCCGAAGGCCAATGCCAGGGACAGATGCTCCTGGGATCCCA
GCTGCACTGGCCTTTGGACCACAGGTATCTGACACGCTCCTAGACTGCAGGAAACTTTG
ACGTGGTCTGCTGTGCTGCAGGAGGTGGCAGCTGCTGCTGCCAGCTCATTGCCCA
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GAGCAGATCTATGGGACCCCTCCAGCAGCCCTATGAGTGTCTGCGCCAGTCATGCAAC
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CAGCGTCTGAACAGCCAGTCCAACGCACGATTGAGGGACTCCGGGGCCCTCCTCCTTCA
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TCTGTGCCAGGCCAGGGCTGGTGAAGGACTCACCCTGCTGCTTCCAGCAGATCTCTGCC
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GGCAGTGAGTTACCAGCTGGAGCGCTGTATCGTAAGACCAGCCAGCTGCTGGAGACATTG
AATCAATTGAGCACACACACGCACGTAGTAGACATCACTCGCACCAGCCCTGCTGCCAAG
AGCCCGTCGGCCCACTTATGGAGCAAGTGGCTCAGCTTAAGTCCCTGAGTGACACCGTC
GAGAAGCTCAAGGATGAGGTCTCAAGGAGACAGTATCTCAGCGCCCTGGAGCCACAGTA
CCCCTGACTTTGCCACCTTCCCTTTCATCAGCCTTCTCAGGGCCAAGGAGGAGCAGCAG
GATGACACAGTCTACATGGGCAAAGTGACCTTCTCATGTGCGGCTGGTTTGGACAGCGA
CACCAGGCTGGTGTGACCCAGGAGCAGCTGCACCAGCTTACAGTGCCTCATCTCC

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**Restriction Sites:**

Please inquire

**ACCN:**

NM\_001135041

**Insert Size:**

4166 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](mailto: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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001135041.1, NP_001128513.1</u>
<b>RefSeq Size:</b>	4166 bp
<b>RefSeq ORF:</b>	3420 bp
<b>Locus ID:</b>	1639
<b>UniProt ID:</b>	<u>Q14203</u>
<b>Cytogenetics:</b>	2p13.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Huntington's disease
<b>Gene Summary:</b>	<p>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 neuropathy type VIIB (HMN7B) which is also known as distal spinal and bulbar muscular atrophy (dsBMA). [provided by RefSeq, Oct 2008]</p> <p>Transcript Variant: This variant (4) represents the shortest transcript and it encodes the shortest protein (isoform 4).</p>