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Product datasheet for SC110869

DCTN1 (NM_004082) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DCTN1 (NM_004082) Human Untagged Clone
Tag:	Tag Free
Symbol:	DCTN1
Synonyms:	DAP-150; DP-150; P135
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC110869 sequence for NM_004082 edited (data generated by NextGen Sequencing)

ATGGCACAGAGCAAGAGGCACGTGTACAGCCGGACGCCCAGCGGCAGCAGGATGAGTGCG
GAGGCAAGCGCCCGGCCTCTGCGGGTGGGCTCCCGTGTAGAGGTGATTGGAAAAGGCCAC
CGAGGCACTGTGGCCTATGTTGGAGCCACACTGTTTGCCACTGGCAAATGGGTAGGCGTG
ATTCTGGATGAAGCAAAGGGCAAAAATGATGGAACTGTTCAAGGCAGGAAGTACTTCACT
TGTGATGAAGGGCATGGCATCTTTGTGCGCCAGTCCCAGATCCAGGTATTTGAAGATGGA
GCAGATACTACTTCCCCAGAGACACCTGATTCTTCTGCTTCAAAAGTCCTCAAAAGAGAG
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ACAGCCCGAAAGACCACAACTCGGCGACCCAAGCCCACGCGCCCAGCCAGTACTGGGGTG
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AGTGAGCCCAGCACCCCGGCTCAGACTCCGCTGGCAGCACCCATCATCCCCACGCCGGTC
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GACAAAGCAAAGCTAAAAGAGCTGGAGAAACACAAAATCCAGCTGGAGCAGGTGCAGGAA
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GCTGATGCCATTGAGATGGCCACTTTGGACAAGGAGATGGCTGAAGAGCGGGCTGAGTCC
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GTGGGAGACTTGGAAGCGATGAATGAGATGAACGATGAGCTGCAGGAGAATGCACGTGAG
ACAGAACTGGAGCTGCGGGAGCAGCTGGACATGGCAGGCGCGCGGGTTCGTGAGGCCCAG

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AAGCGTGTGGAGGCAGCCCAGGAGACGGTTGCAGACTACCAGCAGACCATCAAGAAGTAC
CGCCAGCTGACCGCCCATCTACAGGATGTGAATCGGGAACTGACAAACCAGCAGGAAGCA
TCTGTGGAGAGGCAACAGCAGCCACCTCCAGAGACCTTTGACTTCAAAATCAAGTTTGCT
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CCGTCGGCCCAACTTATGGAGCAAGTGGCTCAGCTTAAGTCCCTGAGTGACACCGTCGAG
AAGCTCAAGGATGAGGTCCTCAAGGAGACAGTATCTCAGCGCCCTGGAGCCACAGTACCC
ACTGACTTTGCCACCTTCCCTTCATCAGCCTTCCTCAGGGCCAAGGAGGAGCAGCAGGAT
GACACAGTCTACATGGGCAAAGTGACCTTCTCATGTGCGGCTGGTTTTGGACAGCGACAC
CGGCTGGTGCTGACCCAGGAGCAGCTGCACCAGCTTCACAGTCGCCTCATCTCCTAA

Clone variation with respect to NM_004082.4

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004082 unedited
GGTAAAGGTTCAATACTTTGTNAATACGAACTCACTATNAGGGCAGGCCGCGTAATTCGG
CACGAGGCTGGGTTCAGGAATCCTCAGGCAGCAGAGGGGACTTGCTCCTCAGCCCCCATC
ACTGCCCCCACCCCTACCCGTGTAGGCCACCGAGTGAGGCCCATGGACTGGGGAGGGCTG
TGCCTGACGACTCCTGTGTCCCTCTATGAGGGCCCAGCGCCCTGACCCTCCTGCCTAGGT
TTCTACCTTTTCTCTCTGTCTTTGGCCAGCTGGGGGAGGGGGTAGAGGCCGGGTGAGCAA
CATGGCACAGAGCAAGAGGCACGTGTACAGCCGGACGCCCAGCGGCAGCAGGATGAGTGC
GGAGGCAAGCGCCCGGCCTCTGCGGGTGGGCTCCCGTGTAGAGGTGATTGGAAAAGGCCA
CCGAGGCACTGTGGCCTATGTTGGAGCCACACTGTTTGCCACTGGCAAATGGGTAGGCGT
GATTCTGGATGAAGCAAAGGGCAAAAATGATGGAACTGTTCAAGGCAGGAAGTACTTCAC
TTGTGATGAAGGGCATGGCATCTTTGTGCGCCAGTCCCAGATCCAGGTATTTGAAGATGG
AGCAGATACTACTTCCCCAGAGACACCTGATTCTTCTGCTTCAAAAGTCCTCAAAAGAGA
GGGAACTGATACAACTGCAAAGACTAGCAAACTGCGGGGACTGAAGCCTAAGAAGGCACC
GACAGCCCGAAAGACCACAACTCGGCGACCCAAGCCCACGCGCCCAGCCAGTACTGGGGG
TAGGCTGGGAGCCAGTAGCCTCCCTGGGGCCCCTCTAGGCTCANCGTCAGCAGGTGAGCT
GAGCAGCAGTGAGCCCAGCACCCCGGCTCATACTNCGCTGGCAGCACCCATCATCCCCAC
GCCAGTCCTCANCTCTCTGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004082 unedited
NCCTTCTCTGGNACCGCGGCCGCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTTGAAG
CAGAAGTTGCTTTAATCAAGGGGTGAAGTCCTCAATCAAGGGGACCTCACTTAACCTTTG
GTGGTGGGGTCTCAGCCTACCCCCCACAAGCCCTGAGGCCCCTCAGGAAGGAGGGAGCAG
TTGAACAACAAATTATGGCAGAGGCCAGGGAATGGGAGTGGGGGAACCCGGGTCAAGGTG
AAGGGGCAGGACGCTGAAAGGGTGGGAGTGAAGCTGAACGGGGCAGGAAGAGCTTAACCC
ACGTTTCTACCTGGGGGCTGGCTGAGGTGGCTGTGCATCGGGCAGAGCGGCACCAGAGGG
CTGAGGGTCGAAGGGGACAGCAGGGGAAAGGAGTGCTTAGGAGATGAGGCGACTGTGAAG
CTGGTGCAGCTGCTCCTGGGTCAGCACCAGCCGGTGTCGCTGTCCAAAACCAGCCGCACA
TGAGAAGGTCACTTTGCCCATGTAGACTGTGTCATCCTGCTGCTCCTCCTTGGCCCTGAG
GAAGGCTGATGAAGGGAAGGTGGCAAAGTCAGTGGGTACTGTGGCTCCAGGGCGCTGAGA
TACTGTCTCCTTGAGGACCTCATCCTTGAGCTTCTCGACGGTGTCACTCAGGGACTTAAG
CTGAGCCACTTGCTCCATAAGTTGGGCCGACGGGCTCTTGGCAGCANGGCTGTTGCGAGT
GATGTCTACTACGTGCGTGTGTGTGCTCAATTGATTCAATGTCTCCAGCAGCTGGCTGGT
CTTACGATACAGCGCTCCAGCTTGTAACTCACTGGCAGGGCCCTCATGGGATACCTTTGC
ACATGCAAAGGGGGCAGGNATGCCAAGGATGCCCTTCTTGGGGCTCCTTGAAGATGGCTG
TTTCAGCTGGACCTGGGAAAGTGCACCCTATGTCAGAAATCGCTGG

Restriction Sites: NotI-NotI

ACCN: NM_004082

Insert Size: 4280 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_004082.2, NP_004073.2
RefSeq Size:	4992 bp
RefSeq ORF:	3837 bp
Locus ID:	1639
UniProt ID:	Q14203
Cytogenetics:	2p13.1
Domains:	CAP_GLY, M
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] Transcript Variant: This variant (1) has multiple differences in the 5' UTR, 5' coding region and 3' coding region, compared to variant 4. These differences cause translation initiation from an upstream AUG and a protein (isoform 1) with a longer N-terminus containing a CAP-Gly domain and a longer C-terminus, compared to isoform 4. Isoform 1 is also called p150.