

# DCTN3 cDNA

Catalog Number: ATGD0344

## PRODUCT INFORMATION

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**Catalog number**

ATGD0344

**Product type**

cDNA

**Species**

Human

**NCBI Accession No.**

NP\_009165.1

**Alternative Names**

DCTN-22, DCTN22

**mRNA Refseq**

NM\_007234.4

**OMIM**

607387

**Chromosome location**

9p13

## PRODUCT SPECIFICATION

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**Formulation**

Lyophilized

**Storage**

Store the plasmid at -20C.

**cDNA Size**

561bp

**Preparation before usage**

1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA.  
Each tube contains approximately 10ug of lyophilized plasmid.

**Vector description**

This shuttle vector contains the complete ORF. It is inserted Nde I to Hind III. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

**Cloning Vector**

pATGen (puc19-derived cloning vector)

**General Description**

## DCTN3 cDNA

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DCTN3 encodes the smallest 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. It is involved in a diverse array of cellular functions, including ER-to-Golgi transport, the centripetal movement of lysosomes and endosomes, spindle formation, cytokinesis, chromosome movement, nuclear positioning, and axonogenesis. This subunit, like most other dynactin subunits, exists only as a part of the dynactin complex. It is primarily an alpha-helical protein with very little coiled coil, and binds directly to the largest subunit (p150) of dynactin. Alternative splicing results in multiple transcript variants.

## DATA

### Sequence nucleotides

```
ATGGCGGGTCTGACTGACTTGCAGCGGCTACAGGCCGAGTGGAAAGAGCTGGAGCGCTGGGTGTACGGGCCGGCGGG  
CGCGCGGCTCACGGAAGGTGGCTGACGGCCTGGTCAAGGTGCAGGTGGCTTGGGAACATTCCAGCAAGAGGGAGAG  
GGTGAAGATTCTCTACAAAAGATTGAAGATCTGATCAAGTACCTGGATCCTGAGTACATCGACCGCATTGCACATACCTGAT  
GCCTCTAAGCTGCAATTCTACCTAGCAGAGGAGCAGTTATCCTTCCCAGGTTGCACTCCTGGAGCAGGTGAATGCCTTGG  
TGCCCATGCTGGACAGTGTCACATCAAAGCCGTTCTGAGCATGCTGCCGCCTGCAGCGCTGGCCAGATCCACATTC  
AGCAGCAGGACCAGTGTGGAAATCACTGAGGAGTCCAAGGCTCTGGAGGAATAACAAGACTACAATGCTTCT  
CCAAGCAATTGTGCAGTGGATGAGCTACTTGCAGTAGAGGCCACGCAAGTGAAGCCAGCAGAGGAGTGA
```

### Transaction Sequence

```
MAGLTDLQLR QARVEEELERW VYGPAGGARGS RKVADGLVKV QVALGNISSK RERVKILYKK IEDLIKLYDP EYIDRIAIPD  
ASKLQFILAE EQFILSQVAL LEQVNALVPM LDSAHIKAVP EHAARLQRRA QIHIQQQDQC VEITEESKAL LEEYNKTTML  
LSKQFVWDE LLCQLEAATQ VKPAEE
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