

## Product datasheet for RC223556

### DCTN1 (NM\_023019) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DCTN1 (NM_023019) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DCTN1
Synonyms:	DAP-150; DP-150; P135
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223556 representing NM_023019 Red=Cloning site Blue=ORF Green=Tags(s)

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CAGGCCAGGAGAAGTTTGAAGTAAAGTGAAGTGTTCAGAGCGGCTGGGCTGCGAGGAGCTGCTGGG  
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Protein Sequence: >RC223556 representing NM\_023019  
 Red=Cloning site Green=Tags(s)

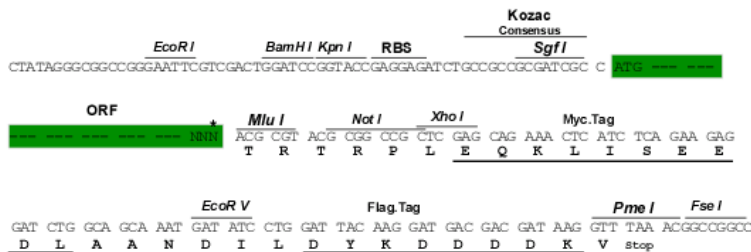
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Restriction Sites:  
 Cloning Scheme:

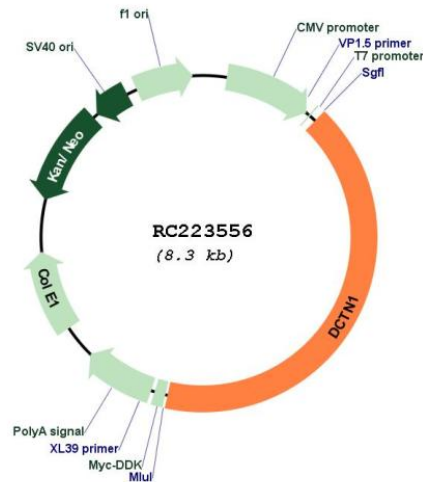
Sgfl-MluI

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

## Plasmid Map:



ACCN: NM\_023019

ORF Size: 3432 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\\_023019.4](#)

RefSeq Size: 4181 bp

RefSeq ORF: 3435 bp

Locus ID: 1639

UniProt ID: [Q14203](#)

Cytogenetics: 2p13.1

<b>Domains:</b>	M
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Huntington's disease
<b>MW:</b>	127.4 kDa
<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 neuronopathy type VIIB (HMN7B) which is also known as distal spinal and bulbar muscular atrophy (dsBMA). [provided by RefSeq, Oct 2008]</p>