

Product datasheet for **SC326364**

DCTN1 (NM_001135040) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DCTN1 (NM_001135040) Human Untagged Clone
Tag:	Tag Free
Symbol:	DCTN1
Synonyms:	DAP-150; DP-150; P135
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC326364 representing NM_001135040. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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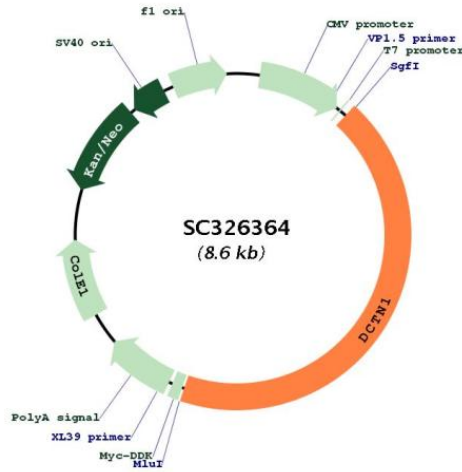
[View online »](#)

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Restriction Sites:

Sgfl-Mlul

Plasmid Map:



ACCN: NM_001135040

Insert Size: 3762 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).

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.

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_001135040.2](#)

RefSeq Size: 4443 bp

RefSeq ORF: 3762 bp

Locus ID: 1639

UniProt ID: [Q14203](#)

Cytogenetics: 2p13.1

Protein Families: Druggable Genome

Protein Pathways: Huntington's disease

MW: 138.8 kDa

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 neuropathy type VIIB (HMN7B) which is also known as distal spinal and bulbar muscular atrophy (dSBMA). [provided by RefSeq, Oct 2008]

Transcript Variant: This variant (3) has multiple differences in the 5' coding region and 5' UTR, compared to variant 4. These differences cause translation initiation from an upstream AUG and a protein (isoform 3) with a longer N-terminus containing a CAP-Gly domain, compared to isoform 4.