

Product datasheet for MC229529

Dctn1 (NM_001198866) Mouse Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Dctn1 (NM_001198866) Mouse Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Dctn1 |
| Synonyms: | AL022633; DAP-150; DP-150; Glued; p150; p150-glued; p150 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |
| Fully Sequenced ORF: | >MC229529 representing NM_001198866 Red=Cloning site Blue=ORF Orange=Stop codon |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTACGGAGGCAAGCGCCCGCCCTGCGGGTTGGCTCCCGCTGGAGGTGATTGGGAAGGGCCACC
GAGGCACTGTGGCTATGTTGGAGCCACTCTTTGCCACTGGCAAATGGGTGGGCGTGATTCTGGATGA
AGCAAAAGGCAAAAATGATGGCACTGTCCAGGGAAGGAAGTATTTACATGTGATGAAGGCCACGGCATC
TTTGTACGCCAGTCCCAGATCCAAGTATTTGAAGATGGAGCAGATACTACTTCCCAGAGACTCCTGATT
CTTCTGCTTCAAAGGTCCCTCAAGAGAGAGGGAGCCGATGCAGCTGCAAAGACCAGCAAATGCGGGGACT
GAAGCCTAAGAAGGCACCGACAGCCGAAAGACCACAACCTCGACGGCCCAAGCCTACTCGCCAGCCAGC
ACTGGGGTGGCTGGGCCAGTAGCTCCCTTGGCCCTCTGGCTCAGCGTCAGCCGGGAACTAAGCAGCA
GTGAGCCAGCACCCAGCTCAGACTCCGCTGGCAGCACCCATCATCCCCACCCGGCCCTCACCTCTCC
TGGAGCAGCACCCCACTTCCATCTCCCTCTAAGGAAGAGGAAGGGCTGAGGGCTCAGGTACGGGACCTG
GAGGAGAAGCTGGAGACCCTGCGCCTAAAACGCTCAGAAGACAAGCAAAGCTGAAAGAGCTGGAGAAGC
ACAAGATCCAGCTGGAGCAGGTGCAGAAATGGAAGAGCAAAAATGCAGGAGCAGCAGGCAGACCTGCAGCG
GCGCCTCAAGGAGCTCGGAAGGAAGCCAAGGAGGCGCTAGAGGCAAAGGAACGCTACATGGAGGAGATG
GCCGACACAGCCGACGCTATCGAGATGGCCACTCTGGACAAGGAGATGGCTGAAGAGCGCGCTGAGTCTC
TGCAGCAAGAGGTGGAGGCACTGAAGGAACGGGTAGACGAGCTCACACAGACCTGGAGATTCTCAAGGC
TGAAATCGAAGAGAAAGGCTCTGATGGGCGCATCAAGCTACCAGCTCAAGCAGCTGGAGGAGCAGAAT
GCCCGCTGAAGGATGCCCTGGTGGATGCGAGACCTCTTTCCTCAGAGAAGCAGGAGCAGTGAAGC
TGCAGAAACTCATGAAAAGAAAACCAGGAGCTGGAGGTCGTGCGGCAGCAGCGCAGCGTCTTCAGGA
GGAGCTGAGCCAGGCTGAGAGCACCATCGATGAGCTCAAAGAGCAGGTGGACGCCCTCTGGGAGCCGAG
GAGATGGTGGAGATGCTGACCGACCGAACCTGAATCTAGAGGAGAAAGTGGGGAGTTACGGGAGACTG
TGGGGACTTGAAGCCATGAACGAGATGAACGATGAGCTGCAGGAGAACGCACGGGAGACGGAGCTGGA
ACTCCGAGAGCAGCTGGACATGGCGGGCCCGAGTGAGGGAAGCGCAGAAGCGAGTGGAAGCCGCCAG
GAGACAGTCGCCGACTACCAGCAGACCATCAAGAAGTACCGCCAGTTGACTGCCACCTACAGGATGTCA



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ATCGGGAGCTGACAAACCAGCAGGAAGCGTCTGTAGAGAGGCAGCAGCAGCCGCCAGAGACTTTTGA
 TTTCAAAATCAAGTTTGCTGAGACCAAGGCTCATGCCAAGGCCATTGAGATGGAGTTGAGACAGATGGAA
 GTTGCCCAGGCCAACCGGCACATGTCCCTGCTGACAGCCTTTATGCCTGACAGCTTCCTTCGGCCAGGTG
 GAGACCACGACTGTGCTCCTGGTGTGCTGCTCATGCCCCGACTCATTGCAAGGCAGAGCTCATCCGGAA
 GCAGGCCCAGGAGAAGTTTGACCTGAGCGAGAAGTGTTCGGAGCGGCCCGGGCTGCGGGGAGCTGCCGGG
 GAGCAGCTGAGCTTTGCTGCTGGACTGGTGTACTCGCTGAGTCTGCTGCAGGCCACGCTGCACCCGCTATG
 AGCATGCCCTCTCTCAGTGCAGTGTGGACGTGTATAAGAAGGTCGGCAGCCTGTACCCCGAGATGAGCGC
 CCACGAGCGCTCCTTAGATTTCTCATTGAGCTGCTGCAACAAGGATCAGCTGGATGAGACTGTCAACGTG
 GAGCCCCACCAAGGCCATCAAGTATTACCAGCATCTGTACAGCATCCACCTCGCTGAACAACCCGAGG
 ACTCCACCATGCAGCTGGCTGACCACATCAAGTTCACCCAGAGTGCCCTGGACTGCATGGGCGTGGAGGT
 GGGGCGGTGCGTGCCTTCTTGCAGGGTGGCAGGAGGCAACAGATATTGCCCTTCTTCCGAGACCTG
 GAAACATCATGTAGTGACACCCGTCAGTTCTGCAAGAAGATCCGAAGGCGGATGCCGGGGACGGATGCTC
 CTGGGATCCCAGCAGCGCTGGCCTTTGGCTCACAGGTATCCGACACACTCTGGACTGCAGGAAGCACTT
 GACGTGGGTGGTGTGCTTCTGCAGGAGGTGGCAGCTGCAGCCGCCAGCTTATTGCCCTTGGCAGAG
 AACGAGGGGCTGCCTGTGGCTGCACTGGAGGAGCTGGCCTTCAAAGCAAGCGAGCAGATCTACGGGAGCC
 CCTCCAGCAGCCCTATGAGTGTCTACGCCAGTGCATGCACCATCCTCATCAGCAGATGAACAAGCTGGC
 CACAGCCATGCAAGAAGGCGAGTATGACGCAGAGCGACCCCGAGCAAGCCTCCTCCGGTTGAACCTCGG
 GCTGCAGCCCTGCGTGCAGAGATCACAGATGCTGAAGGTCTGGGTTTGAAGCTTGAGGATCGAGAGACAG
 TTATCAAGGAGTTAAAGAAGTCACTCAAGTAAAGGGAGAGGAGCTGAGTGAGGCCAACGTGCGGCTCAG
 CCTCCTGGAGAAGAAGTTGGACAGCGCTGCCAAGGATGCAGACGAGCGAATCGAGAAAGTTGACACAGG
 CTGGACGAGACTCAGACCCTGCTGCGGAAGAAGGAGAAAGACTTTGAGGAGACAATGGACGCACTCCAGG
 CTGACATCGACCAGCTGGAGGCAGAGAAGGCAGAGCTCAAGCAGCGCCTGAACAGCCAGTCCAAGCGCAC
 AATCGAGGGGCTCCGGGGCCCCCTCCGTCAAGCATCGTACCCTGGTCTCTGGCATCGTGGTGAGGAA
 CCACAGCGAGGGGCGCTCCTGGCAGGCTCCGGGCGCCTTGCCAGGCCCGGGGCTGGTGAAGGACTCCC
 CACTGCTGCTTACGACAGATCTCTGCTATGAGGCTACACATCTCTCAGCTCCAGCATGAGAACAGCATCCT
 CAGAGGAGCCAGATGAAGGCGTCTTGGCAGCTCTGCCCTCTGCATGTTGCAAAAGCTTTCCTCCCA
 CCCCATGAGGGCCCCGGTGGTAACCTAGTGGTGGGCACTGTACCGCAAGACCAGCCAGCTCCTGGAGA
 AACTAAACCAGCTGAGTACCCACACCCACGTGGTGGATATCACTCGGAGCAGCCAGCTGCCAAGAGCCC
 GTCAGCTCAGCTTATGGAACAAGTGGCTCAGCTCAAGTCCCTGAGTGACACCATTGAGAAGCTCAAGGAT
 GAGGTCTCAAGGAGACAGTACTCAGCGCCTGGAGCCACTGTGCCACCGACTTGGCACTTTCCTT
 CATCTGCCTTCTCAGGGCCAAGGAAGAGCAGCAAGATGACACAGTCTACATGGGCAAGTGACCTTTTC
 ATGCGCGGCGAGGCTAGGACAGCGACACCGCCTGGTGTGACCCAGGAGCAGCTGCACCAGCTTACAGT
 CGCCTCATCTCTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001198866
- Insert Size:** 3795 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:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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_001198866.1](#), [NP_001185795.1](#)

RefSeq Size: 4247 bp

RefSeq ORF: 3795 bp

Locus ID: 13191

Cytogenetics: 6 35.94 cM

Gene Summary: Plays a key role in dynein-mediated retrograde transport of vesicles and organelles along microtubules by recruiting and tethering dynein to microtubules. Binds to both dynein and microtubules providing a link between specific cargos, microtubules and dynein. Essential for targeting dynein to microtubule plus ends, recruiting dynein to membranous cargos and enhancing dynein processivity (the ability to move along a microtubule for a long distance without falling off the track). Can also act as a brake to slow the dynein motor during motility along the microtubule. Can regulate microtubule stability by promoting microtubule formation, nucleation and polymerization and by inhibiting microtubule catastrophe in neurons. Inhibits microtubule catastrophe by binding both to microtubules and to tubulin, leading to enhanced microtubule stability along the axon. Plays a role in metaphase spindle orientation. Plays a role in centriole cohesion and subdistal appendage organization and function. Its recruitment to the centriole in a KIF3A-dependent manner is essential for the maintenance of centriole cohesion and the formation of subdistal appendage. Also required for microtubule anchoring at the mother centriole. Plays a role in primary cilia formation. [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR and uses an in-frame downstream start codon, compared to variant 1. Variant 2 encodes a protein (isoform 2) with a shorter N-terminus, compared to isoform 1.