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Product datasheet for RC214771

Dynamitin (DCTN2) (NM_006400) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dynamitin (DCTN2) (NM_006400) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dynamitin
Synonyms:	DCTN50; DYNAMITIN; HEL-S-77; RBP50
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC214771 representing NM_006400
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGACCCTAAATACGCCGACCTTCCCGGCATTGCCAGGAATGAGCCAGATGTTTATGAAACTAGCG
ACCTACCTGAGGATGATCAAGCGGAGTTCGATGCGTTTGCACAAGAGCTGGAGGAGCTGACAAGCACAAG
TGTGGAACACATCATTGTCAATCCTAATGCTGCCTATGACAAGTTCAAGGACAAGAGAGTGGGGACAAAG
GGACTTGATTTCTCAGATCGTATTGGAAAAACCAAGAGGACAGGATATGAATCTGGAGAATATGAGATGC
TTGGAGAGGGTCTGGGAGTGAAGGAGACACCCCAGCAAAAGTACCAGCGCCTACTGCATGAGGTCCAAGA
GCTGACAACTGAAGTTGAAAAAATCAAGACGACAGTGAAGGAGTCAGCCACAGAGGAGAAGCTGACCCCT
GTGTTGCTGGCTAAACAGCTGGCAGCCCTGAAGCAGCAGCTGGTTGCTTCCCACCTGGAGAAGCTGCTGG
GACCAGATGCTGCAATCAACCTTACCGACCCCGATGGCGCCCTGGCTAAGCGCCTACTACTGCAGCTGGA
AGCAACAAAGAACAGCAAAGGGGGATCAGGGGGAAAAACCACTGGGACCCCCCCAGATAGCAGCCTTGTC
ACTTATGAACTACATTCTCGGCCTGAGCAGGACAAGTTCTCTCAAGCTGCCAAAGTCGCAGAACTTGAAA
AGCGCCTGACAGAGCTGGAGACAGCTGTACGTTGTGATCAGGATGCTCAGAATCCCCTTTCTGCAGGTCT
ACAGGGAGCCTGTCTCATGGAGACTGTAGAGCTGTTGCAAGCAAAGGTGAGCGCCCTAGACCTTGCAGTT
TTGGATCAAGTGGAGGCTCGGCTACAGAGTGTCCTGGGAAAGGTGAACGAGATTGCCAAGCATAAAGCCT
CTGTAGAAGATGCAGATACACAAAGCAAGGTGCACCAGCTATATGAAACTATACAGCGCTGGAGCCCCAT
TGCCTCCACCCTCCCTGAGCTGGTGCAGAGACTTGTCACCATCAAGCAGCTGCACGAGCAAGCCATGCAG
TTTGGTCAGCTCCTGACACACTTGGATACCACCCAGCAGATGATTGCTAATTCCTTGAAGGACAATACCA
CCCTCTTGACCCAGGTGCAGACAACCATGCGTGAAAACCTGGCCACAGTTGAGGGGAACTTTGCCAGCAT
TGATGAACGGATGAAGAAGCTGGGAAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC214771 representing NM_006400
Red=Cloning site Green=Tags(s)

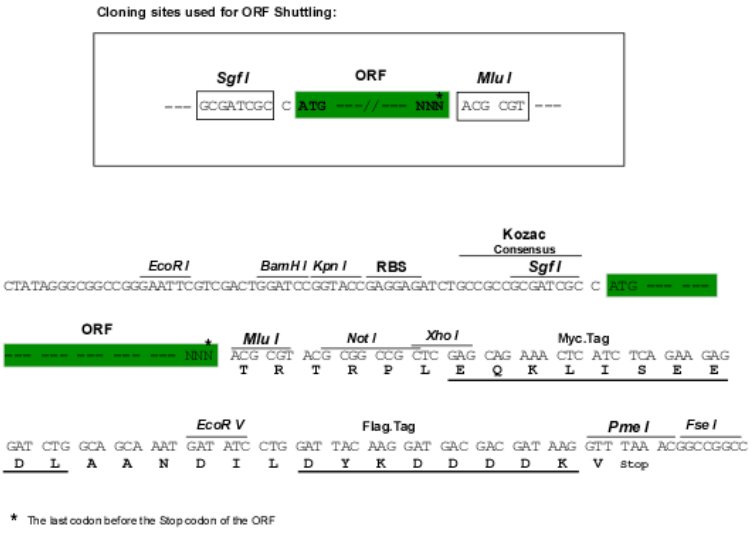
MADPKYADLPGIARNEPDVYETSDLPEDDQAEFDAFAQELEELTSTSVEHIIVNPNAAYDKFKDKRVGTK
GLDFSDRIGKTKRTGYESGEYEMLGEGLGVKETPQQKYQRLLHEVQELTTEVEKIKTTVKESATEEKLTP
VLLAKQLAALKQQLVASHLEKLLGPDAAINLTDPDGALAKRLLLQLEATKNSKGGSGGKTTGTPPDSSLV
TYELHSRPEQDKFSQAAKVAELEKRLTELETAVRCDQDAQNPLSAGLQGACLMETVELLQAKVSALDLAV
LDQVEARLQSVLGKVNEIAKHKASVEDADTQSKVHQLYETIQRWSPIASTLPELVQRLVTIKQLHEQAMQ
FGQLLTHLDTTQQMIANSLKDNTTLLTQVQTTMRENLATVEGNFASIDERMKKLGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6179_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006400

ORF Size: 1218 bp

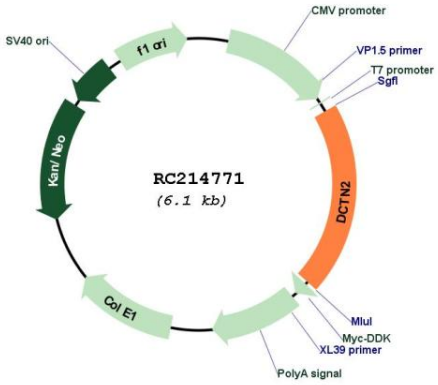
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

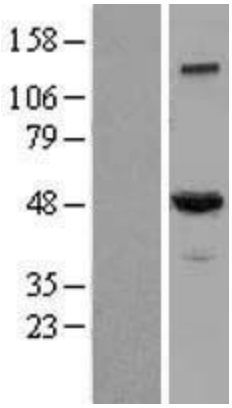
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_006400.4
RefSeq Size:	1757 bp
RefSeq ORF:	1221 bp
Locus ID:	10540
UniProt ID:	Q13561
Cytogenetics:	12q13.3
Domains:	Dynamitin
Protein Pathways:	Huntington's disease
MW:	44.6 kDa
Gene Summary:	This gene encodes a 50-kD subunit of dynactin, a macromolecular complex consisting of 10-11 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, chromosome movement, nuclear positioning, and axonogenesis. This subunit is present in 4-5 copies per dynactin molecule. It contains three short alpha-helical coiled-coil domains that may mediate association with self or other dynactin subunits. It may interact directly with the largest subunit (p150) of dynactin and may affix p150 in place. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, May 2012]

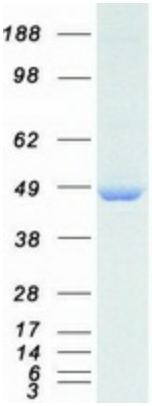
Product images:



Circular map for RC214771



Western blot validation of overexpression lysate (Cat# [LY401921]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214771 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DCTN2 protein (Cat# [TP314771]). The protein was produced from HEK293T cells transfected with DCTN2 cDNA clone (Cat# RC214771) using MegaTran 2.0 (Cat# [TT210002]).