

Product datasheet for MR225230

Dlc1 (NM_001194941) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dlc1 (NM_001194941) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Dlc1
Synonyms: A730069N07Rik; Arhgap7; dlc-1; HP; STARD12
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR225230 representing NM_001194941
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGGACCCCGAGGGCCACGTGATGGCTCGGCCCTGAGAGGCCCGCTGCGGAGGTCCTTCAGCGACC
ACATCAGAGACTCCACC GCCAGGGCGCTGGATGCTATCTGGAAAAACACCAGAGAGAGACGGCTAGCAGA
AATTGAAGCCAAGGAAGCTTGCAGCTGGCTGAGAGTGACTGGTTTCCCCAGTATGCACAGCTGTATGAA
GATCTACTGTTCCCTATTGATATTGCGCTGGTCAAGAGAGAACATGACTTCTGGACAGAGACGCCATCG
AGGCTCTCTGCAGGCGCTTAAATACTCTAAACAAGTGTGCAGTCATGAAGCTGGAGATCAGTCTCACCG
GAAGCGAAGTGAGGATTCGGATGAAGATGAGCCTTGCGCCATAAGCGGCAAGTGGACTTTCAGAGGGAC
AGCAAGCGGTGGTCCCGCCTTGAAGAGTTTGACGTCTTTTCCCCAAAGCAGGATCCAATCCCTGGGTCCC
CAGACAACTCTCGTTTGCAAAGCGCCACAAGCCACGAAAGCATGCTGACAGACCTCAGCGAGCACCAGGA
GGTGGCCTCTGTCCGAAGCCTCAGCAGCACCAGCAGCAGCGTCCCCACCCAGCAGCCACAGTGGAGAT
GCCACTACGCCCCGAACCAATTCGTCATCAGCGTCTGCTCCTCCGGACACTTTGTAGGCAATGATGACT
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GAACACCAAGTCGAAGACGCGGAGCCTGCTCAAACGCATGGAGAGCCTGAAGCTCAAGGGCTCCCACCAC
AGCAAGCACAAAGGCGCCTTCCAAGCTGGGGTTGATCATCAGTGCTCCATTCTGCAGGAGGGTATGGATG
AGGCAAAGCTGAAGCAGCTGAACTGTGTGGAGATCTCAGCCCTCAATGGCAACCACATCAACGTGCCAT
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GAACTGGCCGACCTGGAGAATGAGGACATCTTCCCTGAGCTGGATGACATTCTCTACCACGTGAAGGGGA



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TGCAGCGGATAGTCAACCAAGTGGTCCGAGAAGTTTTCCGACGAGGGAGACTCGGACTCAGCCCTGGACT
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Protein Sequence:

>MR225230 representing NM_001194941
 Red=Cloning site Green=Tags(s)

MGDPEGHVMARPLRGPLRRSFDHIRDSTARALDAIWKNTREERRLAEIEAKEACDWLRVTGFPQYAQLYE
 DLLFPIDIALVKREHDFLDRDAIEALCRLNLTNLCVAMKLEISPHRKRSEDSDEDEPCAISGKWFQRD
 SKRWSRLEEFDFVSPKQDPIPGSPDNSRLQSATSHESMLTDLSEHQEVASVRSLSSTSSSVPTAAHSGD
 ATTPRTNSVIVSVCSSGHFVGNDDSFSSLPSPKELSSFSSMKGHHEKNTKSKTRSLKRMESLKLKGS
 SHH SKHKAPSKLGLIISAPILQEGMDEAKLQKLNCEISALNGNHINVPMVRKRSVSNSTQTS
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 PEDHKPGTFPKA LSHGSFCPSGNSSVNWRGTFHGPGLSLRRENSHDSPELKRNRSSSSLSRSLIYD
 NVPGSILYSSSG ELADLENEIDFPELDDILYHVKGMRIVNQWSEKFSDEGSDSALDSVSPC
 PSPKQIHLDVDHRRTPS DLDSTGNSLNEPEEPTDIPERRDSGVGASLTRCNRHRLRWH
 SFQSSHRPSLNSVSLQINCQSVAQMNLQ KYSLLKLTALLEKYTPSNKHGFSWAVPKFMKRIK
 VPDYKDRSVFVPLTVNVQSRGQPLPQSIQQAMRYL RNHCLDQVGLFRKSGVKSRIQALRQ
 MNESAEDNVNYEQSAYDVADMLKQYFRDLPEPLMTNKLSETFLQ IYQYVPKQRLQAIKAAI
 MLLPDENREVLQTLTYFLSDVTAAVKENQMTPTNLAVCLAPSLFHLNLT
 KRE NSSPRVMQRKQSLGKPDQKDLNENLAATQGLAHMIAECKLQVPEEMSRCRNSYTEQLKPL
 TLEALGHLNSDQPADYRHFLQDCVDGLFKEVKEKFGWVSYPTSEQAELSYKKVSEGPPLRLWR
 STIEVPAPEEIL KRLLKEQHLWDVLLDSKVIIEILDSQTEIYQYVQNSMAPHPARDYVVLRT
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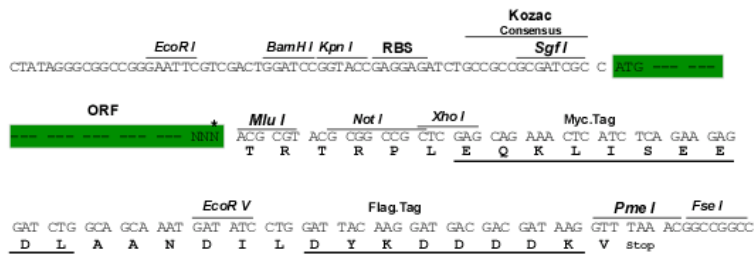
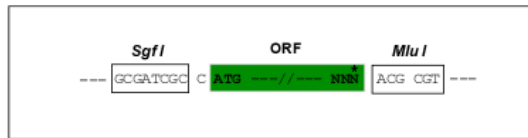
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

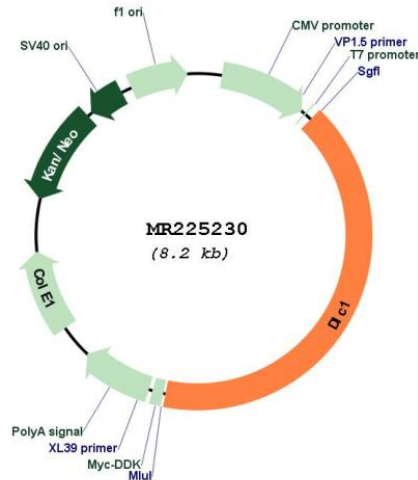
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001194941

ORF Size: 3378 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_001194941.1](#), [NP_001181870.1](#)

RefSeq Size: 6266 bp

RefSeq ORF: 3381 bp

Locus ID: 50768

UniProt ID: [Q9R0Z9](#)

Cytogenetics: 8 23.05 cM

MW: 127.7 kDa

Gene Summary: Functions as a GTPase-activating protein for the small GTPases RHOA, RHOB, RHOC and CDC42, terminating their downstream signaling. This induces morphological changes and detachment through cytoskeletal reorganization, playing a critical role in biological processes such as cell migration and proliferation. Also functions in vivo as an activator of the phospholipase PLCD1. Active DLC1 increases cell migration velocity but reduces directionality (By similarity).[UniProtKB/Swiss-Prot Function]