

Product datasheet for MR216479

Dnal1 (NM_028821) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dnal1 (NM_028821) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Dnal1
Synonyms: 1700010H15Rik; AW121714; Dnalc1; E330027P08Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR216479 representing NM_028821
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCAAAGCAACAACGATCAAAGAAGCCCTGTCCAGATGGGAAGAAAAGACTGGTCAGAAGCCATCTG
 ATGCCAAAGAAATCAAGCTGTATGCCAGATCCCCCATAGAGAAGATGGACGCATCTCTATCCACACT
 TGGTAAGTGCAGAAAGCTTCCCTGTCTACAACTGCATTGAAAAATTGCCAACCTGAATGGCCTAAAA
 AACTTGAGGATTTTGTCTTAGGAAGAAACAACATAAAGAACCTAAATGGACTGGAAGCAGTAGGAGAAA
 CACTGGAAGAAGTGGATCTCCTACAATTTTATTGAGAAGTTGAAAGGAATCCATGTAATGAAGAACT
 GAAGATCTCTACATGTCTAATAACCTGGTAAAAGACTGGGCTGAGTTCCTGAAGCTGGCCGAGCTGCCG
 TGCTGGAGGACCTGGTTCGTCGTAATCCCCTGGAGGAGAAACACTCTGCCGAGGGCAACTGGATCG
 ATGAAGCAACCAAGAGGTGCCAAGCTGAAAAGCTGGATGGTACTCCAGTAATTAAGGAGGATGAAGA
 AGAGGAAAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR216479 representing NM_028821
 Red=Cloning site Green=Tags(s)

MAKATTIKEALSRWEETGQKPSDAKEIKLYAQIPPIEKMDASLSTLGNCEKLSLSTNCIEKIANLNGLK
 NLRILSLGRNNIKNLNGLAVGETLEELWISYNFIEKLGKIHVMKLLKILYMSNNLVKDWAFLKLAELP
 CLEDLVFGNPLEEKHSAEGNWIDEATKRVPKLKKLDGTPVIKEDEEEES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mm9080_d05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_028821

ORF Size: 570 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_028821.3](#), [NP_083097.2](#)

RefSeq Size: 5792 bp

RefSeq ORF: 573 bp

Locus ID: 105000

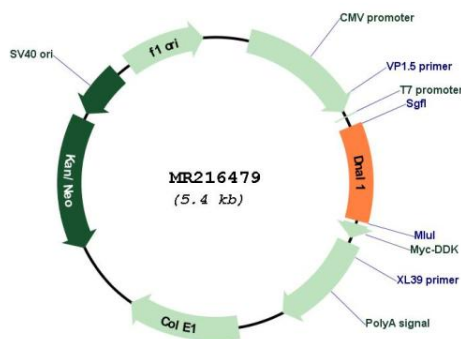
UniProt ID: [Q05A62](#)

Cytogenetics: 12 D1

MW: 21.5 kDa

Gene Summary: Part of the multisubunit axonemal ATPase complexes that generate the force for cilia motility and govern beat frequency (By similarity). Component of the outer arm dynein (ODA). May be involved in a mechanosensory feedback mechanism controlling ODA activity based on external conformational cues by tethering the outer arm dynein heavy chain (DNAH5) to the microtubule within the axoneme (By similarity). Important for ciliary function in the airways and for the function of the cilia that produce the nodal flow essential for the determination of the left-right asymmetry (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR216479