

Product datasheet for RC200520

OriGene Technologies, Inc.

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Dynein light chain (DNAL4) (NM_005740) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Dynein light chain (DNAL4) (NM_005740) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Dynein light chain

Synonyms: MRMV3; PIG27

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC200520 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGAGAAACAGAAGGGAAGAAAGATGAGGCTGACTATAAGCGACTGCAGACCTTCCCTCTGGTCAGGC ACTCGGACATGCCAGAGGAGATGCGCGTGGAGACCATGGAGCTATGTGTCACAGCCTGTGAGAAATTCTC CAACAACAACGAGAGCGCCGCCAAGATGATCAAAGAGAACAATGGACAAGAAGTTCGGCTCCTCCTGGCAC GTGGTGATCGGCGAGGGCTTTGGGTTTGAGATCACCCACGAGGTGAAGAACCTCCTCTACCTGTACTTCG

GGGGCACCCTGGCTGTGTGCGTCTGGAAGTGCTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200520 protein sequence

Red=Cloning site Green=Tags(s)

MGETEGKKDEADYKRLQTFPLVRHSDMPEEMRVETMELCVTACEKFSNNNESAAKMIKETMDKKFGSSWH

VVIGEGFGFEITHEVKNLLYLYFGGTLAVCVWKCS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6393 f11.zip

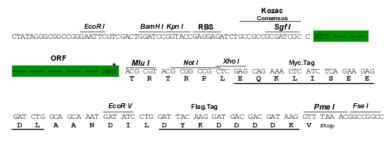
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_005740

ORF Size: 315 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 005740.3

RefSeq Size: 1504 bp
RefSeq ORF: 318 bp
Locus ID: 10126



Cytogenetics:

UniProt ID: <u>O96015</u>

Domains: Dynein_light

Protein Pathways: Huntington's disease

22q13.1

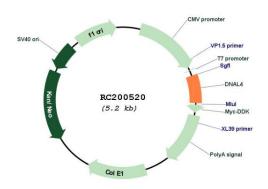
MW: 12 kDa

Gene Summary: This gene encodes an axonemal dynein light chain which functions as a component of the

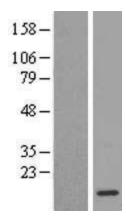
outer dynein arms complex. This complex acts as the molecular motor that provides the force to move cilia in an ATP-dependent manner. The encoded protein is expressed in tissues with motile cilia or flagella and may be involved in the movement of sperm flagella. [provided by

RefSeq, Dec 2014]

Product images:

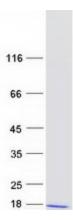


Circular map for RC200520



Western blot validation of overexpression lysate (Cat# [LY417100]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200520 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified DNAL4 protein (Cat# [TP300520]). The protein was produced from HEK293T cells transfected with DNAL4 cDNA clone (Cat# RC200520) using MegaTran 2.0 (Cat# [TT210002]).