

Product datasheet for **RG223642**

Dynein heavy chain (DNAH9) (NM_004662) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Dynein heavy chain
Synonyms:	CILD40; DNAH17L; Dnahc9; DNEL1; DYH9; HL-20; HL20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence: >RG223642 representing NM_004662
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGAACGACCTCAGCAAGATCCATCCAATGTACCAGTTTTCTCTCAAGGCCTTCAGTATCGTCTTCCAGA
 AGGCTGTGGAGAGGGCTGCTCCTGACGAAAGCCTCAGGGAGCGGGTGCCCAACCTAATAGACAGCATAAC
 CTTCTCTGTGTACCAGTACACCATCCGCGGGCTCTTTGAGTGTGATAAGCTGACCTACCTTGCCAGCTC
 ACCTTTCAGATTCTCCTCATGAACCGAGAAGTCAATGCAGTGGAGTTGGATTTCTGCTTCGATCTCCAG
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 GAGATGTGTTCTCGGGAGACGGAGTTTAAAGCATCCTCTTTGCTCTTTGTTACTTCCATGCGGTGGTGG
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 CATGGACTACAATGGTTATCATCAGTACATCGATGCTGAGTGGCCCCAGAATCCCCTACCTCTATGGC
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 TGCAGCCTCGGGACAGCCAGGCCAGAGACGGAGCGGGCGCCACAAGAGAAGAAAAGTCAAGGCCTTCT
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 ACCTAGTGTGGACTTTCAACCTGAAGACTAAGGAAAACCATCCAAGTGGGTCTGGCTGGAGTAGCCT
 TGCTTCTCAGATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG223642 representing NM_004662

Red=Cloning site Green=Tags(s)

MNDLSKIHPMYQFSLKAFSIVFQKAVERAAPDESLRERVANLIDSITFSVYQYTIRGLFECDKLTLYAQL
TFQILLMNREVNVELDFLLRSPVQTGTASPVEFLSHQAWGAVKVLSSMEEF SNLDRDIEGSAKSWKKFV
ESECPEKEKLPQEWKNTALQRLCMLRAMRPDRMTYALRDFVEEKLGSKYVVGRALDFATSFEEGSPATP
MFFILSPGVDPLKDVESQGRKLGTYFNNQNFHNVSLGQGQEVVAEALDLAAKKGHWILQNIHLVAKWL
STLEKKLEEHSNSHPFRVFMASAPSPGHIIPQGIENS IKITNEPPTGMHANLHKALDNFTQDTL
EMCSRETEFKSILFALCYFHAVVAERRKFGPQGWNSYPFNTGDLTISVNVLYNFLEANAKVPYDDLRLYL
FGEIMYGGHITDDWDRRLCRTYLGEFIRPEMLEGELSLAPGFPLPGNMDYNGYHQYIDAELPPESPPLYG
LHPNAEIGFLTQTSEKLFRTVLELQPRDSQARDGAGATREEKVKALLEILERVTDENIPELMAKVEER
TPYIVVAFQECGRMNILTREIQRSLRELELGLKGELTMTSHMENLQNALYFDMVPESWARRAYPSTAGLA
AWFPDLLNRIKELEAWTGDFTMPSTVWLTGFFNPQSFLTAIMQSTARKNEWPLDQMALQCDMTKKNREEF
RSPPREGAYIHGLFMEGACWDTQAGIITEAKLKDLTPMPVMFIKAIPADKQDCRSVYSCPVKTSQGRG
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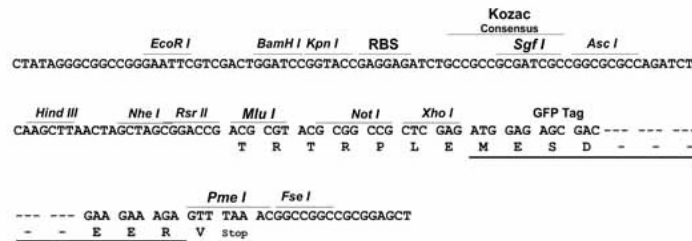
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN:

NM_004662

ORF Size:

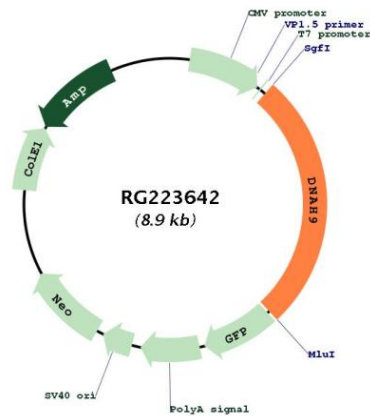
2394 bp

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004662.2 , NP_004653.2
RefSeq Size:	3147 bp
RefSeq ORF:	2397 bp
Locus ID:	1770
UniProt ID:	Q9NYC9
Cytogenetics:	17p12
Protein Families:	Druggable Genome

Gene Summary:

This gene encodes the heavy chain subunit of axonemal dynein, a large multi-subunit molecular motor. Axonemal dynein attaches to microtubules and hydrolyzes ATP to mediate the movement of cilia and flagella. The gene expresses at least two transcript variants; additional variants have been described, but their full length nature has not been determined. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG223642