

Product datasheet for **RG223588**

Dynein heavy chain (DNAH9) (NM_001372) 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	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG223588 representing NM_001372
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGCGGCTCGCGGAGGAGCGGGCCGCGCTCGCGCGGAGAACGCGGATGGGGAACCCGGCGCCGACCGAC
GACTGCGACTCCTGGGACCTACGTGGCCATGAGCCTGCGGCCGGCTGCGGGCGCTGGGAGCGTTGCGC
GGGAGTGCTGAGGCGGAGCAGCTGCTCCAGGCCTTCTGGGCCGCGATGCTGCCGAGGGGCCGCGGCCG
CTGCTGGTGGTGGCGCCCGGGCCAGGGGCTGGCAATACGCCCGGGCTGGAGGTGGGACCTGAGTCGG
GCCTGGCTGGCGCTAAGGCGCTTTTTTCTTCGACCGGGCCGAGCCTCCAGGGCCCGACAGCTTCCG
CGGCGCAGTGGTCTGCGGGGACCTGCCCGCGCACCTCTGGAGCACCTAGCCGCGCTGTTCTCGGAGGTT
GTTCTACCCGTCCTGGCCAATGAGAAGAATCGCCTAACTGGCCCCACATGATATGTGAGGATGTCAGGC
GGCAGCCCCACAGCCTCAATGTGACCTCTCAGTTATACTTGAGCAAGTGAAGGAAAACTTTGCTGCC
TCTTCCAGCAGGCTCAGAAAAATGGAGTTTGGCGATTCCAAAAGTGAGACAGTCTTGATTCTATAGAT
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GAGAGTCTTCCAGCCACTCTTACAAGGGGAGAATCCACCCCTAAGGTGGAGTTGGAGTTCTGGAAGAG
CAGGTATGAAGATCTGAAATACATCTATAATCAACTGAGAACAATAACGGTGAGGGGCATGGCCAAGCTC
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CAGAGGCACAGGACATCCATGTGCACCTGATACCGCTCCAGCGCCACCTGGAAGCTCTGGAGAATGCAGA
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TCCTACCGCTCCCGGGAAGGCTGACTGTGCTGCTCCAGGAGATTTGCAACCTTCTCATCCAGCAGGCCT
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CAGCGGCTCAGAGGAATGCTCTGAGTCAGCAGGTCCAGCAAATGCATGAAGAATTTCAAGAGATGTAC
AGGCTTCTCTCAGGATCTCTCCGACTGCCTGTACCTCAAAGCAGGACTTTGAAAATGACGTCTCTG



AATTTAACCAGAAAGTAGAAGATCTTGACCGAAGATTGGGGACTATCTTTATTCAAGCTTTTGATGATGC
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CGCCTCAGAGCAGCAGAGGAGACTTTGAACCTGGAAAACAGAAGGCATTTGCGATTATGTCAGTGAATCA
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GTTTCTGCTGTACGGGCACATCCTCACTCCGGAAGAAATTGAAGACCATGTGGAAGATGGCATCCCAGAG
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GGCTGGAACCCATCAAGGTGTTTGACGGCTGGATGAAAATTGATATTGACCCCTTAAGGCATCTCTGCT
GAATATTATTAAGAGGTGGAGCCTCTGTTCAAACAGCATCTTGTGGACCACGTCACTCACAGCTTGGCC
AACCTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG223588 representing NM_001372

Red=Cloning site Green=Tags(s)

MRLAEERAALAEENADGEPGADRRLRLLGTYVAMSLRPAAGAWERCAGSAEAEQLLQAFLLGRDAAEGPRP
LLVVRPGPRGLAIRPGLVGPESGLAGAKALFFLRTPGPEPPGDSFRGAVVCGDLPAAPLEHLAALFSEV
VLPVLANEKNRLNWPIMICEDVRRHAHSLQCDSLVIIEQVKGKTLPLPAGSEKMEFADSKSETVLDSID
KSVIYAIESAIVIKWSYQVQVLLKRESSQPLLQGENPTPKVELEFWKSRVEDLKYIYNQLRTITVRMAKL
LDKLQSSYFPAFKAMYRDVVAALAEQDIHVHLIPLQRHLEALENAEFPEVKPQLRPLLHVCLIWATCK
SYRSPGRLTVLLQEICNLLIQQASNYLSPEDLLRSEVEESQRKLQVVSDDLFFKQEFQDRRENLTHTYFK
ENQEVKEWDFQSSLVFVRLDGFLGRLHVVEGLLKTALDFHKLGVKVEFSGVRGNALSQVQVQMMHEEFQEMY
RLLSGSSDCLYLQSTDFENDVSEFNQKVEDLDRRLGTIFIQAFDDAPGLEHAFKLLDIAGNLLERPLVA
RDTSDKYLVLIQMFNKDLDAVRMIYSQHVQEEAELGFSPVHKNMPTVAGGLRWAQELRQRIQGPFSNFR
ITHPCMESAEGRMQQKYEDMLSLLEKYETRLYEDWCRTVSEKSQYNLSQPLLKRPETKEITINFNPQL
ISVLKEMSYLEPREMKHMPETAAAMFSSRDYRQLVANLELMANWYNKVMKTLLEVEFPLVEEELQNIDL
RLRAAEETLNWKTEGICDYVTEITSSIHLEQRIQKTKDNVEEIQNIMKTWVTPIFKTKDGKRESLLSLD
DRHDMKEYYNLIKESGLKIHALLVQENGLFSADPTSNIWKTYVNSIDNLLNGFFLAIECSLYKLENT
ECKAGLTPIFEAQLSLAIPELVFYPSLESVKGFGCDIVEGLITSIFRIPSLVPRLSPQNGSPHYQVDLD
GIPDLANMRRITLMERVQRMMLGCCGYQSTFSQYSYLYVEDRKEVLGQFLLYGHILTPEEIEDHVEDGIPE
NPPLLSQFKVQIDSYETLYEEVCRLEPIKVFDDGWMKIDIRPFKASLLNIKRWSLLFKQHLVDHVTSLA
NL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001372

ORF Size: 3367 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.

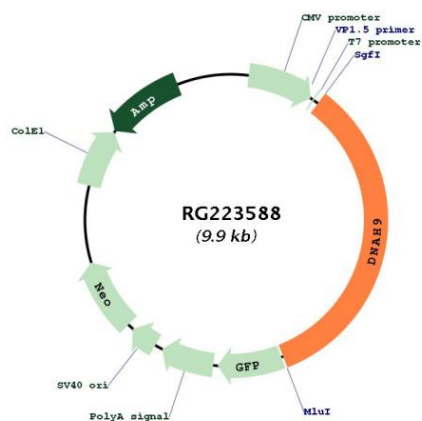
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<u>NM_001372.2, NP_001363.1</u>
RefSeq Size:	13748 bp
RefSeq ORF:	13461 bp
Locus ID:	1770
UniProt ID:	<u>Q9NYC9</u>
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 RG223588