

Product datasheet for **RC239358**

Dynein intermediate chain 1 (DNAI1) (NM_001281428) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dynein intermediate chain 1 (DNAI1) (NM_001281428) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DNAI1
Synonyms:	CILD1; DIC1; ICS1; PCD
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC239358 representing NM_001281428
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGATTCTGCTTCTGCGAAGGCTCCCCATAAACAGCCTCATAAGCAGAGCATCAGCATAGGCAGAGGAA
CCAGGAAGAGAGATGAAGATTCAGGGACTGAAGTGGGAGAAGGCACAGATGAATGGGCCCAATCCAAAGC
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ACAGCCAACAACCCACACGCACCCAGAACATTGTGAGGTACAGCTTCAAAGAAGGCACATATAAGCCTA
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AGGACGGCGGCAGCATTACCGCATGAATTAGTGGCAGTATCCTACCAAGGTTCTCAGGAGTCTGTCAAG
GTGATTTAGAAACAGGAAACCTCGAAGAAGACGAAGAGCCCAAGGAGTTAGAACTGAGCCTGGGAGTC
AAACAGATGTGCCTGCAGCTGGGCAGCTGAAAAAGTACTGAAGAAGAATTGATGACTCCTAAGCAGCC
CAAGGAGAGAAAGCTCACTAACCAGTTCACCTCAGTGAAGAGGCTCACAGACCTACAACAACCCCTGTC
CGGGATCGAGAATGCCAGACGGAGCCTCCTCCAGGACAAACTTTTCAGCCACAGCCAATCAGTGGGAGA
TCTATGATGCCTATGTAGAGGAAGTGGAGAAGCAGGAAAAGACCAAGAGAAGGAGAAGGCAAAGACCCC
AGTGGCTAAAAATCAGGGAAGATGGCCATGAGGAAGTACTGATCTATGGAGTCTCAGACTGATGATCTC
ATCAAATTGTCCCAAGCTGCTAAGATCATGGAGCGGATGGTCAACCAGAAATACATATGATGACATTGCTC
AAGATTTAAGTACTATGACGATGCTGCTGATGAATACCGGGACAGGTGGGTACCCTGCTGCCGCTCTG
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CTGTTTGCAGTGGGATATGGCTTTATGACTTCATGAAGCAGAGCCGGGCGCATGCTGCTCGACATCCACG
TGAAGAACCCAGCTTCCCTGAGTACATGTTGAGCAGCAACAGCGGCGTCATGTGCTCGACATCCACG
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GCCAAAAAGAACAGGCTCACCCAGTGCAGTTCATCTCATCCACCCATCATATTGTGGGCGATGACC
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ATCAAGACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239358 representing NM_001281428
 Red=Cloning site Green=Tags(s)

MIPASAKAPHKQPHKQSIISIGRGTRKRDEDSGTEVGEGETDEWAQSKATVRPPDQLELTD AELKEEFTRIL
 TANNPHAPQNIIVRYSFKEGTYKPIGFVNQLAVHYTQVGNLIPKDSDEGRRQHYRDELVAVS YQGSQESVK
 VISETGNLEEDEEPKELETEPGSQTDVPAAGAAEKVTEELMTPKQPKERKLTNQFNFSERASQTYNNPV
 RDRECQTEPPPRTNFSATANQWEIYDAYVEELEKQEKTKKEKAKTPVAKKSGKMAMRKL TSMESQTDLL
 IKLSQAAKIMERMVNQNTYDDIAQDFKYDDAADEYRDQVGTLLPLWKFQNDKAKRLSVTALCWNPKYRD
 LFAVGYSYDFMKQSRGMLLLYSLKNPSFPEYMFSSNSGMCLDIHVDHPYLVAVGHYDGNVAIYNLKKP
 HSQPSFCCSAKSGKHSDPVWQVKWQKDDMDQNLNFFSVSSDGRIVSWTLV KRKLVHIDVIKLVKVEGSTE
 VPEGLQLHPVGCATFDFHKEIDYMFVGVTEEGKIYKCSKSYSSQFLDTYDAHNMSVDTVSNWPYHTKVF
 MSCSSDWTVKIWDHTIKTPMFIYDLNSAVGDVAWAPYSSTVFAAVTTDGKAHIFDLAINKYEAICNPVA
 AKKNRLTHVQFNLIHPIIIVGDDRGHIIISLKLSPNLRKMPKEKKGQEVQKGP AVEIAKLDKLLNLVREVK
 IKT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

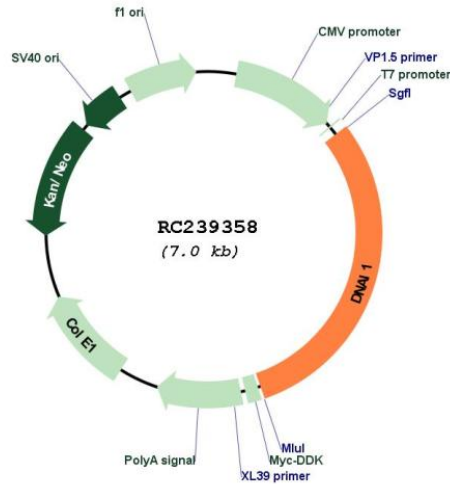
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001281428

ORF Size: 2109 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_001281428.1](#), [NP_001268357.1](#)

RefSeq Size: 2605 bp

RefSeq ORF: 2112 bp

Locus ID:	27019
UniProt ID:	Q9UI46
Cytogenetics:	9p13.3
Protein Families:	Druggable Genome
Protein Pathways:	Huntington's disease
MW:	80.2 kDa
Gene Summary:	<p>This gene encodes a member of the dynein intermediate chain family. The encoded protein is part of the dynein complex in respiratory cilia. The inner- and outer-arm dyneins, which bridge between the doublet microtubules in axonemes, are the force-generating proteins responsible for the sliding movement in axonemes. The intermediate and light chains, thought to form the base of the dynein arm, help mediate attachment and may also participate in regulating dynein activity. Mutations in this gene result in abnormal ciliary ultrastructure and function associated with primary ciliary dyskinesia and Kartagener syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]</p>