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Product datasheet for SC107912

Dynein intermediate chain 1 (DNAI1) (NM_012144) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dynein intermediate chain 1 (DNAI1) (NM_012144) Human Untagged Clone
Tag:	Tag Free
Symbol:	Dynein intermediate chain 1
Synonyms:	CILD1; DIC1; ICS1; PCD
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>NCBI ORF sequence for NM_012144, the custom clone sequence may differ by one or more nucleotides

ATGATTCCTGCTTCTGCGAAGGCTCCCCATAAACAGCCTCATAAGCAGAGCATCAGCATAGGCAGAGGAA
CCAGGAAGAGAGATGAAGATTCAGGGACTGAAGTGGGAGAAGGCACAGATGAATGGGCCCAATCCAAAGC
CACAGTTAGACCCCCTGACCAGCTGGAGTTGACCGATGCGGAGTTAAAGGAGGAGTTCACTCGGATTTTG
ACAGCCAACAACCCACACGCACCCCAGAACATTGTCAGGTACAGCTTCAAAGAAGGCACATATAAGCCTA
TTGGCTTTGTGAACCAACTGGCAGTTCACTACACCCAGGTTGGGAACCTGATCCCCAAAGACTCAGATGA
AGGACGGCGGCAGCATTACCGCGATGAATTAGTGGCAGGTTCTCAGGAGTCTGTCAAGGTGATTTCAGAA
ACAGGAAACCTCGAAGAAGACGAAGAGCCCAAGGAGTTAGAAACTGAGCCTGGGAGTCAAACAGATGTGC
CTGCAGCTGGGGCAGCTGAAAAAGTGACTGAAGAAGAATTGATGACTCCTAAGCAGCCCAAGGAGAGAAA
GCTCACTAACCAGTTCAACTTCAGTGAGAGGGCCTCACAGACCTACAACAACCCTGTCCGGGATCGAGAA
TGCCAGACGGAGCCTCCTCCCAGGACAAACTTTTCAGCCACAGCCAATCAGTGGGAGATCTATGATGCCT
ATGTAGAGGAACTTGAGAAGCAGGAAAAGACCAAAGAGAAGGAGAAGGCAAAGACCCCAGTGGCTAAAAA
ATCAGGGAAGATGGCCATGAGGAAGCTGACATCTATGGAGTCTCAGACTGATGATCTCATCAAATTGTCC
CAAGCTGCTAAGATCATGGAGCGGATGGTCAACCAGAATACATATGATGACATTGCTCAAGATTTTAAGT
ACTATGACGATGCTGCTGATGAATACCGGGACCAGGTGGGTACCCTGCTGCCGCTCTGGAAGTTCCAAAA
TGACAAAGCCAAGCGCCTGTCCGTCACTGCCCTCTGCTGGAATCCAAAGTACAGGGATCTGTTTGCAGTG
GGATATGGCTCTTATGACTTCATGAAGCAGAGCCGGGGCATGCTGCTGCTCTACAGCCTGAAGAACCCCA
GCTTCCCTGAGTACATGTTCAGCAGCAACAGCGGCGTCATGTGTCTCGACATCCACGTGGACCACCCCTA
CCTGGTGGCAGTAGGCCACTATGACGGCAACGTGGCCATTTACAACCTCAAGAAGCCCCACTCCCAGCCC
TCCTTCTGCAGCTCAGCCAAGTCTGGCAAGCACTCAGACCCTGTGTGGCAGGTCAAGTGGCAGAAGGATG
ACATGGACCAAAACCTTAACTTCTTCTCTGTGTCATCTGACGGCAGGATTGTGTCTTGGACTCTCGTGAA
GAGAAAGCTGGTTCACATAGATGTCATCAAGCTGAAGGTGGAAGGCAGCACCACGGAAGTTCCTGAGGGG
TTGCAGCTGCACCCAGTGGGTTGTGGCACTGCCTTTGACTTCCACAAAGAGATTGACTACATGTTCCTAG
TGGGCACAGAGGAGGGAAAAATCTACAAGTGCTCTAAATCCTACTCCAGCCAATTCCTCGACACCTATGA
CGCCCACAACATGTCAGTGGACACTGTGTCCTGGAACCCATACCACACCAAGGTCTTCATGTCCTGCAGC
TCCGACTGGACAGTGAAGATCTGGGACCACACCATCAAGACCCCGATGTTCATCTATGACCTGAACTCAG
CCGTGGGTGATGTGGCCTGGGCGCCATACTCTTCTACTGTGTTCGCAGCAGTCACCACAGATGGGAAGGC
CCACATATTTGACTTAGCCATCAACAAGTATGAGGCCATCTGCAACCAGCCTGTGGCGGCCAAAAAGAAC
AGGCTCACCCACGTGCAGTTCAATCTCATCCACCCCATCATCATTGTGGGCGATGACCGTGGGCACATCA
TCAGCCTCAAGCTCTCACCCAATTTGCGCAAGATGCCAAAGGAAAAGAAGGGGCAGGAGGTGCAGAAGGG
TCCAGCTGTGGAGATTGCGAAACTGGACAAACTGCTGAACCTGGTGAGGGAAGTGAAAATCAAGACCTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_012144 unedited
TTTGTATACGACTCACTATAGGGCGGCCGCGATTCGGCACGAGGGACGGCTGTCCCTAAG
AACCGTTGCGACTGGTAACTGAAGTGGAAGAGAGTCCAGATTTCTTGTGTGTGGTCAAGG
AGACGGACAAACTTTTTGTCTTCAGACGAGGGAGCGTTTTGTAGGCTCTCCAGGGNGTTG
AGATGATTCCTGCTTCTGCGAAGGCTCCCCATAAACAGCCTCATAAGCAGAGCATCAGCA
TAGGCAGAGGAACCAGGAAGAGAGATGAAGATTCAGGGACTGAAGTGGGAGAAGGCACAG
ATGAATGGGCCCAATCCAAAGCCACAGTTAGACCCCCTGACCAGCTGGAGTTGACCGATG
CGGAGTTAAAGGAGGAGTTCACTCGGATTTTGACAGCCAACAACCCACACGCACCCCANA
ACATTGTCAGGTACAGCTTCAAAAAGCAATGGAGTCTGGGTTTCATTCCTAAACTGAAGA
GGAAGATCCCAGTCNACTACTGGGGACAAGATGAAGGTGAAATCTCCACTGAAACTGTAA
GGGTAATTTATTCCTTGGGAATCTTCTTCTCAAAATATTTCCTCTTTTTTTTGGACCTTT
TTTTTGANCCTTTTTCTTGTCGCATCTCTGGGGTTACTTGGTCCTGTTTTTGTTTTCCTT
GCCTTTCTTGCCCTCCTTNNNCTCCCCCCCCCCCCGCCCTCCTGGCGTCTTTGTNTTTTT
CTTTTTTTCTTCTTGTTTCTCCCCCCCCCCCTTGTTGCCCCCCCTCTTTTCCGGCTGCCC
CCCGCCCGGTGTTNTTCCGCTCGCGTTCCCCCCCCCGCCCGCNTCTTTTCTGCCGCCGTC
TTTNGTGGTTTATTTGTTGTTNGGNNGTGTGTGGCGNGTCGACGGATCGAAAAAAAAAAA

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_012144 unedited
CCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTGGGTTTCTACACAGGTTTATTTGT
GCAAAGTTAGAGGGGTAATGGTGGTTGAAGACCAAGTCCTGGGGTAAGGTGCTGGGACCT
TAAGGAACAGAACAAGAAGGGAAGATGCTGGGACCTGATCAGGAGTGGGGTCACATGCTG
GGTGCTAAGGCTGGGCTGGGTACCAGGGTCAAGCCCTAGGAGTACTGTATTCAAGCGATG
GGACAGAGACTGAGGCCAGCCCCTCAGGTCTTGATTTTCACTTCCCTCACCAGGTTCAGC
AGTTTGTCCAGTTTCGCAATCTCCACAGCTGGACCCTTCTGCACCTTCTGCCCCTTCTTT
TCCTTTGGCATCTTGCGCAAATTGGGTGAGAGCTTGAGGCTGATGATGTGCCCACGGTCA
TCGCCCACAATGATGATGGGGTGGATGAGATTGAACTGCACGTGGGTGAGCCTGTTCTTT
TTGCCCGCACAGGCTGGTTGCAGATGGGCTCATACTTGCTGATGGCTAAGTACATATGTG
GGCCTTCCCATTTGGGTGACTGCTGTGAACACAGTAAAGACATGGCGCCCAGCCACATTA
CCCAGGGTGAGTTACGCCATAGATAACCTCCGGTTTTGATGTTTCGGCCACATCTTATTG
TCCACTCGACCCGAGACTTGACACCTTGTGTGTTGGGTTTTAGAACCCGGCTCACTGACG
TTTGGGCCGTTCACGGGTCGCACCCCCCGTGCTTGATTTAAATCCCGCCCCCTGCGCCGC
CGTTGTAAAATTGGTTATTCCCTCAGCGCCCTTATACGCCCTCTCTCGTCCCTTTTCTTC
CTTCCCTTCCTTTTTTCCCCTTTCTACCCCCTTTTTCCTCCCCCCTCCCCCCTTTTCCCC
CTCTCCTTTTCCTTCCCCCCCTTCCCCTCCCCCCCCACTTTCTTCATTTTCTCTCCCTCTC
CTCTCCCTCTTCCCCCACCTCTTCTCCC
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Restriction Sites: NotI-NotI

ACCN: NM_012144

Insert Size: 3520 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_012144.2, NP_036276.1

RefSeq Size: 2548 bp

RefSeq ORF: 2100 bp

Locus ID: 27019

UniProt ID: Q9UI46

Cytogenetics: 9p13.3

Domains: WD40

Protein Families:	Druggable Genome
Protein Pathways:	Huntington's disease
Gene Summary:	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] Transcript Variant: This variant (1) encodes isoform 1.