

Product datasheet for **RC216141**

Dynein intermediate chain 2 (DNAI2) (NM_023036) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dynein intermediate chain 2 (DNAI2) (NM_023036) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dynein intermediate chain 2
Synonyms:	CILD9; DIC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216141 representing NM_023036
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGATTGTGTACGTGTACGTCAAGAAGCGCAGCGAGTTCGGGAAGCAGTGCAATTTCTCGGACCGCC
 AGGCCGAGCTGAACATCGACATCATGCCCAACCCCTGAGCTGGCCGAGCAGTTCGTGGAGCGGAACCCAGT
 GGACACGGGCATCCAGTCTCGATCAGCATGTCGGAACACGAGGCCAACTCAGAGCGTTTGAGATGGAG
 ACCCGGGGAGTTAACCATGTCGAGGGGGGCTGGCCCAAGGACGTGAACCCCTGGAGCTGGAGCAGACCA
 TCCGTTTCCGGAAGAAAGTGGAGAAAGATGAGAACTACGTTAACGCCATCATGCAGCTCGGCTCTATCAT
 GGAGCACTGCATCAAGCAGAACAATGCCATTGACATCTATGAAGAGTATTTCAATGACGAGGAGGCCATG
 GAAGTGTGGAGGAGGCCCTTCAGCTAAAACCATCAATGTGTTTCAGGGACCCCAAGAAATCAAGAGGG
 CTGCCACACACCTCTCCTGGCACCCGATGGCAACAGGAAGTTGGCAGTGCATACTCCTGCTTGGATTT
 TCAGCGGGCACCTGTGGGCATGAGCAGCGATTCATACATCTGGGACCTGGAAAACCCCAACAGCCTGAA
 CTTGCTCTGAAGCCATCGTCTCCACTCGTACGTTGGAGTTCAACCCCAAGATTCACACGTAATCCTGG
 GTGGCTGTACAATGGACAGATAGCCTGTGGACACCCGAAAGGGCAGCCTGGTGGCGGAGCTATCCAC
 CATTGAGTCCAGCCACCGAGACCCTGTGTATGGCACCATCTGGCTGCAGTCGAAGACGGGCACCGAGTGC
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 TACTTTGCCACCAAGTTCATGGTGGGGACCGAGCAGGGCATCGTCATCTCCTGCAACCGCAAGGCCAAG
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 CGCCTGCGGCTCCAGCTGGGGACAACCACCTGCTGGAGGTCTCGCCTGGGCTCTTACCCTCCAGAGG
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 ACCGGGAGATGCGGCTGAAGGAGAAGGGTAAGGGCGAGGGCAGGGATGAGGAGCAGACCGATGAGGAGCT
 GGCCGTAGACCTGGAGGCGCTGGTCAAGGCCGAGGAGGAGTCTTCGACATCATCTTCGAGAGCTG
 AAGAAGAAGGAGGACAGCCATAAAGCTGACGCCAGTGCCTCAGCAACCAAGTCCAGAAGAAGACCAGG
 TGGTGGAGGAGGAGAGGAAGCAGCGGGGAAGAAGGGGATGAAGAAGTGAAGAAGACTTAGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216141 representing NM_023036
 Red=Cloning site Green=Tags(s)

MEIVVYVYVYKRFSEFGKQCNFSDRQAEINIDIMPNPPELAEQFVERNPVDTGIQCSISMSEHEANSERFEME
 TRGVNHVEGGWPKDVNPLELEQTIRFRKKVEKDENVYVNAIMQLGSIMEHCIKQNNNAIDIYEEYFNDEEAM
 EVMEEDPSAKTINVFRDPQEIARAATHLSWHPDGNRKLAVAYSCLDFQRAPVGMSSDSYIWDLENPNKPE
 LALKPSSPLVTLEFNPKDSHVLGGCYNGQIACWDTRKGSVAELSTIESSHRDPVYGTIWLQSKTGTEC
 FSASTDGGVMMWDIRKMSPTVEVILDITKKEQLENALGALSLEFESTLPTKFMVGTGQIVISCNRKAK
 TSAEKIVCTFPGHHGPIYALQRNPFYPKNFLTVGDWTARIWSEDSRESSIMWTKYHMYL TDAAWSVPRP
 TVVFTTRMDGTLDIWDFMFEQCPTLSLKVCDALFCLRVQDNGCLIACGSQGLGTTLLLEVSPGLSTLQR
 NEKNVASSMFERETREKILEARHREMLKEKGKAEGRDEEQTDEELAVDLEALVSKAEIEFFDIIFAEI
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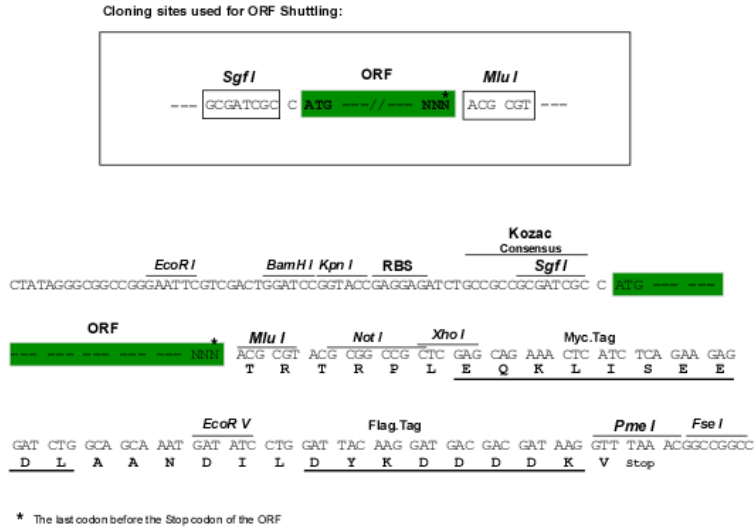
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8017_d05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_023036

ORF Size: 1815 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_023036.6](#)

RefSeq Size: 2497 bp

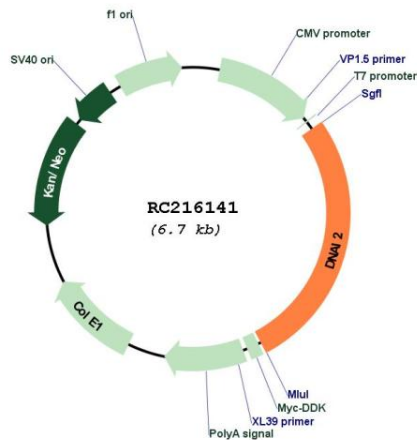
RefSeq ORF: 1818 bp

Locus ID: 64446

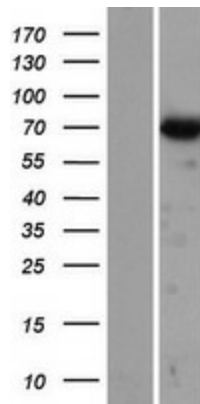
UniProt ID: [Q9GZS0](#)
 Cytogenetics: 17q25.1
 Protein Pathways: Huntington's disease
 MW: 68.6 kDa

Gene Summary: The protein encoded by this gene belongs to the dynein intermediate chain family, and is part of the dynein complex of respiratory cilia and sperm flagella. Mutations in this gene are associated with primary ciliary dyskinesia type 9. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Mar 2010]

Product images:



Circular map for RC216141



Western blot validation of overexpression lysate (Cat# [LY411496]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216141 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).