

Product datasheet for **RC212826**

CMG1 (IFT74) (NM_025103) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CMG1 (IFT74) (NM_025103) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CMG1
Synonyms:	CCDC2; CMG-1; CMG1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC212826 representing NM_025103
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAGCAATCACAAATCTTCAGCAGCTCGCCCTGTTCAAGAGGTGGAGTTGGGTTAACAGGAAGGC
 CTCCTTCTGGGATACGACCCCTATCAGGAAATATTCGAGTGGCAACTGCAATGCCACCTGGGACAGCAAG
 ACCAGGTTCTCGTGGTTGTCCCATAGGGACTGGTGGAGTTCTGTCTTCTCAAATCAAAGTTGCCATCGC
 CCTGTAACACAACAAGGTTTACTGGAATGAAACTGGGACGAAAGGTTCCCGAGAGGCAAAATTTAGACA
 AATCTTACTATCTGGGCTTCTTAGAAGTAAAATAAGTGAACCTACAACCTGAAGTTAATAAACTTCAGAA
 GGGAAATAGAAATGTACAATCAAGAGAATTCAGTATATTTGTCATATGAAAAGAGGGCTGAGACTTTAGCT
 GTTGAGATAAAAAGAGCTTCAAGGACAACAGCAGACTACAACATGTTGGTAGATAAACTTAATACCAACA
 CTGAAATGGAAGAAGTAATGAATGATTACAATATGCTTAAAGCTCAAAATGATCGAGAAACAAAGTTT
 GGATGTCAATTTACTGAAAGACAAGCGAAAGAAAAACAATCAGAAGTGTGGAAGAAGAAATTAAGACAG
 GAAAAACAAGCAACAGATGACATTATCAAAAATATGCTTTTTGAAAACCAAGTCAAGTACCTAGAGATGA
 AAACCACAAATGAGAAACTGTTACAGGAATTAGATACACTTCAACAACAATTGGATTACAGAAACATGAA
 AAAAGAGAGCCTGGAAGCAGAAATAGCTCACTCCAGGTGAAACAGGAGGCGGTATTGCTGCATGAAAA
 CTTTATGAGTTGGAGTCCCATCGAGATCAAATGATTGCAGAAGACAAAAGCATAGGATCTCCAATGGAAAG
 AGAGAGAGAAATTAAGCAGATTAAGATGATAATCAGGAAATAGCCAGCATGGAAGACAGTTAAC
 AGATACAAAAGAAAAGATAAATCAGTTTATTGAAGAAATAGACAACCTTGACATGGATTTAGAGGAACAC
 CAAGGTGAAATGAACAGAAATACAAGGAGCTAAAGAAAAGGGAGGAACATATGGACACTTTTATTGAGA
 CTTTTGAGGAAACAAGAATCAGGAACGAAACGAAAGGCACAGATAGAAGCCAACATTTGTCACACTCTT
 GGAGCACTGCAGTCGAAATATAAATCGTATAGAACAGATATCCTCTATCACCATCAAGAGCTAAAGATG
 ATGCAGGATGACCTCAATTTTAAATCTACTGAAGTGCAGAAATCACAAGTACAGCTCAGAAATTTGACTT
 CAGACATTCACGCTGTCAGTTGGATCTGCAGAAATGGAGCTTCTAGAAAGTAAGATGACTGAAGAACA
 GCATTCTCTAAAAAGCAAAATTAAGCAATGACAACCTGATCTGGAGATATATAATGATTTGCCAGCTTTA
 AAATCATCAGGTGAAGAAAAGATAAAGAAATTACATCAGGAGAGAATGATATTATCAACCCACAGAAATG
 CCTTTAAGAAAATTAAGGAGAAGCAAAACATAGAGTATGAGGCACTAAAAACACAATTGCAAGAAAATGA
 GACACATTTCTCAGCTTACAAATTTGGAGAGAAAGTGGCAACACCTTGAGCAAAATATTTTGGCATGAAA
 GAATTCATAGCAACCAAGAGTCAAGAGAGTGATTACCAGCAATTAAGAAAAATGTGACCAAGCAGATTG
 CAGAGTACAATAAAACCATCGTGGATGCTTACATAGCACCAGCGGAAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212826 representing NM_025103
 Red=Cloning site Green=Tags(s)

MASNHKSSAARPVSRGGVLTGRPPSGIRPLSGNIRVATAMPPGTARPGSRGCPIGTGGVLSQIKVAHR
 PVTQQGLTGMKTGKGPQRQILDKSYLLGLLRSKISELTTEVNKLQKGIEMYNQENSIVLSYKRAETLA
 VEIKELQQLADYNMLVDKLNNTMEMEVMNDYNMLKAQNDRETQSLDVIFTERQAKEKQIRSVVEEIEQ
 EKQATDDIKNMSFENQVKYLEMKTNTNEKLLQELDTLQQQLDSQNMKESLEAEIAHSQVKQEAIVLHEK
 LYELESHRDMIAEDKSIGSPMEEREKLLKQIKDDNQEIASMERQLTDTKEKINQFIEEIRQLDMDLEE
 QGEMNQYKELKKREEHMDTFIETFEETKNQELKRKAQIEANIVALLEHCSRININRIEQISSITNQELKM
 MQDDLNFKSTEVQKSQSTAQNLTSDIQRLQLDLQKMELESKMTEEQHSLKSKIKQMTTDLIYNDLPAL
 KSSGEEKIKKLHQERMILSTHRNAFKKIMEKQNIYEALKTQLQENETHSQLTNLERKWQHLEQNPFAMK
 EFIATKSQESDYQPIKKNVTKQIAEYNKTIVDALHSTSGN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8022_h04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_025103

ORF Size: 1800 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_025103.4](#)

RefSeq Size: 2175 bp

RefSeq ORF: 1803 bp

Locus ID: 80173

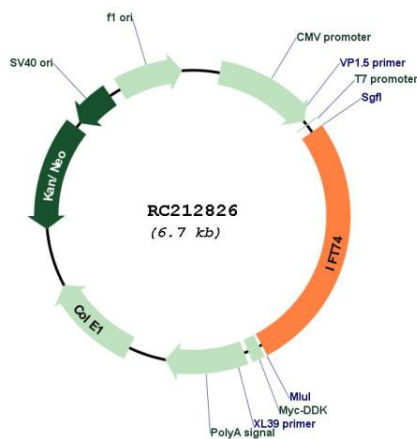
UniProt ID: [Q96LB3](#)

Cytogenetics: 9p21.2

MW: 69.2 kDa

Gene Summary: This gene encodes a core intraflagellar transport (IFT) protein which belongs to a multi-protein complex involved in the transport of ciliary proteins along axonemal microtubules. IFT proteins are found at the base of the cilium as well as inside the cilium, where they assemble into long arrays between the ciliary base and tip. This protein, together with intraflagellar transport protein 81, binds and transports tubulin within cilia and is required for ciliogenesis. Naturally occurring mutations in this gene are associated with amyotrophic lateral sclerosis--frontotemporal dementia and Bardet-Biedl Syndrome. [provided by RefSeq, Mar 2017]

Product images:



Circular map for RC212826