

Product datasheet for RC224927

CMG1 (IFT74) (NM_001099224) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CMG1 (IFT74) (NM_001099224) 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)
ORF Nucleotide Sequence:	>RC224927 representing NM_001099224 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCAGCAATCACAAATCTTCAGCAGCTCGCCCTGTTTCAAGAGGTGGAGTTGGGTTAACAGGAAGGC
CTCCTTCTGGGATACGACCCCTATCAGGAAATATTCGAGTGGCAACTGCAATGCCACCTGGGACAGCAAG
ACCAGTTCTCGTGGTTGCCATAGGGACTGGTGGAGTTCTGTCTTCTCAAATCAAAGTTGCCATCGC
CCTGTAACACAACAAGGTTTACTGGAATGAAAAGTGGGACGAAAGTCCCGAGAGGCAAAATTTAGACA
AATCTTACTATCTTGGGCTTCTTAGAAGTAAAATAAGTGAACCTACAACGAAGTTAATAAACTCAGAA
GGGAATAGAAATGTACAATCAAGAGAATTCAGTATATTTGTCATATGAAAAGAGGGCTGAGACTTTAGCT
GTTGAGATAAAAGAGCTTCAAGGACAACAGCAGACTACAACATGTTGGTAGATAAACTTAATACCAACA
CTGAAATGGAAGAAGTAATGAATGATTACAATATGCTTAAAGCTCAAAATGATCGAGAAACACAAAGTTT
GGATGTCAATTTACTGAAAGACAAGCGAAAGAAAAACAAATCAGAAAGTGTGGAAGAAGAAATGAAACAG
GAAAAACAAGCAACAGATGACATTATCAAAAATATGCTTTTTGAAAACCAAGTCAAGTACCTAGAGATGA
AAACCACAAATGAGAACTGTTACAGGAATTAGATACACTTCAACAACAATTGGATTACAGAACATGAA
AAAAGAGAGCCTGGAAGCAGAAATAGCTCACTCCAGGTGAAACAGGAGGCGGTATTGCTGCATGAAAA
CTTTATGAGTTGGAGTCCCATCGAGATCAAATGATTGCAGAAGACAAAAGCATAGGATCCCAATGGAAG
AGAGAGAGAAATTAAGCAGATTAAGATGATAATCAGGAAATAGCCAGCATGGAAAGACAGTTAAC
AGATACAAAAGAAAAGATAAATCAGTTTATTGAAGAAATTAGACAACCTGACATGGATTTAGAGGAACAC
CAAGATCTACCAACTATGGATGAAAAAATACTGAAAAAATACAGGAAGTTTCAAAAAGCAAGTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC224927 representing NM_001099224
 Red=Cloning site Green=Tags(s)

MASNHKSSAARPVSRGGVGLTGRPPSGIRPLSGNIRVATAMPPGTARPGSRGCPIGTGGVLSSQIKVAHR
 PVTQQGLTGMKTGKGPQRQILDKSYLLGRLRSKISELTTEVNKLQKGIEMYNQENSVYLSYEKRAETLA
 VEIKELQGLADYNMLVDKLNNTMEMEVMNDYNMLKAQNDRETQSLDVIFFTERQAKEKQIRSVEEEIEQ
 EKQATDDI IKNMSFENQVKYLEMKT TNEKLLQELDTLQQQLDSQNMKESLEAEIAHSQVKQEAVLLHEK
 LYELESHRDQMI AEDKSI GSPMEEREKLLKQIKDDNQEIASMERQLTDTKEKINQFIEEIRQLDMDLEE
 QDPTNYGWKILEKNTGSFKKQV

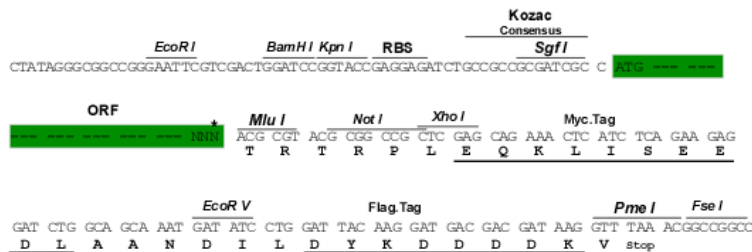
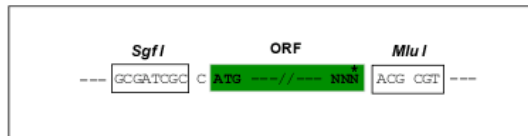
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001099224

ORF Size: 1116 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_001099224.2](#)

RefSeq Size: 1571 bp

RefSeq ORF: 1119 bp

Locus ID: 80173

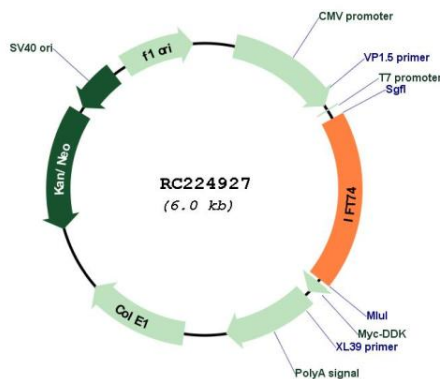
UniProt ID: [Q96LB3](#)

Cytogenetics: 9p21.2

MW: 42.2 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 RC224927