

Product datasheet for SC316512

OriGene Technologies, Inc.

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CMG1 (IFT74) (NM_001099224) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CMG1 (IFT74) (NM_001099224) Human Untagged Clone

Tag: Tag Free Symbol: CMG1

Synonyms: CCDC2; CMG-1; CMG1

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_001099224, the custom clone sequence may differ by one or

more nucleotides

ATGGCCAGCAATCACAAATCTTCAGCAGCTCGCCCTGTTTCAAGAGGTGGAGTTGGGTTA ACAGGAAGGCCTCCTTCTGGGATACGACCCCTATCAGGAAATATTCGAGTGGCAACTGCA ATGCCACCTGGGACAGCAAGACCAGGTTCTCGTGGTTGTCCCATAGGGACTGGTGGAGTT CTGTCTTCTCAAATCAAAGTTGCCCATCGCCCTGTAACACAACAAGGTTTGACTGGAATG AAAACTGGGACGAAAGGTCCCCAGAGGCAAATTTTAGACAAATCTTACTATCTTGGGCTT CTTAGAAGTAAAATAAGTGAACTTACAACTGAAGTTAATAAACTTCAGAAGGGAATAGAA ATGTACAATCAAGAGAATTCAGTATATTTGTCATATGAAAAGAGGGCTGAGACTTTAGCT GTTGAGATAAAAGAGCTTCAAGGACAACTAGCAGACTACAACATGTTGGTAGATAAACTT AATACCAACACTGAAATGGAAGAAGTAATGAATGATTACAATATGCTTAAAGCTCAAAAT ATCAGAAGTGTCGAAGAAGAAATTGAACAGGAAAAACAAGCAACAGATGACATTATCAAA AATATGTCTTTTGAAAACCAAGTCAAGTACCTAGAGATGAAAACCACAAATGAGAAACTG TTACAGGAATTAGATACACTTCAACAACAATTGGATTCACAGAACATGAAAAAAGAGAGC CTGGAAGCAGAAATAGCTCACTCCCAGGTGAAACAGGAGGCGGTATTGCTGCATGAAAAA CTTTATGAGTTGGAGTCCCATCGAGATCAAATGATTGCAGAAGACAAAAGCATAGGATCT CCAATGGAAGAGAGAGAAATTACTTAAGCAGATTAAAGATGATAATCAGGAAATAGCC AGCATGGAAAGACAGTTAACAGATACAAAAGAAAAGATAAATCAGTTTATTGAAGAAATT CTTGAAAAAATACAGGAAGTTTCAAAAAGCAAGTT

Restriction Sites: Please inquire **ACCN:** NM 001099224

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).



CMG1 (IFT74) (NM_001099224) Human Untagged Clone - SC316512

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 001099224.1</u>, <u>NP 001092694.1</u>

RefSeq Size: 1571 bp
RefSeq ORF: 1119 bp
Locus ID: 80173
UniProt ID: Q96LB3
Cytogenetics: 9p21.2

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] Transcript Variant: This variant (4) lacks several exons in the 3' coding region, uses an alternate 3' terminal exon, and differs in the 3' UTR, compared to variant 1. The encoded

isoform (b) has a shorter and distinct C-terminus, compared to isoform (a).