

Product datasheet for **RG212777**

CMG1 (IFT74) (NM_001099222) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | CMG1 (IFT74) (NM_001099222) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | IFT74 |
| Synonyms: | CCDC2; CMG-1; CMG1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RG212777 representing NM_001099222
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCAGCAATCACAATCTTCAGCAGCTCGCCCTGTTCAAGAGGTGGAGTTGGTTAACAGGAAGGC
 CTCCTTCTGGGATACGACCCCTATCAGGAAATATTCGAGTGGCAACTGCAATGCCACCTGGGACAGCAAG
 ACCAGGTTCTCGTGGTTGTCCCATAGGGACTGGTGGAGTTCTGTCTTCTCAAATCAAAGTTGCCATCGC
 CCTGTAACACAACAAGGTTTACTGGAATGAAACTGGGACGAAAGGTCCCAGAGGCAAAATTTAGACA
 AATCTTACTATCTTGGGCTTCTTAGAAGTAAATAAGTGAACCTACAACCTGAAGTTAATAAACTTCAGAA
 GGGAAATAGAAATGTACAATCAAGAGAATTCAGTATATTTGTCATATGAAAAGAGGGCTGAGACTTTAGCT
 GTTGAGATAAAAGAGCTTCAAGGACAACAGCAGACTACAACATGTTGGTAGATAAACTTAATACCAACA
 CTGAAATGGAAGAAGTAATGAATGATTACAATATGCTTAAAGCTCAAAATGATCGAGAAACAAAGTTT
 GGATGTCAATTTACTGAAAGACAAGCGAAAGAAAAACAATCAGAAGTGTGGAAGAAGAAATGAACAG
 GAAAAACAAGCAACAGATGACATTATCAAAAATATGCTTTTTGAAAACCAAGTCAAGTACCTAGAGATGA
 AAACCACAATGAGAACTGTTACAGGAATTAGATACACTTCAACAACAATTGGATTACAGAACATGAA
 AAAAGAGAGCCTGGAAGCAGAAATAGCTCACTCCAGGTGAAACAGGAGGCGGTATTGCTGCATGAAAA
 CTTTATGAGTTGGAGTCCCATCGAGATCAAATGATTGCAGAAGACAAAAGCATAGGATCTCCAATGGAA
 AGAGAGAGAAATTAAGCAGATTAAGATGATAATCAGGAAATAGCCAGCATGGAAGACAGTTAAC
 AGATACAAAAGAAAAGATAAATCAGTTTATTGAAGAAATAGACAACCTGACATGGATTTAGAGGAACAC
 CAAGGTGAAATGAACAGAAATACAAGGAGCTAAAGAAAAGGAGGAACATATGGACACTTTTATTGAGA
 CTTTTGAGGAAACAAGAATCAGGAATGAAACGAAAGGCACAGATAGAAGCCAACATTTGTCACCTTT
 GGAGCACTGCAGTCGAAATATAAATCGTATAGAACAGATATCCTCTATACCAATCAAGAGCTAAAGATG
 ATGCAGGATGACCTCAATTTTAAATCTACTGAAGTGCAGAAATCACAAGTACAGCTCAGAAATTTGACTT
 CAGACATTCACGCTGTCAGTTGGATCTGCAGAAAATGGAGCTTCTAGAAAGTAAGATGACTGAAGAACA
 GCATTCTCTAAAAAGCAAAATTAAGCAATGACAACCTGATCTGGAGATATATAATGATTTGCCAGCTTTA
 AAATCATCAGGTGAAGAAAAGATAAAGAAATTACATCAGGAGAGAATGATATTATCAACCCACAGAAATG
 CCTTTAAGAAAATTAAGGAGAAGCAAAACATAGAGTATGAGGCACTAAAAACACAATTGCAAGAAAATGA
 GACACATTTCTCAGCTTACAAATTTGGAGAGAAAGTGGCAACACCTTGAGCAAAATATTTTTCGATGAAA
 GAATTCATAGCAACCAAGAGTCAAGAGAGTGATTACCAGCAATTAAGAAAAATGTACCAAGCAGATTG
 CAGAGTACAATAAAACCATCGTGGATGCTTACATAGCACCAGCGGAAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG212777 representing NM_001099222
 Red=Cloning site Green=Tags(s)

MASNHKSSAARPVSRGGVLTGRPPSGIRPLSGNIRVATAMPPGTARPGSRGCPIGTGGVLSQIKVAHR
 PVTQQGLTGMKTGKGPQRQILDKSYLGLLRKISELTTEVNKLQKGIEMYNQENSYYLSYEKRAETLA
 VEIKELQGGADYNMLVDKLNTEEMEEVMNDYNMLKAQNDRETQSLDVFIFTERQAKEKQIRSVEEEIEQ
 EKQATDDIIKNMSFENQVKYLEMKTNEKLLQELDTLQQQLDSQNMKESLEAEIAHSQVKQEAULLHEK
 LYELESHRDQMI AEDKSI GSPMEEREKLLKQIKDDNQEIASMERQLTDTKEKINQFIEEIRQLDMDLEEH
 QGEMNQYKELKKREEHMDTFIETFEETKNQELKRKAQIEANIVALLEHCSRINRIEQISSITNQELKM
 MQDDLNFKSTEVQKSQSTAQNLTSDIQRLQLDLQKMELLESKMTEEQHSLKSKIKQMTTDL E IYNDLPAL
 KSSGEEKIKKLHQERMILSTHRNAFKIMEKQNI EYEALKTQLQENETHSQLTNLERKQWQHLEQNNFAMK
 EFIATKSQESDYQPIKKNVTKQIAEYNKTIVDALHSTSGN

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

| | |
|-------------------------------|--|
| 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: | <ol style="list-style-type: none">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_001099222.2 |
| RefSeq Size: | 2183 bp |
| RefSeq ORF: | 1803 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] |