

Product datasheet for **RG205105**

Cofilin 2 (CFL2) (NM_021914) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cofilin 2 (CFL2) (NM_021914) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Cofilin 2
Synonyms: NEM7
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG205105 representing NM_021914
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTCTGGAGTTACAGTGAATGATGAAGTCATCAAAGTTTTAATGATATGAAAGTAAGGAAATCTT
CTACACAAGAGGAGATCAAAAAGAGAAAGAAAGCAGTTCTTCTGTTTAAAGCGATGACAAAAGACAAAT
AATTGTAGAGGAAGCAAAGCAGATCTTGGTGGGTGACATTGGTGATACTGTAGAGGACCCCTACACATCT
TTTGTGAAGTTGCTACCTCTGAATGATTGCCGATATGCTTTGTACGATGCCACATACGAAACAAAAGAGT
CTAAGAAAGAAGACCTAGTATTTATATTCTGGGCTCCTGAAAGTGCACCTTTAAAAGCAAGATGATTTA
TGCTAGCTCTAAAGATGCCATTAAGAAATTTACAGGTATTAACATGAGTGGCAAGTAAATGGCTTG
GATGATATTAAGGACCGTTCGACACTTGGAGAGAAATGGGAGGCAATGTAGTAGTTTCACTTGAAGGAA
AACCATTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG205105 representing NM_021914
Red=Cloning site Green=Tags(s)

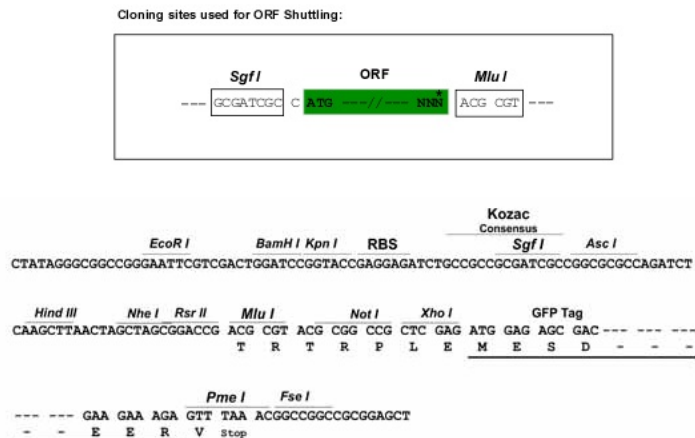
MASGVTVNDEVIKVFNDMKVRSSTQEEIKKRKKAVLFLSDDKRQIIVEEAKQILVGDIGDTPYTS
FVKLLPLNDCRYALYDATYETKESKKEDLVFIFWAPESAPLKSCKMIYASSKDAIKKKFTGIKHEWQVNL
DDIKDRSTLGEKLGNNVVSLEGKPL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_021914

ORF Size: 498 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_021914.7](#)

RefSeq Size: 3093 bp

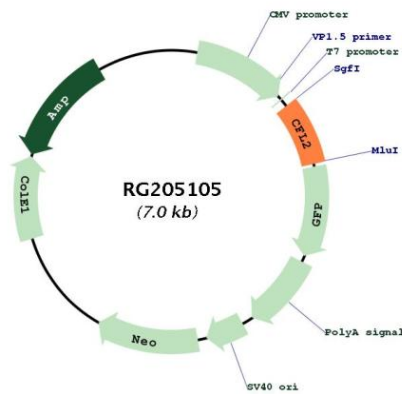
RefSeq ORF: 501 bp

Locus ID: 1073

UniProt ID: [Q9Y281](#)

| | |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cytogenetics: | 14q13.1 |
| Domains: | ADF |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Axon guidance, Fc gamma R-mediated phagocytosis, Regulation of actin cytoskeleton |
| Gene Summary: | This gene encodes an intracellular protein that is involved in the regulation of actin-filament dynamics. This protein is a major component of intranuclear and cytoplasmic actin rods. It can bind G- and F-actin in a 1:1 ratio of cofilin to actin, and it reversibly controls actin polymerization and depolymerization in a pH-dependent manner. Mutations in this gene cause nemaline myopathy type 7, a form of congenital myopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2009] |

Product images:



Circular map for RG205105