

## Product datasheet for **RG209653**

### **C5orf45 (MRNIP) (NM\_016175) Human Tagged ORF Clone**

#### Product data:

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                         |
| Product Name:             | C5orf45 (MRNIP) (NM_016175) Human Tagged ORF Clone                          |
| Tag:                      | TurboGFP                                                                    |
| Symbol:                   | C5orf45                                                                     |
| Synonyms:                 | C5orf45                                                                     |
| Mammalian Cell Selection: | Neomycin                                                                    |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                     |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                      |
| ORF Nucleotide Sequence:  | >RG209653 representing NM_016175<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGTCGCTTCAGCGTTCTCGGGTGCTACGCTGCTGCAGCTGCCGCCTCTCCAGGCGCACCAGGTAA  
 AAAAGAGTGTCAAGTGGACATGCAAAGCTTGTGGAGAGAAGCAGTCCTTTTGCAGGCTTATGGTGAAGG  
 CTCTGGTGCTGATTGTAGACGCCATGTCCAAAAGTTAAATCTACTACAGGGACAAGTTTCAGAGCTGCCA  
 CTCAGGTCTCTAGAAGAACTGTCAGTGCCAGTGAAGAAGAAAACGTGGGACACCAGCAGGCTGGGAATG  
 TGAAGCAGCAGGAAAAATCGCAGCCCTCAGAGAGTCGCTGGCTGAAGTATCTAGAAAAGGACTCCCAAGA  
 ACTGGAGCTGGAAGGAACAGGAGTGTGTTTCAGCAAACAGCCTTCATCCAAAATGGAGGAGCCAGGCCCC  
 CGCTTCAGTCAAGACCTGCCTAGAAAAAGGAAGTGGAGCGGGAGCACCGTCCAGCCTCCGTGCAGCCGTG  
 GCGTGCAGGACTCGGGTGGCTCTGAGGTCGCCTGGGGACCCAGAGGGACAGGCTGGCCTGACATGGAA  
 GGTGAAACAAGGCAGCAGCCCCGCTCCAGGAGAACTCTGCAGACTGCAGTGCCGGGGAGCTGAGGGGT  
 CCTGGGAAGGAGCTATGGAGTCCCATCCAGCAGTTACAGCCACATCCTCTAAATGGGCGCAATTTGTCC  
 TGCCACCTAGAAAAAGTTCACATGTGGACAGTGAGCAGCCAAGGTCTCTCAGAGGGACCCAGGCCAGC  
 TGGTCCAGCACAGGCTAAGCAAGGGACCCAGAGCACAGGCCTCAAGAGAAGGCCTCAGCAGGCCCACT  
 GCCGCTGTCCAGCTTCTCGGGCCACACACCCCGTCACATCTGGGTCTGAGAGGCCTTGGGGAAGACCT  
 CATGGGACGCAAGGACTCCCTGGGACAGAGGTGGGCCCTTGGTCTGAGGACACAGAATCCTCGACCCAC  
 ACGACTATGTGACCTCTTATAACTGGGAAGACTTCGATGATGATGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG209653 representing NM\_016175  
 Red=Cloning site Green=Tags(s)

MASLQRSRVLRCCSCLFQAHQVKKSVKWTCKACGEKQSFLQAYGEGSGADCRRHVQKLNLLQGQVSELP  
 LRSLEETVSASEEENVGHQQAGNVKQKEKSPSESRWLKYLEKDSQELELEGTGVCFSKQPSSKMEEPGP  
 RFSQDLPRKRKWSGSTVQPPCSRGVQDSGGSEVAWGPQKGQAGLTKVKQGSSPCLQENSADCSAGELRG  
 PGKELWSPIIQQVTATSSKWAQFVLPKRKSSHVDSEQPRSLQRDRPAGPAQAKQGTTPRAQASREGLSRPT  
 AAVQLPRATHPVTSGSERPCGKTSWDARTPWAEGGPLVLEAQNRPTRLCDLFIITGEDFDDDV

TRTRPLE – GFP Tag – V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_016175

**ORF Size:** 1029 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_016175.3](#), [NP\\_057259.2](#)

**RefSeq Size:** 1229 bp

**RefSeq ORF:** 1032 bp

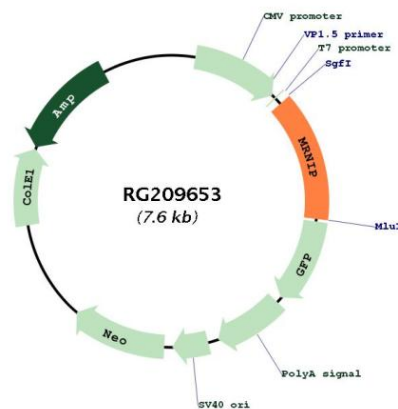
**Locus ID:** 51149

**UniProt ID:** [Q6NTE8](#)

**Cytogenetics:** 5q35.3

**Gene Summary:** Plays a role in the cellular response to DNA damage and the maintenance of genome stability through its association with the MRN damage-sensing complex (PubMed:27568553). Promotes chromatin loading and activity of the MRN complex to facilitate subsequent ATM-mediated DNA damage response signaling and DNA repair (PubMed:27568553). [UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for RG209653