

## Product datasheet for **RG232607**

### CFAP410 (NM\_001271441) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | CFAP410 (NM_001271441) Human Tagged ORF Clone                                  |
| Tag:                      | TurboGFP   |
| Symbol:                   | CFAP410  |
| Synonyms:                 | C21orf2; LRRC76; RDMS; SMDAX; YF5/A2   |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-AC-GFP (PS100010)  |
| E. coli Selection:        | Ampicillin (100 ug/mL)   |
| ORF Nucleotide Sequence:  | >RG232607 representing NM_001271441<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGCTGACGCGGAAGATGGTTCTGACCCGGGCCAAGGCCTCGGAGCTGCACAGCGTGCGCAAGCTCA  
ACTGCTGGGGCAGCCGCCTCACAGATATCTCCATTTGCCAGGAGATGCCAGCCTGGAGGTGATCACGCT  
CAGTGTCAACAGCATCTCCACCCTGGAGCCTGTGAGCCGGTGCCAGCGCCTGAGTGAGCTGTACCTGCGG  
AGGAACCGCATCCCAGCCTGGCTGAGCTCTTCTACCTGAAGGGCTGCCGCTCTGCGGGTGTGTGGC  
TGGCCGAGAACCCTGTGCGGCACCAGCCCCACCGCTACCGCATGACCGTGTGCGCACCTGCCGCG  
CCTACAGAAGCTGGACAACCAGGCTGTGACGGAGGAGGCTGTCCCGTGCAGTGTGAGGAGAGGAG  
ATCACTGCGGCCCCAGAGAGAGAGGGCACAGGCCACGGCCGCCCCAAGCTATGCTGCACACTGAGCTCCC  
TCAGCTCCGCTGTGAGACTGGCCGGGACCCGCTGGACAGCGAGGAGGGAACCCGGCGCCAGGATGA  
ACGTGGCTGAAGCCGCTTCCCGGGCCAGTTTCCCTTCCTCTCAGCCAGGATGCCTCGAGCAGCCAC  
AGGGCAGGGTGTGAGTGGCGGGCCGCTAGGGGCCGCGGCTGCCTCTGCCACTGCACCCACTGCACAGAAA  
CCGTGGGAGGGAGCATGGAGCCTCACAGGGCCCCGTGGGAGGGAGCATGGAGCCTCACAGGGCCTTGA  
AGAGCTGTGCCCCAGGGGAGCTGCGTGTGCGGGTCTGTGAATGCGCACACAGTGAACACGTGCCCGC  
CACGGAGCCGCTGCCCCCTCAGCCTCTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT  
GGCTGAGGGCAACAGGAGTACAGTGAAGAGGTGCCACACACCGCTCCACAGGCGGGCTCCTCTGCTC  
AGATTCTCCGAGTGTGCCAAGCTCCTGACTGCCATCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT  
CTGGAGCCGTGCAGCAGACTGTGGCAGCCGGCTGCAGGCCCTGCTGCGGGAAGAGGTGCAGGAGCACG  
CCGAG

AG**CGGACCG**ACCGGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG232607 representing NM\_001271441  
 Red=Cloning site Green=Tags(s)

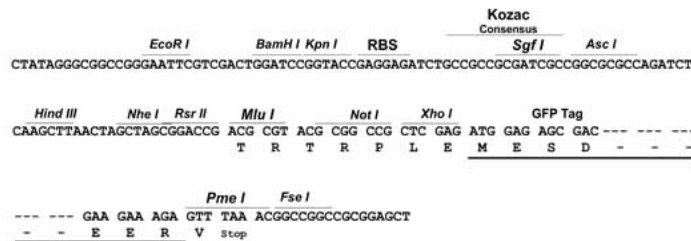
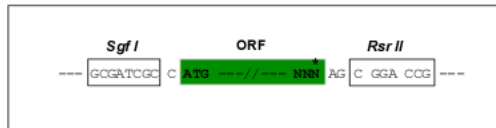
MKLTRKMLTRAKASELHSVRKLN CWGSR L TDISICQEMPSLEVI T LSVNSISTLEPVSRQRLSELYLR  
 RNRIPSLAELFY LKGLPRLRVLWLAENPCCG TSPHRYRMTVLR TLPRLQKLDNQAVTEEELSRALSEGEE  
 ITAAPERE GTGHGGPKL CCTLSSLSSAAETGRDPLDSEEEATGAQDERGLKPPSRGQF PSLSARDASSSH  
 RGRVSGGPLGAAAASAHCTHCTETVGREHGASQGPVGREHGASQGLEELCPRGSCVCGSVNAHTRVTRAP  
 HGA VLAPQPLL LSWSVCEGPGPCWAEGNRSHVEEVPHTRPQAGLLCSDSPSVPNVLTAILLLLRELD AEG  
 LEAVQQT VGSRLQALRGEEVQEHA E

SGP TRRRLE - GFP Tag - V

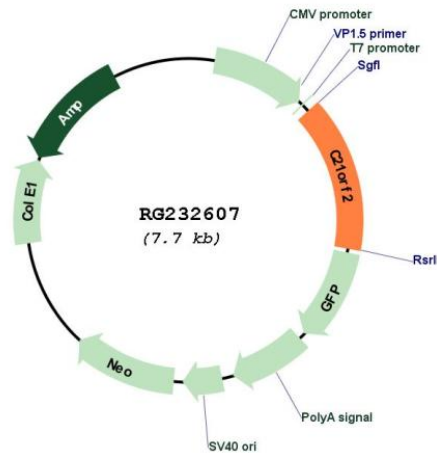
**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_001271441

|                               |  |
|-------------------------------|--|
| <b>ORF Size:</b>              | 1125 bp  |
| <b>OTI Disclaimer:</b>        | <p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p> |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.   |
| <b>Components:</b>            | 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).   |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>  |
| <b>RefSeq:</b>                | <a href="#">NM_001271441.2</a>   |
| <b>RefSeq Size:</b>           | 2611 bp  |
| <b>RefSeq ORF:</b>            | 1128 bp  |
| <b>Locus ID:</b>              | 755  |
| <b>UniProt ID:</b>            | <a href="#">O43822</a>   |
| <b>Cytogenetics:</b>          | 21q22.3  |
| <b>Gene Summary:</b>          | Four alternatively spliced transcript variants encoding four different isoforms have been found for this nuclear gene. All isoforms contain leucine-rich repeats. Three of these isoforms are mitochondrial proteins and one of them lacks the target peptide, so is not located in mitochondrion. This gene is down-regulated in Down syndrome (DS) brain, which may represent mitochondrial dysfunction in DS patients. [provided by RefSeq, Sep 2012]   |