

## Product datasheet for **RG204390**

### **C12orf4 (NM\_020374) Human Tagged ORF Clone**

#### **Product data:**

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Product Type:</b>             | Expression Plasmids     |
| <b>Tag:</b>                      | TurboGFP                |
| <b>Symbol:</b>                   | C12orf4                 |
| <b>Mammalian Cell Selection:</b> | Neomycin                |
| <b>Vector:</b>                   | pCMV6-AC-GFP (PS100010) |
| <b>E. coli Selection:</b>        | Ampicillin (100 ug/mL)  |



**ORF Nucleotide Sequence:** >RG204390 representing NM\_020374  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGAAGAAAAACAGAGAAAGATTCTGCAATAGAGAGAGAGAATTTGTATATAAATTTAAAGTAGGAAGTC  
 AGTGCTTAGAACTGAGAGTGCCACTCAAATTTCTGTTCAAGAGAATGCCAGTCATTTGCATGGACGTCT  
 GATGCTGCTGCACAGTTTACCGTGCTTTATAGAAAAAGACTTAAAAAGAAGCTCTGACTCAGTTTATAGAA  
 GAAGAATCCCTCAGCGATTATGATAGAGATGCTGAAGCATCCCTGGCAGCTGTGAAATCAGGTGAAGTAG  
 ATTTACATCAGCTGGCGAGTACATGGGCCAAAGCTTATGCTGAGACCAGTTAGAGCATGCAAGGCCTGA  
 AGAACCCAGCTGGGATGAAGATTTTGCAGATGTGTACCATGACTTAATTCATTCTCCTGCCTCTGAAACT  
 CTCTTAAATTTGGAACATAATTACTTTGTTAGTATCTCAGAACTGATTGGTGAAGAGATGTGGAGCTGA  
 AAAAATTACGAGAGAGACAAGGTATTGAAATGGAAAAAGTCATGCAGGAATTGGGAAATCACTGACAGA  
 TCAAGATGTAAATTCAGTGGCTGCTCAGCATTTTGAATCCAGCAAGACCTAGAAAAATAATGGTCAAT  
 GAATTAACAACAACTGCCATCCAAAAACAAGAGTATCAAGAAATGGGTAATAAAACTTCAACCAAGACC  
 TAAAAAACCCCAACAACAGCTCCCTTAGTGAGGAAATTAAGTTTCAGCCAAGTCAGTTCAGAGAATCTGT  
 AGAAGCAATTGGAAGGATTTATGAGGAACAGAGAAAGTTAGAAGAAAGTTTACCATTCACTTAGGAGCC  
 CAGTTGAAGACCATGCATAATTTGAGATTGCTGAGAGCAGATATGCTGGACTTCTGTAAGCATAAAAGAA  
 ATCATCGAAGTGGTGTGAAACTTCATCGGCTCCAAACAGCTCTGTCACTTTATTCTACATCTCTCTGTGG  
 CCTGTTTTACTAGTAGATAATCGAATTAATTCATATAGTGGTATTAAGAGAGATTTTGCCACAGTTTGC  
 CAAGAATGCACTGACTTCCATTTCCCCGAATTGAAGAGCAATTAGAAGTTGTCCAACAGGTGGTACTTT  
 ATGCTAGAACCCAGCGCAGGAGTAAATTGAAAGAAATCACTTGATTCTGGAACCAAAATGGAGGAAATGA  
 TGATAAGACTAAGAATGCTGAGAGGAACTTTTAAATGTTTTACCTGGGGAATTTTATATTACACGGCAT  
 TCTAATCTCTCAGAAATCCATGTTGCTTTCCATCTCTGTGTGGATGACCATGTGAAATCGGGAAACATCA  
 CTGCTCGTGATCTGCCATTATGGGACTCCGAATATACTCAAAGTTTGTGTACCCATGACATCACAAAC  
 AATAAGCATTCTCTCTTGTGCTGGTACATGATATGTCAGAGGAAATGACTATACCCTGGTGCTTAAGGAGA  
 GCGGAACTTGTGTTCAAGTGTGTCAAAGGTTTCATGATGGAATGGCTTCATGGGATGGAGGAATTTCTA  
 GGACAGTGCATTTCTAGTACCACAGAGTATTTCTGAAGAAATGTTTTATCAACTTAGTAACATGCTTCC  
 CCAGATCTTCCGAGTATCATCAACACTCACTCTGACATCCAAGCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG204390 representing NM\_020374  
 Red=Cloning site Green=Tags(s)

MKKNRERFCNREREFVYKFVGSQCLELRVPLKFPVQENASHLHGRLMLLHSLPCFIEKDLKEALTQFIE  
 EESLSDYDRDAEASLAAYKSGEVDLHQLASTWAKAYAETTLEHARPEEPSWDEDFADVYHDLIHSPASET  
 LLNLEHNYFVSISELIGERDVELKKLRERQGIEMKVMQELGKSLTDQDVNSLAAQHFEQQDLENKWSN  
 ELKQSTAIQKQEQEWIKLHQDLKNPNSSSLSEEIKVQPSQFRESVEAIGRIYEEQRKLEESFTIHLGA  
 QLKTMHNLRLLRADMLDFCKHKNHRSGVKLHRLQTALSLYSTSLCGLVLLVDNRINSYSGIKRDFATVC  
 QECTDFHFPRIEEQLEVQQVVLARTQRRSKLKESLDSGNQNGNDKTKNAERNYLNVLPGFYITRH  
 SNLSEIHVAFHLCVDDHVKSGNITARDPAIMGLRNILKVCCTHDITTIISIPLLLVDHMSEMTIPWCLRR  
 AELVFKCVKGFMEMASWDGGISRTVQFLVPQSISEEMFYQLSNMLPQIFRVSSLTLTLSKH

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

## Cloning Scheme:



**ACCN:** NM\_020374

**ORF Size:** 1656 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\\_020374.4](#)

**RefSeq Size:** 3830 bp

RefSeq ORF: 1659 bp

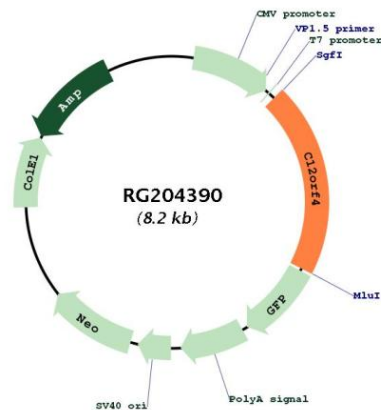
Locus ID: 57102

UniProt ID: [Q9NQ89](#)

Cytogenetics: 12p13.32

**Gene Summary:** This gene is highly conserved from nematodes to humans. In rat, the orthologous gene encodes a cytoplasmic protein that is involved in mast cell degranulation. The human gene has been implicated in autosomal recessive intellectual disability. [provided by RefSeq, Sep 2016]

### Product images:



Circular map for RG204390