

## Product datasheet for **RG216616**

### **ZDHC14 (NM\_153746) Human Tagged ORF Clone**

#### Product data:

|                           |                         |
|---------------------------|-------------------------|
| Product Type:             | Expression Plasmids     |
| Tag:                      | TurboGFP                |
| Symbol:                   | ZDHC14                  |
| Synonyms:                 | NEW1CP                  |
| Mammalian Cell Selection: | Neomycin                |
| Vector:                   | pCMV6-AC-GFP (PS100010) |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |



**ORF Nucleotide Sequence:** >RG216616 representing NM\_153746  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGCCTCCCGGCGGCGGCGGCCCATGAAAGACTGCGAGTACAGCCAGATCAGCACCCACAGCTCCTCCC  
 CCATGGAGTCGCCCCACAAGAAGAAGAAAATCGCGGCCCGGAGGAAATGGGAGGTGTTCCCGGGAAGAAA  
 CAAGTTCTTCTGTAACGGGAGGATCATGATGGCCCGGAGAGCGGCGTCTTCTACCTGACGCTCGTCCTC  
 ATCCTGGTCACTAGCGGACTCTTCTCGCCTTCGACTGTCCGTACCTGGCGGTGAAAATCACCCCTGCCA  
 TCCCTGCAGTCGCTGGCATCCTGTTCTTCTTTGTATGGGACCCGTGCTCCGCACAGCTTCAGCGACCC  
 CGGAGTCCTCCACGAGCCACGCTGATGAAGCCGCCGATCTGGAAGGCAAAATAGATATCGAAACGGC  
 ACCAGTTCAGGGGGTACCGCCCGCTCCAGAACCAAGAAGTCATCATCAATGGCCAGACCGTGAAC  
 TTAATACTGTTTACCTGCAAGATTTCCGGCCCCCTCGCGCTCCATTGCAGCCTTTGTATAACTG  
 CGTAGAACGGTTTGATCACCCTGTCCCTGGTAGGCAACTGTGTGGGAAAAAGAACTACAGATTTTTT  
 TATATGTTTATTTATCTGTCTTTCTGACAGTCTTTATATTTGCATTTCGTTATACCCACGTCATT  
 TTCGTTACAGCAACAGGATTCTAAATGCCCTTAAGGACAGTCTGCAAGCGTCTCGAGGCTGTGGT  
 GTGCTTCTTCTGTCTGGTCCATCGTTGGCCTCTCAGGATTCACACCTACTTGATCAGCTCCAACCAG  
 ACAACAAATGAGGACATTAAAGGATCCTGGTCAATAAAAGAGGTAAAGAAAATTACAATCCCTACAGCT  
 ACGGAAATATCTTTACCAACTGCTGTGTTGCCCTGTGTGGGCCCATCTACCAAGCCTGATCGACAGAAG  
 AGGGTACATCCAGCCGACACGCCGAGCCAGCAGCACCCCTCCAATGGCATCACCATGTACGGGGCCACG  
 CAGTCACAGAGTGACATGGCTGCAGCCACGCCCTGCTGCAGAGCGAGCCAGCCTCACCAGCGACGAGC  
 TGCACCTGCCCGGAAGCCTGGCCTGGCACGCCCTGCGCCAGCCTCACACTGGGCCGCCACACCGCC  
 CGCCTCCATGCCAACCTCGCCGAGGCCACGCTCGCGGACGTGATGCCCGGAAAGATGAGCACATGGGC  
 CACCAGTTCCTGACGCCGATGAGGCGCCCTCGCCCCCAGGCTACTGGCGGCGGGCAGCCCCCTGGCGC  
 ACAGCCGACCATGCACGTGCTGGGCTGGCCAGCCAGGACTCCCTGCATGAGGACTCTGTGCGCGGCCT  
 GGTGAAGCTCAGCTCCGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG216616 representing NM\_153746  
 Red=Cloning site Green=Tags(s)

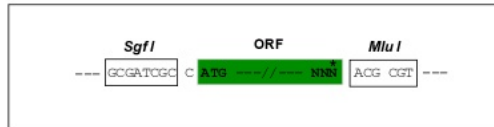
MPPGGGGPMKDCEYSQISTHSSSPMESPHKKKIAARRKWEVFPGRNKKFCNGRIMMARQTGVFYLTLVL  
 ILVTSGLFFAFDCPYLAVKITPAIPAVAGILFFVMTLLRTSFDPGVLPRATPDEAADLERQIDIANG  
 TSSGGYRPPRTKEVIINGQTVKLKYCFTCKIFRPPRASHCSLDCNVERFDHHCWPWVGNCVGRNRYRFF  
 YMFILSLSFLTIVFIFAFVITHVILRSQQTGFLNALKDSPASVLEAVVCFVSVWSIVGLSGFHTYLISNQ  
 TTNEDIKGSWSNKRGENYNPYSYGNIFTNCCVALCGPISPSLIDRRGYIQPDTPQPAAPSNGITMYGAT  
 QSQSDMAAATPLLQSEPSLTDELHLPKPGGLGTPCASLTLGPPTPPASMPNLAEATLADVMPRKDEHMG  
 HQFLTPDEAPSPRLLAAGSPLAHSRTMHVLGLASQDSLHEDSVRGLVKLSSV

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

## Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI  
 CTATAGGGCGGCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT  
 HindIII NheI RsrII MluI NotI XhoI GFP Tag  
 CAAGCTTAAGTCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---  
 T R T R P L E M E S D - - -  
 --- GAA GAA AGA GTT TAA ACGCCGGCCGCGGAGCT  
 - - E E R V Stop

**ACCN:** NM\_153746

**ORF Size:** 1419 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:**

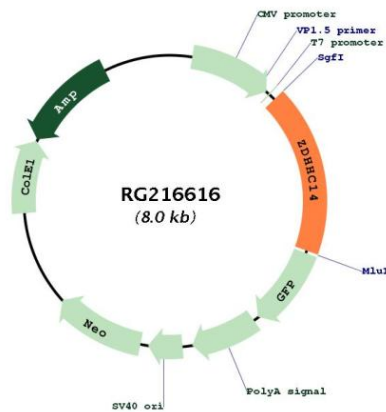
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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\\_153746.2](#)

|                   |                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RefSeq Size:      | 2774 bp                                                                                                                                                                                                                                                                                                                                                                                        |
| RefSeq ORF:       | 1422 bp                                                                                                                                                                                                                                                                                                                                                                                        |
| Locus ID:         | 79683                                                                                                                                                                                                                                                                                                                                                                                          |
| UniProt ID:       | <a href="#">Q8IZN3</a>                                                                                                                                                                                                                                                                                                                                                                         |
| Cytogenetics:     | 6q25.3                                                                                                                                                                                                                                                                                                                                                                                         |
| Domains:          | zf-DHHC                                                                                                                                                                                                                                                                                                                                                                                        |
| Protein Families: | Transmembrane                                                                                                                                                                                                                                                                                                                                                                                  |
| Gene Summary:     | Palmitoyltransferase that could catalyze the addition of palmitate onto various protein substrates. May have a palmitoyltransferase activity toward the beta-2 adrenergic receptor/ADRB2 and thereby regulate G protein-coupled receptor signaling (PubMed:27481942). May play a role in cell differentiation and apoptosis (PubMed:21151021, PubMed:24407904).[UniProtKB/Swiss-Prot Function] |

### Product images:



Circular map for RG216616