

## Product datasheet for **RG203758**

### Retinal protein 4 (UNC119) (NM\_005148) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Retinal protein 4 (UNC119) (NM_005148) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Retinal protein 4
Synonyms:	HRG4; IMD13; POC7; POC7A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203758 representing NM_005148 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGGTGAAGAAGGGCGCGGTGGGGCCGGGACGGCGACGGAGTCCGCTCCGGGGCCCTCGGGCCAGA  
GCGTGGCCCCCATACCACAGCCGCTGCGGAATCCGAATCTGGGTCCGAGTCGGAGCCGGACGCAGGCC  
AGGGCCAGGCCGGGGCCGCTGCAGAGGAAGCAGCCGATCGGGCCGGAGGACGTGCTGGGGCTGCAGCGG  
ATCACCAGTACTACCTCTGCTCCCTGAGGAGAATATCTACAAGATCGACTTTGTGAGTTTAAGATTC  
GGGACATGGACTCAGGCACTGTCTCTTTGAAATCAAGAAGCCCCAGTCTCAGAACGGTTGCCCATCAA  
CCGGCCGGGACCTGGACCCCAATGCTGGGCGCTTTGTCCGCTACCGATTACGCCTGCCTTCTCCGCTG  
AGGCAGGTGGGAGCCACGGTGGAGTTCACAGTGGGAGACAAGCCTGTCAACAACCTCCGCATGATCGAGA  
GGCACTACTTCCGCAACCAGCTACTCAAAGCTTCGACTTCCACTTTGGCTTCTGCATCCCCAGCAGCAA  
GAACACCTGCGAGCACATTTACGACTTCCCCCTCTCTCCGAGGAGCTGATCAGCGAGATGATCCGCCAC  
CCGATGAGACCCAGTCTGACAGCTTCTACTTCGTGGATGACCGGCTGGTATGCACAATAAAGCAGACT  
ATTCTACAGCGGGACACCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG203758 representing NM\_005148  
 Red=Cloning site Green=Tags(s)

MKVKKGGGGAGTATESAPGPSGQSVAPIQPAPAESESGSESEPDAGPGPRPGPLQRKQPIGPEDVLGLQR  
 ITGDYLCSP EENIYKIDFVRFKIRDMSGTVLFEIKKPPVSERLPINRRDLDPNAGR FVRYQFTPAFLRL  
 RQVGATVEFTVGDKPVNNFRMIERHYFRNQLLKSFDHFGFCIPSSKNTCEHIYDFPPLSEELISEMIRH  
 PYETQSDSFYFVDDRLVMH NKADYSYSGTP

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005148

**ORF Size:** 720 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\\_005148.4](#)

**RefSeq Size:** 1395 bp

**RefSeq ORF:** 723 bp

**Locus ID:** 9094

**UniProt ID:** [Q13432](#)

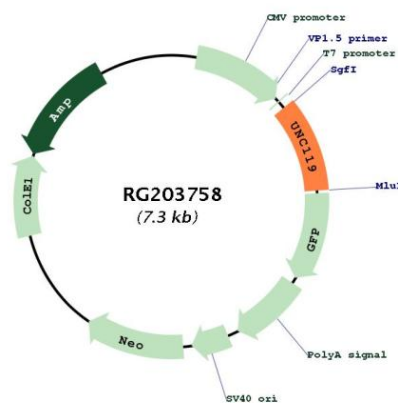
**Cytogenetics:** 17q11.2

**Domains:** GMP\_PDE\_delta

**Protein Families:** Druggable Genome, Stem cell - Pluripotency

**Gene Summary:** This gene is specifically expressed in the photoreceptors in the retina. The encoded product shares strong homology with the *C. elegans* unc119 protein and it can functionally complement the *C. elegans* unc119 mutation. It has been localized to the photoreceptor synapses in the outer plexiform layer of the retina, and suggested to play a role in the mechanism of photoreceptor neurotransmitter release through the synaptic vesicle cycle. Two transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG203758