

Product datasheet for **RC203758**

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:	Myc-DDK
Symbol:	Retinal protein 4
Synonyms:	HRG4; IMD13; POC7; POC7A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203758 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGGTGAAGAAGGGCGGGTGGGGCCGGGACGGCGACGGAGTCCGCTCCGGGGCCCTCGGGCCAGA
GCGTGGCCCCATACCACAGCCGCTGCGGAATCCGAATCTGGGTCCGAGTCGGAGCCGGACGCAGGCC
AGGGCCAGGCCGGGGCCGCTGCAGAGGAAGCAGCCGATCGGGCCGGAGGACGTGCTGGGGCTGCAGCGG
ATCACCAGTACTACCTCTGCTCCCTGAGGAGAATATCTACAAGATCGACTTTGTGAGTTTAAGATTC
GGGACATGGACTCAGGACTGTCTCTTTGAAATCAAGAAGCCCCAGTCTCAGAACGGTTGCCCATCAA
CCGGCCGGGACCTGGACCCCAATGCTGGGCGCTTTGTCCGCTACCGTTCACGCCTGCCTTCTCCGCTG
AGGCAGGTGGGAGCCACGGTGGAGTTCACAGTGGGAGACAAGCCTGTCAACAACCTCCGCATGATCGAGA
GGCACTACTTCCGCAACCAGCTACTCAAAAGCTTCGACTTCCACTTTGGCTTCTGCATCCCCAGCAGCAA
GAACACCTGCGAGCACATTTACGACTTCCCCCTCTCTCCGAGGAGCTGATCAGCGAGATGATCCGCCAC
CCGTATGAGACCCAGTCTGACAGCTTCTACTTCGTGGATGACCGGCTGGTATGCACAATAAAGCAGACT
ATTCCTACAGCGGGACACCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203758 protein sequence
 Red=Cloning site Green=Tags(s)

MKVKKGGGGAGTATESAPGPSGQSVAPIQPAPAESESGSESEPDAGGPRPGPLQRKQPIGPEDVLGLQR
 ITGDYLCSPENIYKIDFVRFKIRDMSGTVLFEIKKPPVSERLPINRRDLDPNAGRFRVRYQFTPAFLRL
 RQVGATVEFTVGDKPVNNFRMIERHYFRNQLLKSFDHFHGFICIPSSKNTCEHIYDFPPLSEELISEMIRH
 PYETQSDSFYFVDDRLVMHMKADYSYSGTP

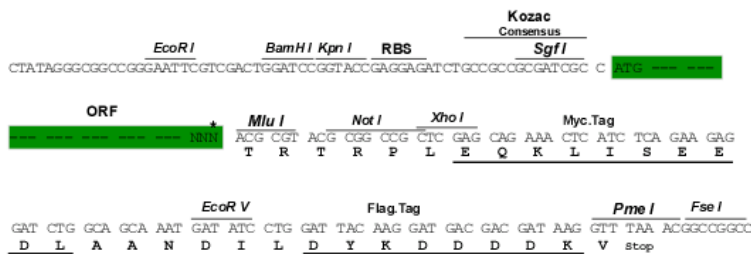
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6324_h10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

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: 1398 bp

RefSeq ORF: 723 bp

Locus ID: 9094

UniProt ID: [Q13432](#)

Cytogenetics: 17q11.2

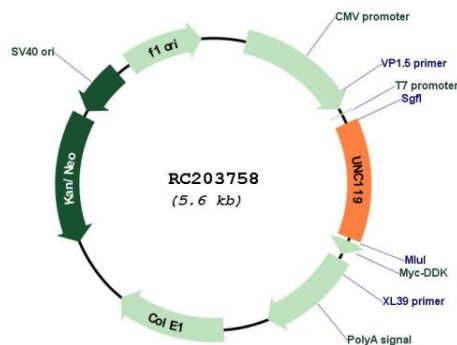
Domains: GMP_PDE_delta

Protein Families: Druggable Genome, Stem cell - Pluripotency

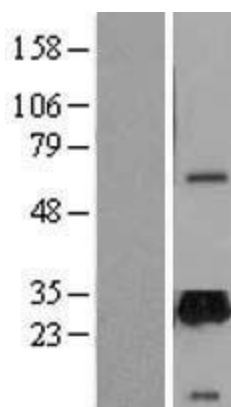
MW: 27 kDa

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]

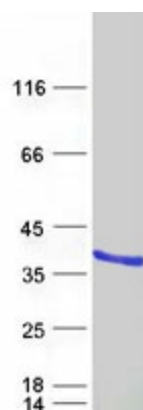
Product images:



Circular map for RC203758



Western blot validation of overexpression lysate (Cat# [LY417490]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203758 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UNC119 protein (Cat# [TP303758]). The protein was produced from HEK293T cells transfected with UNC119 cDNA clone (Cat# RC203758) using MegaTran 2.0 (Cat# [TT210002]).