

Product datasheet for **RG214215**

OPHN1 (NM_002547) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OPHN1 (NM_002547) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	OPHN1
Synonyms:	ARHGAP41; MRX60; OPN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG214215 representing NM_002547
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTACATCCCCGCTGGAGTTCAGCGACTGCTACCTGGACAGCCCCGATTTCCGCGAGAGGCTCAAGT
 GTTATGAGCAGGAAGTGGAGAGGACCAACAAATTCATCAAGACGTAATCAAAGACGGCAACGCGCTTAT
 CAGCGCTATGAGAAATTATTCTTCTGCTGTTTCAGAAATTTCCAGACGCTGCAGTCATTTCAAGTTGAT
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 AAGGCAGACTTCTGGAGATGAAAGT

ACGCGTACGCGGCGGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG214215 representing NM_002547
 Red=Cloning site Green=Tags(s)

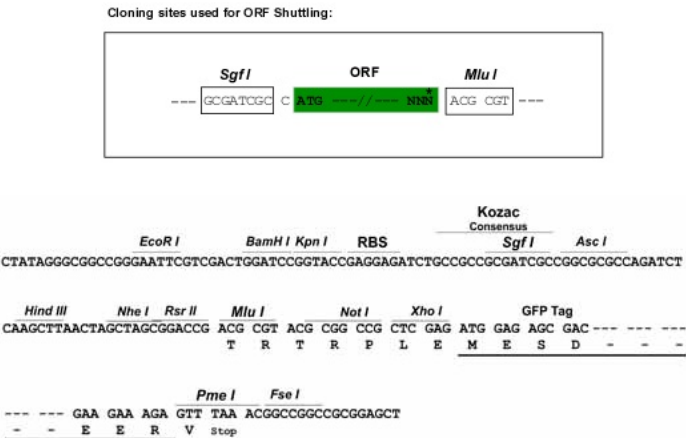
MGHPPLEFSDCYLDSPDFRERLKCQEELERTNKFIDVIKDGNALISAMRNYSSAVQKFSQTLQSFQFD
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 LSEANRRLWMEAMDGKEPIYHSPITKQEMELNEVGKFKVRKCINIIETKGIKTEGLYRTVGSNIQVQKL
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 KPPQHPKLPPIQRSGETDPGRKSPSRPILDGKLEPCPEVDVGKLVSRQLDGGTKITPKATNGPMPSGPTK
 TPSFHIKRPAPRPLAHHKEGDADSFskVRPPGEKPTIIRPPVRPPDPPCRAATPQKPEPKPDIVAGNAGE
 ITSSVVASRTRFFETASRKTGSSQGRLPGDES

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:	NM_002547
ORF Size:	2406 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_002547.3](#)

RefSeq Size: 7350 bp

RefSeq ORF: 2409 bp

Locus ID: 4983

UniProt ID: [O60890](#)

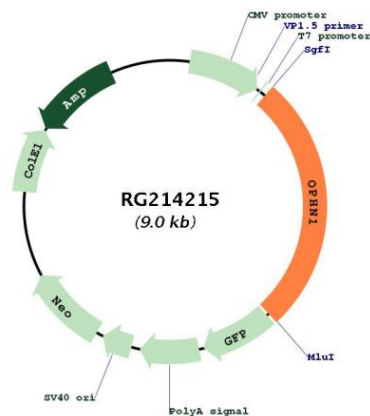
Cytogenetics: Xq12

Domains: RhoGAP, PH

Protein Families: Druggable Genome

Gene Summary: This gene encodes a Rho-GTPase-activating protein that promotes GTP hydrolysis of Rho subfamily members. Rho proteins are important mediators of intracellular signal transduction, which affects cell migration and cell morphogenesis. Mutations in this gene are responsible for OPHN1-related X-linked cognitive disability with cerebellar hypoplasia and distinctive facial dysmorphism. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG214215