

## Product datasheet for **RG204079**

### AIPL1 (NM\_014336) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AIPL1 (NM_014336) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AIPL1
Synonyms:	AIPL2; LCA4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204079 representing NM_014336 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATGCCGCTCTGCTCCTGAACGTGGAAGGGGTCAAGAAAACCATTCTGCACGGGGCACGGGCGAGC  
TCCCAAATTCATCACCGGATCCCGAGTGATCTTTCAATTCGACACCATGAAATGTGATGAGGAGCGGAC  
AGTCATTGACGACAGTCGGCAGGTGGGCCAGCCATGCACATCATCGAAACATGTTCAAGCTCGAG  
GTCTGGGAGATCCTGCTTACCTCCATGCGGGTGCACGAGGTGGCCGAGTCTGGTGCACACCATCCACA  
CGGGGTCTACCCATCCTGTCCCGAGCCTGAGGCAGATGGCCAGGGCAAGGACCCACAGAGTGGCA  
CGTGACACAGTGCGGGTGGCCAACATGTTCCGCTACCACACGCTGGGCTACGAGGACCTGGACGAGCTG  
CAGAAGGAGCCTCAGCCTCTGGTCTTTGTGATCGAGCTGCTGCAGTTGATGCCCGAGTGATTACCAGA  
GGGAGACCTGGAACCTGAGCAATCATGAGAAGATGAAGGCGGTGCCCGTCTCCACGGAGAGGAAATCG  
GCTCTTCAAGCTGGGCCGCTACGAGGAGGCCTCTTCAAGTACCAGGAGGCCATCATCTGCCTAAGGAAC  
CTGCAGACCAAGGAGAAGCCGTGGGAGGTGCAGTGGTGAAGCTGGAGAAGATGATCAACTCTGATCC  
TCAACTACTGCCAGTGCCTGTGAAGAAGGAGGAGTACTATGAGGTGCTGGAGCACACAGTGATATTCT  
CCGGCACCAAGGAGCATCGTGAAGGCTACTACGTGCGTGCCCGGGCTCACGCAGAGGTGTGGAATGAG  
GCCGAGGCAAGGCGGACCTCCAGAAAGTGTGGAGCTGGAGCCGTCATGCAGAAGGCGGTGCGCAGGG  
AGCTGAGGCTGTGGAGAACCAGCATGGCCGAGAAGCAGGAGGAGGAGCGGCTGCGCTGCCGGAACATGCT  
GAGCCAGGGTGCACGCAGCCTCCCGCAGAGCCACCCACAGAGCCACCCGACAGTCATCCACAGAGCCA  
CCTGCAGAGCCACCCACAGCACCATCTGCAGAGCTGTCCGAGGGCCCCCTGCAGAGCCAGCCACAGAGC  
CACCCCGTCCCCAGGGCACTCGCTGCAGCAC

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG204079 representing NM\_014336  
Red=Cloning site Green=Tags(s)

MDAALLLNVEGVKKTILHGGTGELPNFITGSRVIFHFRTMKCDEERTVIDDSRQVGQPMHIIIGNMFKLE  
 VWEILLTSMRVHEVAEFWCDTIHTGVYPILSRSLRQMAQKDPTEWHVHTCGLANMFAYHTLGYEDLDEL  
 QKEPQPLVFVIELLQVDAPSDYQRETWNLSNHEKMKAVPVLHGEGRNLFKLGRYEEASSKYQEAIICLRN  
 LQTKKEPWEVQWLKLEKMINTLILNYCQCLLKKEEYVEVLEHTSDILRHHPGIVKAYVVRARAHAEVWNE  
 AEAKADLQKVLELEPSMQKAVRRELRLLENRMAEKQEEERLRNMLSQGATQPPAEPTEPPAQSSTEP  
 PAEPPTAPSAELSAGPPAEPATEPPPSPGHSLQH

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_014336

**ORF Size:** 1152 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\\_014336.3](#), [NP\\_055151.3](#)

**RefSeq Size:** 2981 bp

**RefSeq ORF:** 1155 bp

**Locus ID:** 23746

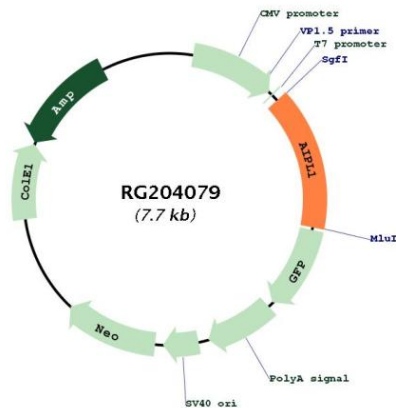
**UniProt ID:** [Q9NZN9](#)

**Cytogenetics:** 17p13.2

**Protein Families:** Druggable Genome

**Gene Summary:** Leber congenital amaurosis (LCA) is the most severe inherited retinopathy with the earliest age of onset and accounts for at least 5% of all inherited retinal diseases. Affected individuals are diagnosed at birth or in the first few months of life with nystagmus, severely impaired vision or blindness and an abnormal or flat electroretinogram. The photoreceptor/pineal-expressed gene, AIPL1, encoding aryl-hydrocarbon interacting protein-like 1, is located within the LCA4 candidate region. The encoded protein contains three tetratricopeptide motifs, consistent with chaperone or nuclear transport activity. Mutations in this gene may cause approximately 20% of recessive LCA. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

### Product images:



Circular map for RG204079