

## Product datasheet for **RG237012**

### AIPL1 (NM\_001285403) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AIPL1 (NM_001285403) 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:	>RG237012 representing NM_001285403. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGATGCCGCTCTGCTCCTGAACGTGGAAGGGGTCAAGAAAACCATTCTGCACGGGGGCACGGGCGAG
CTCCCAAACCTTCATCACCGGATCCCGAGTGATCTTTCAATTCGACCATGAAATGTGATGAGGAGCGG
ACAGTCATTGACGACAGTCGGCAGGTGGCCAGCCCATGCACATCATCATCGAAACATGTTCAAGCTC
GAGGTCTGGGAGATCCTGCTTACCTCCATGCGGGTGCACGAGGTGGCCGAGTTCTGGTGCGACCCATC
CACACGGGGTCTACCCATCCTATCCCGAGCCTGAGGCAGATGGCCAGGGCAAGGACCCACAGAG
TGGCACGTGCACACGTGCGGGCTGGCCAACATGTTGCGCTACCACACGCTGGGCTACGAGGACCTGGAC
GAGCTGCAGAAGGAGCCTCAGCCTCTGGTCTTTGTGATCGAGCTGCTGCAGAGGGAGACCTGGAACCTG
AGCAATCATGAGAAGATGAAGGCGGTGCCCGTCTCCACGGAGAGGAAAATCGGCTCTTCAAGCTGGGC
CGCTACGAGGAGGCTCTTCCAAGTACCAGGAGGCCATCATCTGCCTAAGGAACCTGCAGACCAAGGAG
AAGCCATGGGAGGTGCAGTGGCTGAAGCTGGAGAAGATGATCAATACTCTGATCCTCAACTACTGCCAG
TGCCTGCTGAAGAAGGAGGAGTACTATGAGGTGCTGGAGCACACCAGTGATATTCTCCGGCACCACCCA
GGTGCCGGGGCTGCAGGGGCGGACAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG237012  
 Blue=ORF Red=Cloning site Green=Tag(s)

MDAALLLNVEGVKKTILHGGTGELPNFITGSRVIFHFRTMKCDEERTVIDDSRQVGQPMHIIIGNMFKL  
 EVWEILLTSMRVHEVAEFWCDTIHTGVYPILSRSLRQMAQKDPTEWHVHTCGLANMFAYHTLGYEDLD  
 ELQKEPQPLVFVIELLQRETWNLSNHEKMKAVPVLHGEGRNLFKLGRYEEASSKYQEAIICLRNLQTK  
 KPWEVQWLKLEKMINTLILNYCQLLKKEEYVELEHTSDILRHHPGARGCRGGQ  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001285403

**ORF Size:** 786 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).

**RefSeq:** [NM\\_001285403.3](#)

**RefSeq Size:** 1418 bp

**RefSeq ORF:** 789 bp

Locus ID: 23746

UniProt ID: [Q9NZN9](#)

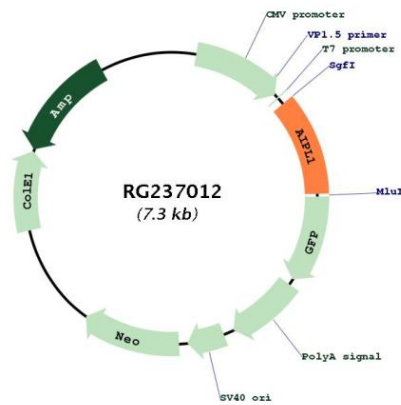
Cytogenetics: 17p13.2

Protein Families: Druggable Genome

MW: 30.9 kDa

**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 RG237012