

Product datasheet for **MG201738**

Arl6 (NM_019665) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Arl6 (NM_019665) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Arl6
Synonyms: 1110018H24Rik; 2210411E14Rik; BBS3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201738 representing NM_019665
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTCTTGCTGGACAGACTTTTCAGGTTTGCTTGGCCTGAAGAAGAAGGAGGTTTCATGTTCTGTGCCTGG
 GGCTGGATAACAGTGGGAAAACCACAATCATTAAACAGCTGAAGCCTTCCAACGCTCAATCTCAAGATAT
 AGTTCCAACCATAGGATTTAGCATAGAGAAATCAAGTCTCCAGTTTGTCTTTTACAGTGTGGACATG
 TCAGGTCAGGAAGGTACAGGAATCTCTGGGAACACTATTATAAAGATGGACAAGCCATTATTTTGTCA
 TTGATAGTAGTGATAAGTTAAGAATGGTTGTGGCCAAAGAAGAGCTTGATACCCTTCTGAATCACCCAGA
 TATTAAGCACCGTCGAATCCAATCTTGTCTTTGCAAACAAAATGGATCTTAGAGACTCAGTGACCTCT
 GTGAAGGTGTCTCAGTTGCTGTGCTTAGAGAGCATTAAAGACAAGCCGTGGCATATTTGTCTAGTGACG
 CCATCAAAGGAGAAGGCCTGCAGGAAGCGTGGACTGGCTCCAAGATCAGATCCAAGCTGTGAAGACG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201738 representing NM_019665
 Red=Cloning site Green=Tags(s)

MVLLDRLSGLLGLKKKEVHVLCLGLDNSGKTTIINKLKPSNAQSQDIVPTIGFSIEKFKSSSLSFTVFD
 SGQGRYRNLWEHYKDGQAIFVIDSSDKLRMVVAKEELDTLLNHPDIKHRRIPILFFANKMDLRDSVTS
 VKVSQLLCLESIKDKPWHICASDAIKGEGLQEGVDWLQDQIQAVKT

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

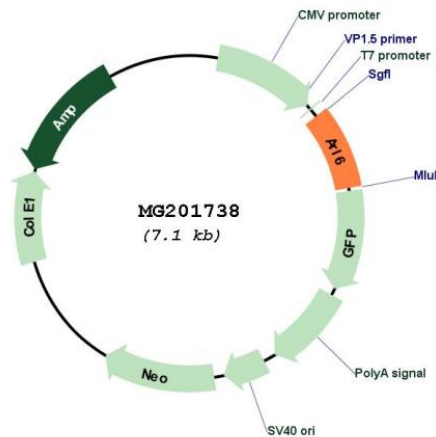


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Cloning Scheme:



Plasmid Map:



ACCN: NM_019665

ORF Size: 558 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:	<ol style="list-style-type: none">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:	<u>NM_019665.2</u> , <u>NP_062639.2</u>
RefSeq Size:	1326 bp
RefSeq ORF:	561 bp
Locus ID:	56297
UniProt ID:	<u>O88848</u>
Cytogenetics:	16 C1.3
Gene Summary:	Involved in membrane protein trafficking at the base of the ciliary organelle (By similarity). Mediates recruitment onto plasma membrane of the BBSome complex which would constitute a coat complex required for sorting of specific membrane proteins to the primary cilia (By similarity). Together with BBS1, is necessary for correct trafficking of PKD1 to primary cilia (PubMed:24939912). Together with the BBSome complex and LTZL1, controls SMO ciliary trafficking and contributes to the sonic hedgehog (SHH) pathway regulation (By similarity). May regulate cilia assembly and disassembly and subsequent ciliary signaling events such as the Wnt signaling cascade (By similarity). Isoform 2 may be required for proper retinal function and organization (PubMed:20333246).[UniProtKB/Swiss-Prot Function]