

Product datasheet for RC202698

ARL 1 (ARL1) (NM_001177) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ARL 1 (ARL1) (NM_001177) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ARL 1
Synonyms: ARFL1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202698 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTGGCTTTTTCTCAAGTATATTTTCCAGTCTGTTTGGAACTCGGGAAATGAGAATTTAATTTTGG
 GATTAGATGGAGCAGGAAAAACCACAATTTGTACAGATTACAAGTGGGAGAAGTTGTTACTACTATACC
 TACCATTGGATTAATGTAGAGACGGTGACGTACAAAAACCTTAAATCCAAGTCTGGGATTTAGGAGGA
 CAGACAAGTATCAGGCCATACTGGAGATGTTACTATTCAAACACAGATGCAGTCATTTATGTAGTAGACA
 GTTGTGACCGAGACCGAATTGGCATTTCCAAATCAGAGTTAGTTGCCATGTTGGAGGAAGAAGAGCTGAG
 AAAAGCCATTTTAGTGGTGTTCGAAATAAACAGGACATGGAACAGGCCATGACTTCCTCAGAGATGGCA
 AATTCACTTGGGTTACCTGCCTTGAAGGACCGAAAATGGCAGATATTCAAACGTCAGCAACCAAAGGCA
 CCGGCCTTGATGAGGCAATGGAATGTTAGTTGAAACATTA AAAAGCAGACAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202698 protein sequence
 Red=Cloning site Green=Tags(s)

MGGFFSSIFSSLFGTREMRLILGLDGAGKTTILYRLQVGEVVTIPIGPNVETVYKNLKFQVWDLGG
 QTSIRPYWRCYYSNTDAVIYVVDSCDRDRIGISKSELVAMLEEEELRKAILLVVFANKQDMEQAMTSSEMA
 NSLGLPALKDRKWQIFKTSATKGTGLDEAMEWL VETLKSQ

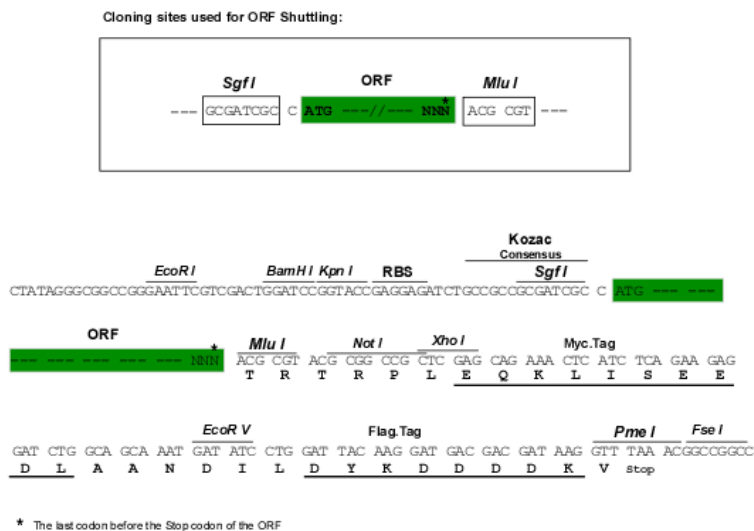
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6416_f06.zip



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001177

ORF Size: 543 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_001177.6](#)

RefSeq Size: 3253 bp

RefSeq ORF: 546 bp

Locus ID: 400

UniProt ID: [P40616](#)

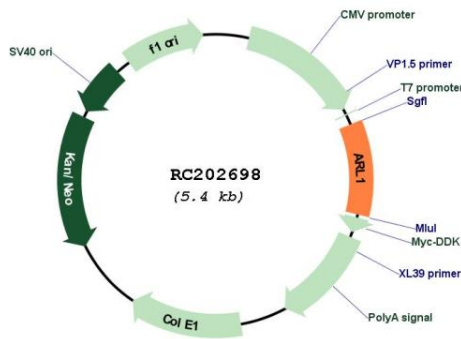
Cytogenetics: 12q23.2

Domains: RAB, SAR, ARF, arf

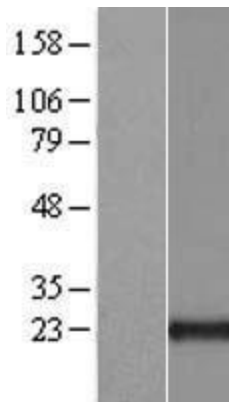
MW: 20.4 kDa

Gene Summary: The protein encoded by this gene belongs to the ARL (ADP-ribosylation factor-like) family of proteins, which are structurally related to ADP-ribosylation factors (ARFs). ARFs, described as activators of cholera toxin (CT) ADP-ribosyltransferase activity, regulate intracellular vesicular membrane trafficking, and stimulate a phospholipase D (PLD) isoform. Although, ARL proteins were initially thought not to activate CT or PLD, later work showed that they are weak stimulators of PLD and CT in a phospholipid dependent manner. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2014]

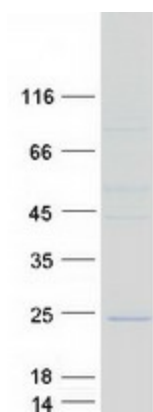
Product images:



Circular map for RC202698



Western blot validation of overexpression lysate (Cat# [LY420086]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202698 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ARL1 protein (Cat# [TP302698]). The protein was produced from HEK293T cells transfected with ARL1 cDNA clone (Cat# RC202698) using MegaTran 2.0 (Cat# [TT210002]).