

## Product datasheet for RR204316L4

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OriGene Technologies, Inc.

## Arhgdia (NM\_001007005) Rat Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Arhgdia (NM\_001007005) Rat Tagged Lenti ORF Clone

Tag:mGFPSymbol:ArhgdiaSynonyms:Bles01

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RR204316).

Sequence:

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM\_001007005

ORF Size: 612 bp

## Arhgdia (NM\_001007005) Rat Tagged Lenti ORF Clone - RR204316L4

**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: <u>NM 001007005.1</u>, <u>NP 001007006.1</u>

 RefSeq Size:
 1963 bp

 RefSeq ORF:
 615 bp

 Locus ID:
 360678

 UniProt ID:
 Q5XI73

 Cytogenetics:
 10q32.3

**Gene Summary:** Controls Rho proteins homeostasis. Regulates the GDP/GTP exchange reaction of the Rho

proteins by inhibiting the dissociation of GDP from them, and the subsequent binding of GTP to them. Retains Rho proteins such as CDC42, RAC1 and RHOA in an inactive cytosolic pool, regulating their stability and protecting them from degradation. Actively involved in the recycling and distribution of activated Rho GTPases in the cell, mediates extraction from membranes of both inactive and activated molecules due its exceptionally high affinity for prenylated forms. Through the modulation of Rho proteins, may play a role in cell motility regulation. In glioma cells, inhibits cell migration and invasion by mediating the signals of SEMA5A and PLXNB3 that lead to inactivation of RAC1.[UniProtKB/Swiss-Prot Function]