

Product datasheet for **RG203496**

D4 (ARHGDIB) (NM_001175) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: D4 (ARHGDIB) (NM_001175) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: D4
Synonyms: D4; GDIA2; GDID4; Ly-GDI; LYGDI; RAP1GN1; RhoGDI2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG203496 representing NM_001175
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACTGAAAAAGCCCCAGAGCCACATGTGGAGGAGGATGACGATGATGAGCTGGACAGCAAGCTCAATT
 ATAAGCCTCCACCACAGAAGTCCCTGAAAGAGCTGCAGGAAATGGACAAAGATGATGAGAGTCTAATTAA
 GTACAAGAAAACGCTGCTGGGAGATGGTCTGTGGTGACAGATCCGAAAGCCCCCAATGTCGTTGTCACC
 CGGCTCACCTGGTTTGTGAGAGTGCCCGGGACCAATCACCATGGACCTTACTGGAGATCTGGAAGCCC
 TCAAAAAGGAAACCATTGTGTTAAAGGAAGTTCTGAATATAGAGTCAAATTCACCTCAAAGTGAACAG
 GGATATTGTGTCAGGCCTGAAATACGTTACGACACCTACAGGACTGGGGTGAAAGTGGATAAAGCAACA
 TTTATGGTTGGCAGCTATGGACCTCGGCCTGAGGAGTATGAGTTCCTCACTCCAGTTGAGGAGGCTCCCA
 AGGGCATGCTGGCCCGAGGCACGTACCACAACAAGTCCTTCTTACCGACGATGACAAGCAAGACCACCT
 CAGCTGGGAGTGAACCTGTCGATTAAGAAGGAGTGGACAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG203496 representing NM_001175
 Red=Cloning site Green=Tags(s)

MTEKAPEPHVEEDDDDELDSKLNYPKPPQKSLKELQEMDKDESILIKYKKTLLGDGPVVTDPKAPNVVVT
 RLTLVCESAPGPITMDLTGDLALKKETIVLKEGSEYRVKIHFKVNRDIVSGLKYVQHTYRTGVKVDKAT
 FMVGSYGPREEYEFLTPVEEAPKGMARGTYHNKSFFTDDDKQDHLSEWNLSIKKEWTE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_001175

ORF Size: 603 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

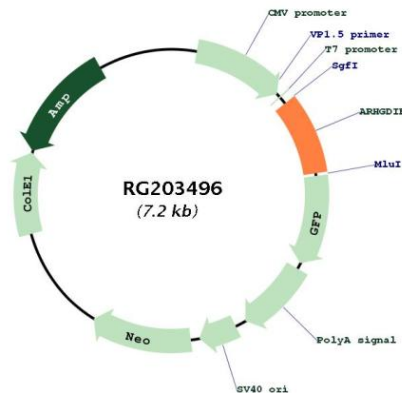
Reconstitution Method:

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_001175.2](#)

RefSeq Size:	1216 bp
RefSeq ORF:	606 bp
Locus ID:	397
UniProt ID:	P52566
Cytogenetics:	12p12.3
Domains:	Rho_GDI
Protein Families:	Druggable Genome
Protein Pathways:	Neurotrophin signaling pathway
Gene Summary:	Members of the Rho (or ARH) protein family (see MIM 165390) and other Ras-related small GTP-binding proteins (see MIM 179520) are involved in diverse cellular events, including cell signaling, proliferation, cytoskeletal organization, and secretion. The GTP-binding proteins are active only in the GTP-bound state. At least 3 classes of proteins tightly regulate cycling between the GTP-bound and GDP-bound states: GTPase-activating proteins (GAPs), guanine nucleotide-releasing factors (GRFs), and GDP-dissociation inhibitors (GDIs). The GDIs, including ARHGDIB, decrease the rate of GDP dissociation from Ras-like GTPases (summary by Scherle et al., 1993 [PubMed 8356058]).[supplied by OMIM, Dec 2010]

Product images:



Circular map for RG203496