

Product datasheet for **RG226350**

p114RhoGEF (ARHGEF18) (NM_001130955) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: p114RhoGEF (ARHGEF18) (NM_001130955) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ARHGEF18
Synonyms: P114-RhoGEF; p114RhoGEF; RP78; SA-RhoGEF
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG226350 representing NM_001130955
Red=Cloning site Blue=ORF Green=Tags(s)

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GACATGCTTCAGCGGCAGCTCCACCTGGAGGGCATGCTATGCTGGAAGACCACATCAGGGCGCTTAAAG
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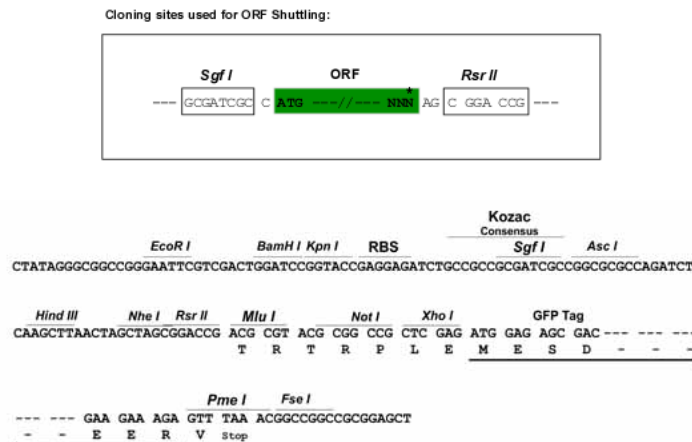
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Protein Sequence: >RG226350 representing NM_001130955
 Red=Cloning site Green=Tags(s)

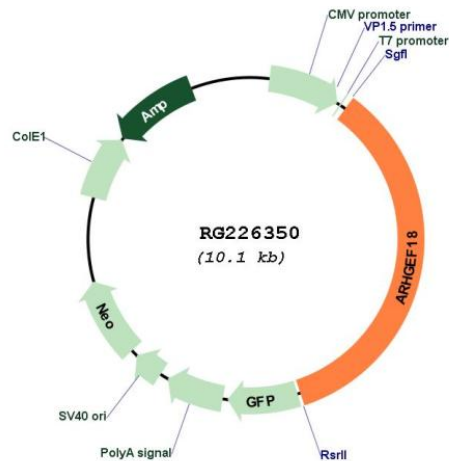
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 RERLEQERAELEQRQAYQHDLERLREAQRAVERERLELLRRLKKQNTAPGALPPDTLAEAQPPSHPP
 SFNGEGLEGRVSMPLPSGVGPEYAE RPEVARRDSAPTENRLAKSDVPIQLLSATNQFQRQA AVQQQIPTK
 LAASTKGGKDKGGKSRGSQRWESSASF DLKQQLLLNKL MGKDESTSRNRRSLSPILPGRHSPAPPDPGF
 PAPSPPPADSPSEGFSLKAGGTALLPGPPAPSPLPATPLSAKEDASKEDVIFV

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII
 Cloning Scheme:



Plasmid Map:



ACCN: NM_001130955

ORF Size: 3519 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_001130955.1](#), [NP_001124427.1](#)

RefSeq Size: 5773 bp

RefSeq ORF: 3360 bp

Locus ID: 23370

UniProt ID: [Q6ZSZ5](#)

Cytogenetics: 19p13.2

Gene Summary:

Rho GTPases are GTP binding proteins that regulate a wide spectrum of cellular functions. These cellular processes include cytoskeletal rearrangements, gene transcription, cell growth and motility. Activation of Rho GTPases is under the direct control of guanine nucleotide exchange factors (GEFs). The protein encoded by this gene is a guanine nucleotide exchange factor and belongs to the Rho GTPase GEF family. Family members share a common feature, a Dbl (DH) homology domain followed by a pleckstrin (PH) homology domain. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Nov 2018]