

Product datasheet for **RG218112**

RGS1 (NM_002922) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RGS1 (NM_002922) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: RGS1
Synonyms: 1R20; BL34; HEL-S-87; IER1; IR20
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG218112 representing NM_002922
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGCCAGGAATGTTCTTCTCTGCTAACCCAAAGGAATTGAAAGGAACCACTATTCACTTCTAGACGACA
AAATGCAAAAAGGAGGCCAAAGACTTTTGAATGGATATGAAAGCATACCTGAGATCTATGATCCACA
TCTGGAATCTGGAATGAAATCTCCAAGTCCAAGGATGTACTTTCTGCTGCTGAAGTAATGCAATGGTCT
CAATCTCTGAAAACTTCTTGCCAACCAACTGGTCAAATGTCTTTGGAAGTTTCTAAAGTCTGAAT
TCAGTGAGGAGAATATTGAGTTCTGGCTGGCTTGTGAAGACTATAAGAAAACAGAGTCTGATCTTTTGCC
CTGTAAAGCAGAAGAGATATATAAAGCATTTGTGCATTCAGATGCTGCTAAACAAATCAATATTGACTTC
CGCACTCGAGAATCTACAGCCAAGAAGATTAAGCACCAACCCACGTTTGTGATGAAGCACA AAAAG
TCATATACTCTTATGAAAAGGACTCTTATCCAGGTTCTCAATCAGATATTTACTTAAATCTTCT
AAATGACCTGCAGGCTAATAGCCTAAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218112 representing NM_002922
Red=Cloning site Green=Tags(s)

MPGMFFSANPKELKGTTHSLDDKMQRRPKTFGMDMKAYLRSMIPHLESGMKSSKSKDVL SAAEVMQWS
QSLEKLLANQTGQNVFGSFLKSEFSEENIEFWLACEDYKKTESDLLPCKAEIYKAFVHSDAAKQINIDF
RTRESTAKKIKAPTPTCFDEAQKVIYTLMEKDSYPRFLKSDIYLNLLNDLQANSLK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_002922

ORF Size: 627 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:

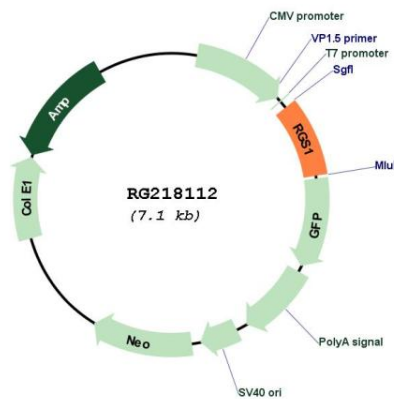
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_002922.2](#)

RefSeq Size: 1403 bp
RefSeq ORF: 630 bp
Locus ID: 5996
UniProt ID: [Q08116](#)
Cytogenetics: 1q31.2
Domains: RGS
Gene Summary:

This gene encodes a member of the regulator of G-protein signalling family. This protein is located on the cytosolic side of the plasma membrane and contains a conserved, 120 amino acid motif called the RGS domain. The protein attenuates the signalling activity of G-proteins by binding to activated, GTP-bound G alpha subunits and acting as a GTPase activating protein (GAP), increasing the rate of conversion of the GTP to GDP. This hydrolysis allows the G alpha subunits to bind G beta/gamma subunit heterodimers, forming inactive G-protein heterotrimers, thereby terminating the signal. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG218112