

## Product datasheet for **RG204591**

### RRAS2 (NM\_012250) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RRAS2 (NM\_012250) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** RRAS2  
**Synonyms:** NS12; TC21  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG204591 representing NM\_012250  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGCGGCCGGCTGGCGGGACGGCTCCGGCCAGGAGAAGTACCGGCTCGTGGTGGTCGGCGGGGGCG  
GCGTGGGCAAGTCGGCGCTCACCATCCAGTTCATCCAGTCCTATTTTGTAAACGGATTATGATCCAACCAT  
TGAAGATCTTACACAAAGCAGTGTGTATAGATGACAGAGCAGCCCGGCTAGATATTTTGGATACAGCA  
GGACAAGAAGAGTTTGGAGCCATGAGAGAACAGTATATGAGGACTGGCGAAGGCTTCCTGTTGGTCTTTT  
CAGTCACAGATAGAGGCAGTTTTGAAGAAATCTATAAGTTTCAAAGACAGATTCTCAGAGTAAAGGATCG  
TGATGAGTCCCAATGATTTTAATTGGTAATAAAGCAGATCTGGATCATCAAAGACAGGTAACACAGGAA  
GAAGGACAACAGTTAGCACGGCAGCTTAAGGTAACATACATGGAGGCATCAGCAAAGATTAGGATGAATG  
TAGATCAAGCTTTCCATGAACCTGTCCGGTTATCAGGAAATTTCAAGAGCAGGAATGTCCTCCTCACC  
AGAACCAACACGGAAAGAAAAGACAAGAAAGGCTGCCATTGTGTCAATTTTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG204591 representing NM\_012250  
Red=Cloning site Green=Tags(s)

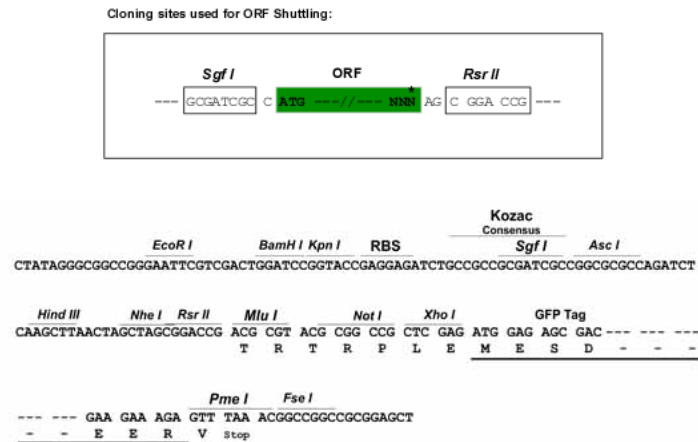
MAAAGWRDGSQEKYRLVVVGGGVGKSAITQFIQSYFVTDYDPTIEDSYTKQCVIDDRAARLDILDTA  
GQEEFGAMREQYMRTEGFLLVFSVTDGRGSFEEIYKFQRQILRVKDRDEFPMILIGNKADLDHQRVQTE  
EGQLARQLKVTYMEASAKIRMNVDQAFHELVRVIRKQEQECPSPPEPTRKEKDKKGCVCVIF

SGPTRRRLE - GFP Tag - V

**Restriction Sites:** SgfI-RsrII



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**Cloning Scheme:**


**ACCN:** NM\_012250

**ORF Size:** 612 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\\_012250.6](#)

**RefSeq Size:** 1510 bp

**RefSeq ORF:** 615 bp

**Locus ID:** 22800

**UniProt ID:** [P62070](#)

**Cytogenetics:** 11p15.2

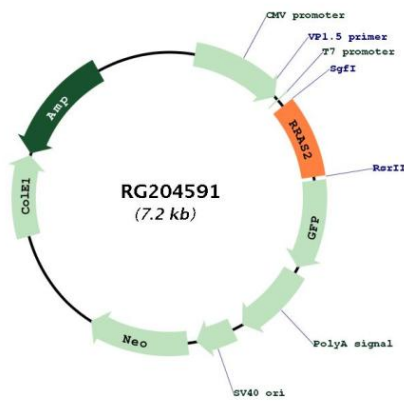
**Domains:** ras, RAN, RAS, RHO, RAB

**Protein Families:** Druggable Genome

**Protein Pathways:** MAPK signaling pathway, Regulation of actin cytoskeleton, Tight junction

**Gene Summary:** This gene encodes a member of the R-Ras subfamily of Ras-like small GTPases. The encoded protein associates with the plasma membrane and may function as a signal transducer. This protein may play an important role in activating signal transduction pathways that control cell proliferation. Mutations in this gene are associated with the growth of certain tumors. Pseudogenes of this gene are found on chromosomes 1 and 2. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Apr 2010]

**Product images:**



Circular map for RG204591