

Product datasheet for RC204591

RRAS2 (NM_012250) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RRAS2 (NM_012250) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RRAS2
Synonyms: NS12; TC21
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC204591 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCGCGCCGGCTGGCGGGACGGCTCCGGCCAGGAGAAGTACCGGCTCGTGGTGGTGGCGGGGGCG
 GCGTGGGCAAGTCGGCGCTCACCATCCAGTTCATCCAGTCCTATTTTGTAAACGGATTATGATCCAACCAT
 TGAAGATCTTACACAAAGCAGTGTGTATAGATGACAGAGCAGCCCGGCTAGATATTTTGGATACAGCA
 GGACAAGAAGAGTTTGGAGCCATGAGAGAACAGTATATGAGGACTGGCGAAGGCTTCTGTGGTCTTTT
 CAGTCACAGATAGAGGCAGTTTTGAAGAAATCTATAAGTTTCAAAGACAGATTCTCAGAGTAAAGGATCG
 TGATGAGTCCCAATGATTTTAATTGGTAATAAAGCAGATCTGGATCATCAAAGACAGGTAACACAGGAA
 GAAGGACAACAGTTAGCACGGCAGCTTAAGGTAACATACATGGAGGCATCAGCAAAGATTAGGATGAATG
 TAGATCAAGCTTTCCATGAACTTGTCGGGTTATCAGGAAATTTCAAGAGCAGGAATGTCCTCCTCACC
 AGAACCAACACGGAAAGAAAAGACAAGAAAGGCTGCCATTGTGTCAATTTTC

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204591 protein sequence
 Red=Cloning site Green=Tags(s)

MAAAGWRDGSQEKYRLVVVGGGVGKSAITIQFIQSIFYVTDYDPTIEDSYTKQCVIDDRAARLDILD
 TAQEEFGAMREQYMRTGEGFLLVFSVTDGRSFEEIYKFQRQILRVKDRDEFPMILIGNKADLDHQRQVTQE
 EQQLARQLKVTYMEASAKIRMNVDQAFHELVRVIRKVFQEQECPSPPEPTRKEKDKKGGCHCVIF

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

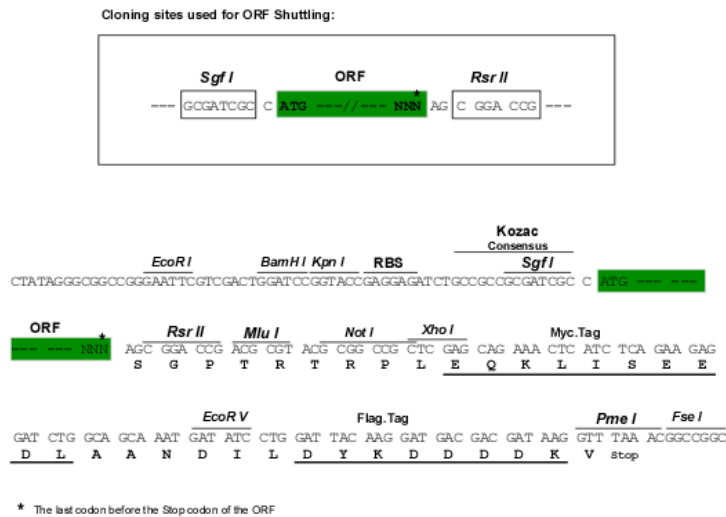


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Chromatograms: https://cdn.origene.com/chromatograms/mk6615_h05.zip

Restriction Sites: SgfI-RsrII

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](#)

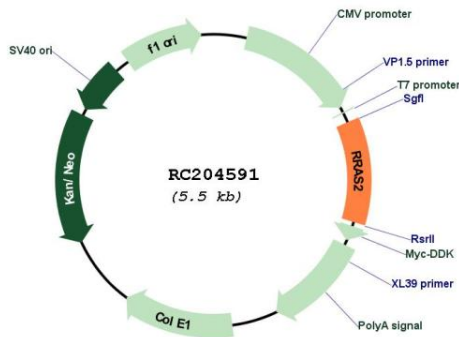
RefSeq Size: 2360 bp

RefSeq ORF: 615 bp

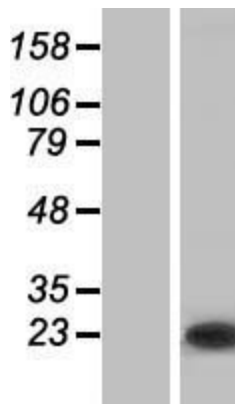
Locus ID: 22800

UniProt ID:	<u>P62070</u>
Cytogenetics:	11p15.2
Domains:	ras, RAN, RAS, RHO, RAB
Protein Families:	Druggable Genome
Protein Pathways:	MAPK signaling pathway, Regulation of actin cytoskeleton, Tight junction
MW:	23.4 kDa
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]

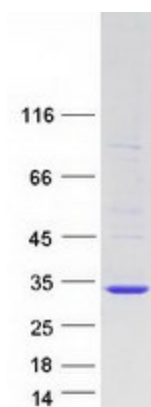
Product images:



Circular map for RC204591



Western blot validation of overexpression lysate (Cat# [LY415877]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204591 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RRAS2 protein (Cat# [TP304591]). The protein was produced from HEK293T cells transfected with RRAS2 cDNA clone (Cat# RC204591) using MegaTran 2.0 (Cat# [TT210002]).