

Product datasheet for **RC204820**

RRAS (NM_006270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RRAS (NM_006270) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RRAS
Synonyms:	R-Ras
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204820 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCAGCGGGCGGCGTCCGGGACAGGGCGGGGGCGGCCCGGGGCGGGGACCTGGGCCCGGGGACC
CCCCGCCAGCGAGACACACAAGCTGGTGGTCTGGGCGGCGGCGGCTGGGCAAGAGCGCGTGACCAT
CCAGTTCATCCAGTCTACTTCGTGTCTGACTACGACCCACTATTGAGGACTCCTACACGAAGATCTGC
AGTGTGGATGGCATCCCAGCCCGGCTGGACATCCTGGACACCGGGCCAGGAAGAGTTCGGGGCCATGA
GAGAGCAGTACATGCGTGTGGCCACGGCTTCTGCTGGTGTTCGCCATTAACGACCGGCAGAGTTTCAA
CGAGGTGGCAAGCTCTTACGCAGATTCTGCGGGTCAAGGACCGGACGACTTCCCCGTTGTGTTGGTC
GGGAACAAGGCAGATCTGGAGTACAGCGCCAGGTCCCCGATCAGAAGCCTCTGCCTTCGGCGCCTCCC
ACCACGTGGCCTACTTTGAGGCCTCGGCCAAACTGCGTCTCAACGTGGACGAGGCTTTTGAGCAGCTGGT
GCGGGCTGTCCGAAATACCAGGAACAAGAGCTCCCACCGAGCCCTCCCAGTGCCCCAGGAAGAAGGGC
GGGGGCTGCCCTGCGTCTCTCTG

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC204820 protein sequence
Red=Cloning site Green=Tags(s)

MSSGAASGTGRGRPRGGGPGDPPPSETHKLVVVGGGVGSALTIQFIQSYFVSDYDPTIEDSYTKIC
 SVDGIPARLDILDLAGQEEFGAMREQYMRAGHGFLLVFAINDRQSFNEVGKLFQTILRVKDRDDFPVVLV
 GNKADLESQRQVPRSEASAFGASHHVAYFEASAKLRLNVDEAFEQLVRAVRKYQEQLPPSPSPAPRKKK
 GCPCVLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6288_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006270

ORF Size: 654 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006270.5](#)

RefSeq Size: 1013 bp

RefSeq ORF: 657 bp

Locus ID: 6237

UniProt ID: [P10301](#)

Cytogenetics: 19q13.33

Domains: ras, RAN, RAS, RHO, RAB

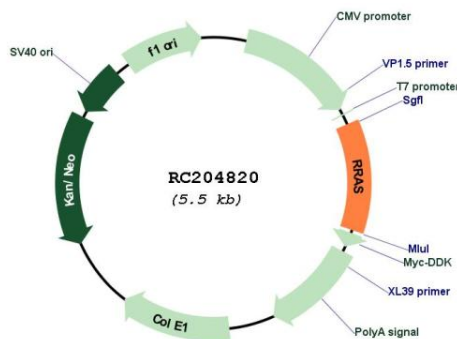
Protein Families: Druggable Genome

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

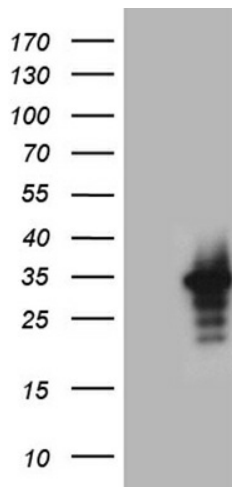
MW: 23.5 kDa

Gene Summary: The protein encoded by this gene is a small GTPase involved in diverse processes including angiogenesis, vascular homeostasis and regeneration, cell adhesion, and neuronal axon guidance. Mutations in this gene are found in many invasive cancers. [provided by RefSeq, Jul 2015]

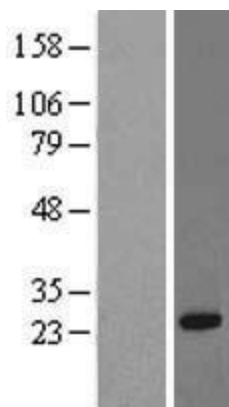
Product images:



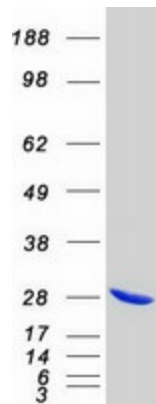
Circular map for RC204820



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RRAS (Cat# RC204820, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RRAS (Cat# [TA809505])(1:2000). Positive lysates [LY416758] (100ug) and [LC416758] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416758]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204820 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RRAS protein (Cat# [TP304820]). The protein was produced from HEK293T cells transfected with RRAS cDNA clone (Cat# RC204820) using MegaTran 2.0 (Cat# [TT210002]).