

Product datasheet for RC218272

MRAS (NM_001085049) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MRAS (NM_001085049) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: MRAS
Synonyms: M-RAS; NS11; R-RAS3; RRAS3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC218272 representing NM_001085049
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAACCAGCGCCGTCGCCAGTGACAACCTCCCCACATACAAGCTGGTGGTGGGGGATGGGGGTG
TGGGCAAAGTGCCCTCACCATCCAGTTTTTCCAGAAGATCTTTGTGCCTGACTATGACCCACCATTGA
AGACTCTACCTGAAACATACGGAGATTGACAATCAATGGCCATCTTGGACGTTCTGGACACAGCTGGG
CAGGAGGAATTCAGCGCCATGCGGGAGCAATACATGCGCACGGGGGATGGCTTCCTCATCGTCTACTCCG
TCACTGACAAGGCCAGCTTTGAGCACGTGGACCGCTTCCACCAGTTATCCTGCGCGTCAAAGACAGGGA
GTATTCCCGATGATCCTCGTGGCCAACAAGGTCGATTTGATGCACTTGAGGAAGATCACCAGGGAGCAA
GGAAAAGAAATGGCGACCAACAATATTCCTGACATAGAAAACCAAGTCCCAAGGACCCACCTCTCAATG
TCGACAAAGCCTTCCATGACCTCGTTAGAGTAATTAGGCAACAGATTCGGAAAAAGCCAGAAGAAGAA
GAAGAAAACCAATGGCGGGGAGACCGGCCACAGGCACCCACAAACTGCAATGTGTGATCTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC218272 representing NM_001085049
Red=Cloning site Green=Tags(s)

MATSAVPSDNLPTYKLVVVGDDGGVSKSALTIQFFQKIFVDPDYDPTIEDSYLKHTEIDNQWAILDVLDTAG
QEEFSAMREQYMRDGDGFLIVYSVTDKASFVDRFHQLILRVKDRESFPMILVANKVDLMHLRKITREQ
GKEMATKHNIPIYIETSAKDPPLNVDKAFHDLVRVIRQQIPEKSQKTKKWKWRGDRATGTHKLQCVIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

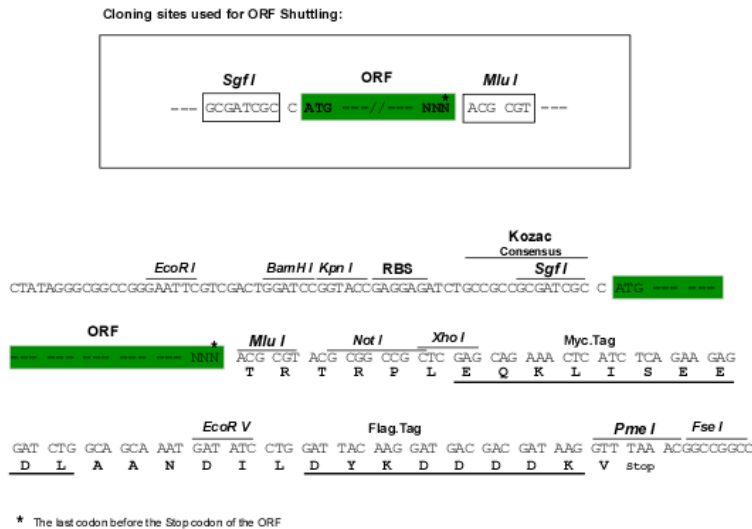


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Chromatograms: https://cdn.origene.com/chromatograms/mk6480_d08.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_001085049

ORF Size: 624 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_001085049.3](#)

RefSeq Size: 4013 bp

RefSeq ORF: 627 bp

Locus ID: 22808

UniProt ID: [O14807](#)

Cytogenetics: 3q22.3

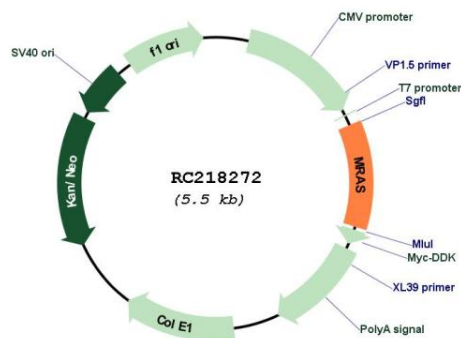
Protein Families: Druggable Genome

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

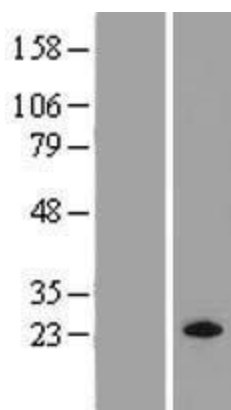
MW: 23.7 kDa

Gene Summary: This gene encodes a member of the Ras family of small GTPases. These membrane-associated proteins function as signal transducers in multiple processes including cell growth and differentiation, and dysregulation of Ras signaling has been associated with many types of cancer. The encoded protein may play a role in the tumor necrosis factor-alpha and MAP kinase signaling pathways. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]

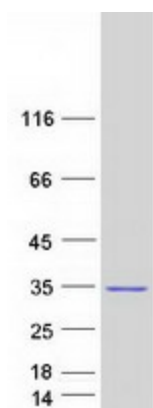
Product images:



Circular map for RC218272



Western blot validation of overexpression lysate (Cat# [LY421269]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218272 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MRAS protein (Cat# [TP318272]). The protein was produced from HEK293T cells transfected with MRAS cDNA clone (Cat# RC218272) using MegaTran 2.0 (Cat# [TT210002]).