

Product datasheet for **RG218272**

MRAS (NM_001085049) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MRAS (NM_001085049) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MRAS
Synonyms: M-RAS; NS11; R-RAS3; RRAS3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG218272 representing NM_001085049
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAACCAGCGCCGTCCTCCAGTGACAACCTCCACATACAAGCTGGTGGTGGGGGATGGGGGTG
TGGGCAAAGTGCCCTCACCATCCAGTTTTCCAGAAGATCTTTGTGCCTGACTATGACCCACCATTGA
AGACTCTACCTGAAACATACGGAGATTGACAATCAATGGCCATCTGGACGTTCTGGACACAGCTGGG
CAGGAGGAATTCAGCGCCATGCGGGAGCAATACATGCGCACGGGGGATGGCTTCTCATCGTCTACTCCG
TCACTGACAAGGCCAGCTTTGAGCACGTGGACCGCTTCCACCAGTTATCCTGCGCGTCAAAGACAGGGA
GTATTCCCGATGATCCTCGTGGCCAACAAGGTCGATTTGATGCACTTGAGGAAGATCACCAGGGAGCAA
GGAAAAGAAATGGCGACCAACAATATTCCTGACATAGAAACCAGTGCCAAGGACCCACCTCTCAATG
TCGACAAAGCCTTCCATGACCTCGTTAGAGTAATTAGGCAACAGATTCGGAAAAAGCCAGAAGAAGAA
GAAGAAAACCAATGGCGGGGAGACCGGCCACAGGCACCCACAAACTGCAATGTGTGATCTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218272 representing NM_001085049
Red=Cloning site Green=Tags(s)

MATSAVPSDNLPTYKLVVVGDDGGVSKSALTIQFFQKIFVDPDYDPTIEDSYLKHTEIDNQWAILDVLDTAG
QEEFSAMREQYMRDGDGFLIVYSVTDKASFHVDRFHQLILRVKDRESFPMILVANKVDLMHLRKITREQ
GKEMATKHNIPIYIETSAKDPPLNVDKAFHDLVRVIRQQIPEKSQKSKKTKWRGDRATGTHKLQCVIL

TRTRPLE - GFP Tag - V

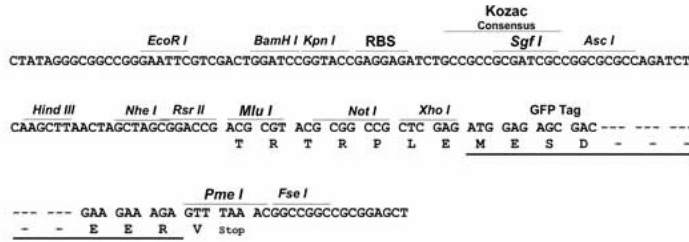
Restriction Sites: SgfI-MluI



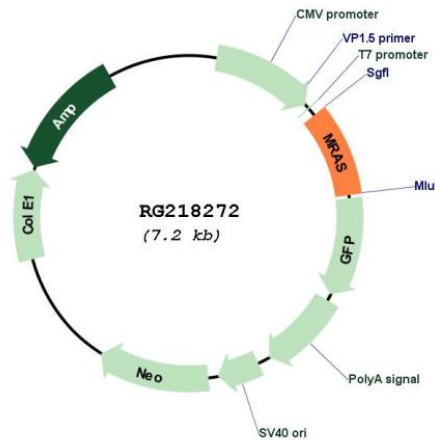
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Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001085049
 ORF Size: 624 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none">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
Gene Summary:	<p>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]</p>